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Deposit Insurance and Cross-Border Banks[1]

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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 integration dimension of the European project. Today there is a single banking supervisor and a single resolution mechanism. But the banking union will remain incomplete until an agreement is reached on a common deposit insurance scheme. Looking into the current situation 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 differences coexist.

DEPOSIT INSURANCE AROUND THE WORLD

For many decades, deposit insurance was seen as an undebatable institution in advanced economies and as a synonym of progress and financial development in emerging markets. Since Diamond and Dybvig (1986) showed how deposit insurance was crucial to prevent bank runs, no one questioned the need to offer this protection 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 actively monitor banks. Most of the existing literature supports this view (Demirgüç-Kunt and Detagriache 2002; Demirgüç-Kunt and Huizinga 2004; Ioannidou and Penas 2010; Karas et al. 2013), though there is also evidence to the contrary (Martinez Peria and Schmukler 2001; Lamer 2015). Anginer et al. (2014) reconcile these opposing perspectives, finding that before the global financial crisis, ample safety nets coming from deposit insurance induced excessive risk-taking, while during the crisis these schemes were a pillar in safeguarding financial stability.

Despite the prevalence of deposit insurance as an institutional pillar, there is substantial heterogeneity in its design (Demirgüç-Kunt and Kane 2001; Demirgüç-Kunt and Huizinga 2004; Beck and Laeven 2006; Demirgüç-Kunt et al. 2015). This has important implications. For instance, Huizinga and Nicodeme (2002) show that international depositors are sensitive to differences in national deposit insurance policies. Eisenbeis and Kaufman (2008) discuss the flaws in decentralized deposit insurance schemes in the US and how these offer important lessons for European policymakers. Hardy and Nieto (2008) show that uncoordinated deposit insurance policies around the world can lead to insufficient supervision and excessive deposit insurance.

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 implications for cross-border banks. When a bank expands across borders, a crucial decision needs to be made: will 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 of a foreign bank will most likely be unaware of the legal status of their bank—unless something goes wrong. In a recent paper, Bonfim and Santos (2019) show that during a crisis, bank depositors seem to be well aware of the differences between a branch and a subsidiary. Indeed, in financial distress, the distinction 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 authorities are responsible for dealing with the process. The supervision of a subsidiary is typically the responsibility of the host, even though the home authorities are responsible for supervising the consolidated banking groups. The same is usually true for resolution powers 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 some power when dealing with branches, but these are quite limited. Most of the responsibility falls to the home authorities, including in matters of deposit insurance.[2] Against this backdrop, depositors in a given country may face different levels of protection, depending on the design and

[1] The opinions expressed in the article are those of the authors and do not necessarily reflect those of Banco de Portugal or the Eurosystem. Any errors or omissions are the sole responsibility of the authors.

[2] Even though the host authorities might also choose to offer additional deposit insurance to depositors in branches of foreign institutions.

credibility of the deposit insurance fund backing the claims.[3]

In some cases, host countries of foreign branches might prefer home country regulation and supervision if the home country's deposit insurance scheme is 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 banking group that they would 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 foreign branches is clearly a material risk for the host authorities. To avoid such risks, supervisors often favor the legal form of a subsidiary. For instance, New Zealand requires foreign banks to be incorporated as subsidiaries (IADI 2011).

When financial stability is threatened, the interests of stakeholders from the home and host countries of cross-border banks often come into conflict. The agency problems that arise from competition among regulators can have crucial implications for the resolution of distressed institutions, the magnitude and distribution of costs coming from potential failures, and the externalities created (Eisenbeis and Kaufman 2008; Dell'Ariccia and Marquez 2006). Schüler (2003) argues that the conflicts typically arise in two dimensions: a home country dimension and an international dimension. The home country dimension is related to principal/agent problems between bank supervisors and taxpayers. These may be reflected in insufficient capital requirements or regulatory forbearance, most notably when financial institutions become distressed. More importantly for the issues we are discussing, in the international dimension, Schüler (2003) argues that when foreign banks increase their market share through branches (rather than through subsidiaries), host country regulators are faced with a loss of supervisory and regulatory power over the risks their country truly faces. This makes regulation, supervision, and resolution more challenging in countries with a substantial foreign bank presence, especially if branches are the main legal form. Host authorities are tempted to protect their own citizens, even at the expense of citizens from the home country or from other host countries, given that they are typically also responsible for financial stability (Eisenbeis and Kaufman 2008). At the same time, the home country regulators and supervisors might have difficulties in identifying (and acting upon) the externalities that a failure may create in the host countries. All these tensions are not easy to resolve and present challenges to cross-border integration.

