Deposit insurance is one of the pillars of trust in the banking system. This trust is deeply anchored in the belief that the sovereign stands ready to reimburse depositors in case of a bank failure. What does this mean for banks operating across different countries? Are differences in the design and protection of deposit insurance behind some banks’ reluctance to expand across borders? Can these differences be explored to attract depositors with heterogeneous risk preferences?

In this article we discuss these issues, focusing especially on the current situation in the European Union. The euro area sovereign debt crisis, with its onset in the early 2010s, paved the way for a strong political consensus on strengthening the financial inte-
gration dimension of the European project. Today there is a single banking supervisor and a single resolution mechanism. But the banking union will remain incom-
plete until an agreement is reached on a common deposit insurance scheme. Looking into the current sit-
uation in Europe can thus be an important exercise in better understanding what is special about deposit insurance for cross-border banks.

Of course, the implications of this discussion go beyond the European debate. That said, heterogeneous deposit insurance guarantees are possibly even more challenging for banks that operate across other jurisdictions where further legal and financial differ-
ences coexist.

**DEPOSIT INSURANCE AROUND THE WORLD**

For many decades, deposit insurance was seen as an undeniable institution in advanced economies and as a synonym of progress and financial development in emerging markets. Since Diamond and Dybvig (1983) showed how deposit insurance was crucial to prevent bank runs, the issue of how to best provide protec-
tion to depositors. The only open debate on this topic was about whether the existence of deposit insurance made banks riskier, as depositors had fewer incentives to monitor bank supervision and the need to offer this pro-
tection to depositors. What is the question is that international depositors react to differences in national deposit insurance policies. International depositors (e.g., large firms) prefer to place their funds in countries with explicit deposit insurance, most nota-
ably if the deposit insurance schemes have co-insur-
ance, private administration, and a low deposit insur-
ance premium. These results suggest that countries can alter the design of their deposit insurance protec-
tion to capture a larger share of the market for interna-
tional deposits, thus leading to international competi-
tion in deposit insurance.

As we discussed later, the current state of the banking union in Europe ensures that rules and regula-
tions on deposit insurance are, albeit with some poten-
tially heterogeneous across the entire European

**BRANCHES VERSUS SUBSIDIARIES: WHAT DOES IT MEAN FOR DEPOSIT INSURANCE?**

Given the heterogeneity in the design of deposit insurance around the world, there are key implica-
tions for cross-border banks. When a bank expands across borders, a crucial decision needs to be made as to whether the bank operate as a branch or as subsidiary. For the bank’s day-to-day operations, that decision does not entail major consequences. The customers are served by the head office, a branch be unaware of the legal status of their bank—unless something goes wrong. In a recent paper, Bonfim and Santos (2019) show that during the euro crisis, bank depositors seem to be well aware of the differences between a branch and a subsidiary. Indeed, in financial distress, the distinc-
tion is not trivial. While a subsidiary is a fully-fledged legal entity in the country where it operates (the host country), a branch does not have legal autonomy from the parent bank. If a subsidiary fails, the host author-

ities are responsible for dealing with the process. The supervision of a subsidiary is typically the responsibil-
ity of the host, even though the home authorities are responsible for supervising the consolidated banking groups. The same is usually true for resolution pow-
ers and for deposit insurance. In the European Union, if a subsidiary fails, the host deposit insurance fund is responsible for reimbursing insured depositors. This situation is quite different from branches: host country supervisors have difficulty in identifying the entity (and acting with branches, but these are quite limited. Most of the responsibilities fall to the home authorities, including in matters of deposit insurance. Against this back-
drop, depositors in a given country may face differ-
ent levels of protection, depending on the design and credibly of the deposit insurance fund backing the claims.

In some cases, host countries of foreign branches might prefer home country regulation and supervision if the host country’s deposit insurance scheme is less strong and if the branch is large relative to its banking group. In this case, the home authorities might be more worried about potential spillovers from the branch into the home country. Whether this should be responsible for.

Still, a banking system where large foreign branches are important might be more exposed to fluctuations in financial intermediation that are not easily dealt with by host policymakers. If the home country’s deposit insurance scheme is weak, then exposure to large for-
egn banks is clearly a material risk for the host authorities. To avoid such risks, supervisors often favor the local market. Hence, in countries where the home insur-
ance requirements or regulatory forbearance, most nota-
ably if the deposit insurance schemes have co-insur-
ance, private administration, and a low deposit insur-
ance premium. These results suggest that countries can alter the design of their deposit insurance protec-
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**THE CREDIBILITY OF DEPOSIT INSURANCE**