[3] Eisenbeis and Kaufman (2008) note that "When a large number of foreign branches from different home countries coexist in a host country, bank customers in that country may encounter a wide variety of different insurance plans. These plans are likely to differ, at times significantly, in terms of account coverage, premiums, insurance agency ownership (private vs. government) and operation, ex ante funding and credibility."

One recent example of how the conflicts between home and host authorities can shape the outcome of a financial crisis comes from Iceland (Allen et al. 2011). Immediately after Lehman Brothers collapsed, three large internationally active Icelandic banks failed. These banks had adopted aggressive growth strategies in the preceding years, relying on the collection of internet deposits through foreign branches and subsidiaries (IADI 2011). Depositors in these banks were thus subject to a wide array of home and host oversight and 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 between deposit insurance and resolution authorities, most notably when dealing with large internationally active banking groups (IADI 2011). It also showed that depositors in foreign branches may be unprotected if the parent bank is unable to protect the branch operation (and if the home country deposit insurance scheme or, ultimately, the sovereign backing it up, is not strong or credible enough).

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-border operations. Huizinga and Nicodeme (2002) show 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 notably if the deposit insurance schemes have co-insurance, private administration, and a low deposit insurance premium. These results suggest that countries can alter the design of their deposit insurance protection to capture a larger share of the market for international deposits, thus leading to international competition in deposit insurance.

As we will discuss later, the current state of the banking union in Europe ensures that rules and regulations on deposit insurance are, albeit with some potential heterogeneity, common across the entire European Union, thus eliminating the scope for competition across jurisdictions based on depositor protection. However, even though the rules apply across the EU, fiscal responsibility is still national. That means that in the event of a bank failure, depositors in a given country will be reimbursed by the domestic authority, unless their deposits are held in a foreign branch, in which case depositors are insured in the home country of the branch's parent bank. This has certain implications: Bonfim and Santos (2019) show that during the euro area sovereign debt crisis, Portuguese depositors took action in response to the perceived credibility of the 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 branches, thus implying that deposits were no longer 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; Eisenbeis 2004). One key issue behind such strength and credibility of deposit insurance 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 1908 and 1917, eight US states created deposit insurance schemes, most of which failed within a very short period. According to Eisenbeis 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 usually with significant exposure to one or two large institutions; iii) governance was poor, especially in the case of privately funded schemes; and iv) there was a failure to recognize that the credibility of the insurance mechanisms 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.

A DECADE OF CHANGE IN EUROPEAN DEPOSIT INSURANCE

Before the failure of Lehman Brothers, all member states had their own deposit insurance schemes. The existence of deposit insurance was indisputable and debate over a common deposit insurance scheme was nonexistent. Indeed, the overall regulatory landscape was far from integrated. The Second Banking Directive, published in 1988 and modified in 1995, established 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. After the enactment of this Directive, any EU bank had the option of establishing branches anywhere within the EU without requiring approval from the host authorities. However, 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 supervision of 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 no 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 7, 2008, the EU's Economic 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 generally harmonized 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 funds is also envisaged in the Directive, which provides a crude form of risk-sharing, limited to liquidity insurance. Still, the degree of heterogeneity across national deposit guarantee schemes permitted by this Directive can be relevant in some dimensions. This may contribute to the differentiation of deposits across national borders and hence to financial fragmentation in times of crisis.

A key question is whether these common rules on deposit insurance, backed by common supervision and resolution, are enough to align incentives among authorities in different member states and to promote cross-border banking. As we shall argue below, the result of these tensions may continue to prevent the emergence of truly European banks, which could in itself provide a substantial degree of private risk-sharing across the monetary union. 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.

4 The FDIC, established in 1933, was one of the world's first deposit insurance schemes to be sponsored by a central government. Its creation was the result of the lessons learned from more than 10,000 bank failures in the US between 1929 and 1933 (Eisenbeis and Kaufman, 2010).

THE EUROPEAN BANKING UNION: WHERE DO WE STAND TODAY AND WHY?