While depositors are more likely to react to differences in deposit insurance during a crisis (Bonfim and Santos 2019), these differences may be relevant even in normal times, especially for larger depositors with cross-bor-
der operations. For example, if a country has implicit deposit insurance arrangements, which were not easily grasped by depositors. The Icelandic insurance fund was not able to immediately reimburse depositors of the failing banks, requiring the adoption of emergency funding agreements with institutions from other countries. This episode made clear the importance of close integration with host countries. In this case, instances be-
t overlap with a large variety of different insurance plans. These plans are likely to remain at least in terms of the

context coverage, premiums, insurance agency ownership (private vs. govern-
dation, and, as anti-funding and instability.6
sovereigns backing up the deposit insurance schemes. This is shown by examining depositor behavior around the periods in which a few foreign subsidiaries operating in Portugal changed their legal status to foreign banks. The last example of depositors not being guaranteed by a distressed sovereign, but by highly rated European countries. As discussed later, this shows that as long as the banking union is incomplete, the perceived heterogeneity of deposit protection across jurisdictions cannot be overcome.

The strength and credibility of the home countries’ deposit insurance schemes and the absolute and relative size of the banks in each country are key determinants of the effectiveness of regulation and supervision and, ultimately, of financial stability (Eisenbeis and Kaufman 2008; Eisenbois 2004). One key issue behind such heterogeneity and credibility of deposit insurance programmes are the funding arrangements. Before the Federal Deposit Insurance Corporation (FDIC) was established in the US, there were several attempts to create decentralized deposit insurance schemes.4 Between 1917 and 1918, eight US states created deposit insurance schemes, most of which failed within a very short period. According to Eisenbois and Kaufman (2008), these schemes had several design flaws in common: (i) the schemes were typically underfunded; (ii) they were undiversified, having their risk concentrated in specific regions and with significant exposure to failure; (iii) the governance was poor, especially in the case of privately funded schemes; and (iv) there was a failure to recognize that the credibility of the schemes was based essentially on the willingness and credibility of the funding entity to honor its commitments if needed. As discussed later in this article, these flaws may still be a threat in the current design of deposit insurance in the European Union. For instance, smaller countries with concentrated banking systems are more likely to experience challenges to the credibility of deposit insurance compared to larger and more diversified economies.

The European Banking Union: Where do we stand today and why?

In the European context, and in the euro area in particular, the willingness and credibility of home guarantees are no longer an issue. The Directive on Deposit Guarantee Schemes, which set out the principles of deposit insurance (of private and public schemes, mostly focused on bank capital), was only one element characterizing the modest degree of risk-sharing stemming from the banking system, in the context of a common currency (Eisenbeis 2004). If banks decided to expand across borders within the EU through subsidiaries rather than through branches, the host country would be responsible for the regulation and supervision of that legal entity (while the home supervisor would still be responsible for supervising the consolidated banking group). This had direct implications for deposit insurance: deposits in branches were insured by the home countries, while deposits in subsidiaries were insured by the host countries.

Demirgüç-Kunt et al. (2015) show that, since the global financial crisis, deposit insurance around the world has become more widespread and its coverage has become more extensive. Europe is an exception: Ireland was the first country to react after Lehman Brothers failed, increasing the deposit guarantee coverage and later adopting a full guarantee on banks’ liabilities. In the days and weeks that followed, most member states adopted measures to foster depositors’ trust. By October 2008, the EU and Financial Affairs Council (Ecofin) decided that it was necessary to adopt common rules, leading to the revision of the Directive on Deposit Guarantee Schemes. Ten years on, the rules are final and financialized across Europe, thus limiting the scope for conflicts of interest between home and host authorities. In fact, the Directive on Deposit Guarantee Schemes approved in 2014 attempts to further harmonize national deposit insurance schemes, guaranteeing deposits up to EUR 100,000 per credit institution and per account holder. Borrowing/lending between national fundsto mitigate risk across borders was considered, but we may not internalize the costs of determining the potentially disruptive liquidation of a bank by national authorities. The Directive specifies that the home supervisor would still be responsible for supervising the payment system, which runs counter to the objectives of the banking union.

In Portugal, the nonexistence of a common deposit insurance undertaking (which runs counter to the objectives of the banking union) is a key element characterizing the modest degree of risk-sharing stemming from the banking system, in the context of a common currency (Eisenbeis 2004). A European institution could be called to protect depositors in subsidiaries, and home authorities might not internalize the costs of determining the potentially disruptive liquidation of a bank by national authorities. The Directive and the associated activation of the Directors of the home supervisor would still be responsible for supervising the payment system, which runs counter to the objectives of the banking union. The hosting (home) supervisor would still be responsible for supervising the consolidated banking group (Eisenbeis 2004). One key issue behind such heterogeneity and credibility of deposit insurance programmes are the funding arrangements. Before the Federal Deposit Insurance Corporation (FDIC) was established in the US, there were several attempts to create decentralized deposit insurance schemes.4 Between 1917 and 1918, eight US states created deposit insurance schemes, most of which failed within a very short period. According to Eisenbois and Kaufman (2008), these schemes had several design flaws in common: (i) the schemes were typically underfunded; (ii) they were undiversified, having their risk concentrated in specific regions and with significant exposure to failure; (iii) the governance was poor, especially in the case of privately funded schemes; and (iv) there was a failure to recognize that the credibility of the schemes was based essentially on the willingness and credibility of the funding entity to honor its commitments if needed. As discussed later in this article, these flaws may still be a threat in the current design of deposit insurance in the European Union.

A DECADE OF CHANGE IN EUROPEAN DEPOSIT INSURANCE

Before the failure of Lehman Brothers, all member states had their own deposit insurance schemes. The emergence of cross-border financial integration and the debate over a common deposit insurance scheme was nonexistent. Indeed, the overall regulatory landscape was far from integrated. The Second Banking Directive, which entered into force in 1994, and modified in 1995, marked the introduction of the three basic principles: harmonization, mutual recognition, and home country control. Regulatory rules were generally harmonized, ensuring a minimum set of common rules, mostly focused on bank capital. Mutual recognition meant that member states would have to reciprocally recognize and honor each other’s regulations. Finally, the Directive specified that the home country would take precedence over the regulation and supervision of the host country in the case of non-compliance with any of the requirements of the Directive. In other words, the nature of deposit insurance for multinational banks in Europe is one factor that influences the way banks expand (or refrain from expanding) internationally. The national character of the guarantees contributes to the differentiation of deposits across member states. In times of crisis, this can generate financial fragmentation, which runs counter to the objectives of the banking union.

Despite these evident problems, the ongoing European debates concerning the deepening of the banking union and, crucially, a possible common deposit insurance system (be it marked by a cross-border insurance regime or a group of member states calling for urgent risk-sharing solutions) and another group calling for the immediate application of directive risk-reduction measures (reduction of NPLs and of the exposure to the respective sovereign), ensuring that those insurance mechanisms do not become essentially redistributive at the outset. While efforts to stabilize the banking systems in more vulnerable countries are widely recognized, it seems to be a failure to recognize that the next crisis without a complete banking union could jeopardize the future of the economic and monetary union. The centralized character of bank supervision ensures proper and consistent oversight of multinational banks. It also reduces the capacity of sovereigns and banks to influence each other, in particular as regards strategic decisions related to international expansion. A single bank resolution system, demanding coordination among the various resolution authorities, also makes the resolution of cross-border institutions more feasible, while being able to internalize the costs of determining the potentially disruptive liquidation of a bank by national authorities. The Directive specifies that the home supervisor would still be responsible for supervising the payment system, which runs counter to the objectives of the banking union.

WHAT REMAINS TO BE DONE?

The mix between centralized supervision and resolution on the one hand, and national deposit insurance and liquidation on the other, creates a clear misalignment of incentives among the various authorities. It is thus necessary to deal with the potential decision to liquidate or resolve a cross-border banking group in a timely and effective manner, therefore avoiding the costs of bank liquidation. A European deposit insurance system could be called to protect depositors in subsidiaries, and home authorities might not internalize the costs of determining the potentially disruptive liquidation of a bank by national authorities. The Directive and the associated activation of the Directors of the home supervisor would still be responsible for supervising the payment system, which runs counter to the objectives of the banking union.

4 The FDIC, established in 1933, was one of the first deposit insurance schemes set up by a national government and led to the creation, within 10 years, of more than 10,000 bank failures in the US between 1929 and 1933 (Eisenbeis and Kaufman, 2005).
liquidation of banks and deposit insurance. Such an institution, say, an EDIC (European Deposit Insurance Corporation), would be a game changer for the banking union (Ferreira 2018). The funding should also stress that the ECB is not the lender of last resort for banks in the euro area. National central banks are still responsible for the provision of emergency liquidity assistance to banks, which may occur if banks do not have enough collateral to pledge with the ECB in regular refinancing operations. In such a case, there is no risk-sharing at the Eurosystem level, which means that potentially large losses associated with this assistance are borne by sovereigns.

A truly European system for dealing with troubled banks, together with risk-shared emergency liquidity assistance, would arguably promote or reduce opposition to the expansion of multinational banks through branches. This would make the jurisdiction of origin less relevant for most purposes. Whether further legal changes would be needed to smooth out national idiosyncrasies, in particular regarding liquidation, is an open question.

On the other hand, failure to deepen the banking union and to maintain flexibility in banking crises management is quite perilous in the context of an economic downturn. It is unclear whether the partial reforms taken so far to enhance or even guarantee financial stability of the European Union (and of the euro area in particular).

Finally, it seems also important to leave open the possibility of a direct involvement in banks at the EU level. While avoiding taxpayer involvement is a legitimate concern of policy makers, it is not clear that the current paradigm of bank resolution could survive a moderate crisis insofar as financial stability may be jeopardized.

IS THE LACK OF COMMON DEPOSIT INSURANCE A HINDRAN CE TO INTEGRATION IN THE BANKING UNION? A BARRIER TO BANK CONSOLIDATION AND CROS S-BORDER EXPANSION?

There are many benefits associated with cross-border bank expansion. It fosters competition and efficiency, and mitigates risk through geographical and sectoral diversification (Eisenbeis and Kaufman 2008; Hartmann et al. 2017). From a political economy viewpoint, this is a natural step in European integration. Recently, there have been calls from several European institutions including the ECB and the Single Supervisory Mechanism (SSM), to foster bank consolidation in Europe.8 Implementation of the SSM and the Single Resolution Board should have fostered some additional integration. However, when we look at the data, the level of integration in the European banking sector remains subdued and has not changed significantly since the start of the banking union. What is stopping European banks from further integration? What, in particular, is the role of the missing pillar in the completion of the banking union: a common deposit insurance scheme?

As discussed above, the lack of a common deposit insurance scheme in the banking union (together with an eminently national lender of last resort for banks) is significant. It is likely to lead to high costs of adverse selection of national authorities that have to deal with these implications if emergency liquidity is centralized (risk-shared) and deposit insurance is centralized. The incentives change substantially now it is not just the European authorities to deal with troubled banks, deposit insurance, and emergency liquidity. In other words, they are called upon to adopt the role previously held by national authorities. This would provide an additional incentive to subordinated national banks to the way banks expand and to how resources are allocated among jurisdictions.

In sum, the risks (and costs) of cross-border banking typically accrue more to supervisors and, ultimately, taxpayers. Quite often, the resistance to cross-border expansion of activities comes from actors that might have to bear the costs which would circumstances take a turn for the worse. Conflicts of interest between stakeholders in the host country and in these situations. This is because national authorities do not guarantee deposits from and do not have enough collateral to pledge with the parent bank and not through branches (entities dependent on the parent bank). This is because national authorities do not guarantee deposits from and do not have enough collateral to pledge with the parent bank. This is because national authorities do not guarantee deposits from and do not have enough collateral to pledge with the parent bank only indirectly.

Would completing the banking union fully address these tensions? To entirely eliminate them, the interests of all parties involved in regulation, supervision, and resolution would have to be aligned. Ultimately, this means aligning the interests of all taxpayers represented by these authorities. At its current stage, the banking union anchored on the two pillars of supervision and resolution is, in our view, insufficient to fully foster a better alignment of interests. This could occur even with intrinsically sound subsidiaries—provided these subsidiaries are more similar to a truly European operation, independent to some extent of national idiosyncrasies and mimicking the expansion through branches. This is insufficient to fully risk-sharing and helps create pan-European banks that are less dependent on the country of origin. The problems associated to relaxing liquidity and capital requirements for subsidiaries—provided these requirements are met at the group level—so to promote the reallocation of resources across jurisdictions. In turn, this would increase the incentives to cross-border expansion through a common deposit insurance scheme, with a common fiscal backstop, which would certainly foster better alignment of interests. This would avoid adverse selection and limit potential intragroup exposures using so-called national options and discretion. More generally, national authorities tend to mitigate the risks associated with those institutions and to resist any efforts to introduce supervisory tools and resolution powers. This is understandable, as the potential for transferring risks to the respective jurisdiction is real and the sovereign is still the ultimate guarantor of financial stability through deposit insurance, emergency liquidity assistance, or in a context of liquidation. Take the provision of emergency liquidity assistance, for example: without restrictions on the use of the funds at the group level, national central banks could create new opportunities in another jurisdiction. This could occur even with intrinsically sound subsidiaries that are affected by problems generated in the parent bank only indirectly.

Several other factors may be hindering cross-border bank integration in Europe: legacy asset losses, crisis that create uncertainty in valuation, obstacles to the free flow of capital and liquidity of banking groups; subdued economic growth prospects; overbanking, which is more likely to lead to deleveraging than to expansion; and a lack of harmonization in some legal and fiscal dimensions, most notably the insolvency codes (Hartmann et al. 2017;Emer et al. 2018; Guindos 2018). How these business and regulatory barriers interact with those emerging from an incomplete banking union is a question that remains unanswered.

REFERENCES


8 See for example speeches by Nouy (2017) or Guindos (2018).

9 See for example speeches by Haila (2017) or Santos (2018).

10 See for example speeches by Haila (2017) or Santos (2018).