In the European context, and in the euro area in particular, the lack of common deposit insurance was only one element characterizing the modest degree of risk-sharing stemming from the banking system, in the context of a common currency.

Since the onset of the crisis, the nonexistence of a European banking union was widely acknowledged as a clear threat to the economic and financial stability of Europe, essentially because it contributes to a strong relationship between sovereigns and the banking sector. This threat is amplified in times of crisis and poses significant challenges to financial stability, as well as to the design and transmission of the common monetary policy.

The banking union initiatives that emerged in 2012 represent an important step for the completion 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 a first step towards avoiding the involvement of countries (or taxpayers) in the recapitalization of banks and in the activation of deposit guarantees. This may contribute to mitigate the fragmentation of financial and banking systems along national borders. Still, the three pillars upon which the banking union was supposed to be designed—common supervision, resolution of troubled banks, and deposit insurance—are still incomplete. The lack of a common deposit insurance scheme, together with the possibility of liquidation of banks according to national law, leave room for disturbances in the event of a crisis, and significantly affect the incentives for authorities at the EU level in terms of risk transfer and maintaining financial stability.

That is, even though banks are now supervised and resolved at the European level, the ultimate consequences and responsibilities regarding a bank failure are still eminently national. If a bank with cross-border activities fails within the EU, the host authorities will be called to protect depositors in subsidiaries, and home authorities will have to deal with deposits held at branches. One recent example where the conflicts were evident was the distressed acquisition of Banco Popular Español in 2017. If the bank had failed instead of being purchased by Banco Santander, the Portuguese deposit insurance scheme would have had to reimburse, if necessary, deposits held in the Portuguese subsidiary, even though the decisions concerning the supervision and resolution of this subsidiary were not made in Portugal, but at the European level (Nouy 2017). Given the heterogeneity across sovereigns, 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) are marked by a clear tension between a group of member states calling for urgent risk-sharing solutions and another group calling for the immediate application of decisive risk-reduction measures (reduction of NPL 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, there seems to be a failure, on both sides, to find an adequate balance between ambition in the degree of risk reduction and recognition of the substantial benefits of a more complete banking union. More than that, there seems to be a failure to recognize that facing the next crisis without a complete banking union could jeopardize the future of the economic and monetary 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 up to national authorities to deal with the outcome of a resolution or liquidation determined by a European decision. Member states thus bear the ultimate responsibility regarding financial stability, but are clearly constrained by supervisory and resolution (or no resolution) decisions. This means that European authorities might not internalize the costs of determining the potentially disruptive liquidation of a bank by national authorities and the associated activation of deposit guarantees. Deciding at the European level not to apply a resolution measure and, as a consequence, determining the liquidation of banks at the national level, may thus be more likely without a common deposit insurance scheme, possibly leading to local systemic disruptions.

But again, the lack of a common deposit insurance scheme is not the only challenge in the European institutional design to promote financial stability and cross-border banking integration. A deepened banking union would also require a common resolution fund (which is already in place) but with a truly credible backstop and the internalization, at the EU level, of the costs of bank liquidation. A European institution could perhaps make the jurisdiction of origin less relevant if it met certain requirements. Specifically, it should have a high degree of autonomy and independence from national governments, sufficient resources to tackle a systemic crisis, and responsibility over the resolution, 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).

Further, one 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 are enough to enhance or even guarantee the financial stability of the European Union (and of the euro area in particular).

Finally, it seems also important to leave open the possibility of more 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 AND OVERALL INCOMPLETENESS OF THE BANKING UNION A BARRIER TO BANK CONSOLIDATION AND CROSS-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.[5] 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) significantly alters the incentives of national authorities with regard to the operation of cross-border banks. For example, national authorities will tend to encourage the cross-border expansion of domestic banks through subsidiaries (entities independent of 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 provide emergency liquidity assistance to subsidiaries; i.e., they do not assume the risks of those international operations. They also welcome the limited liability aspect of such operations, in a context where proper supervision may be difficult. With proper supervision, however, the risk-sharing aspect of international operations could potentially outweigh the costs. For example, a shock to the domestic economy that leads to losses in loan portfolios and to potential limitations on the credit supply could be offset by the international operations. But such benefits are perhaps perceived as limited, since the bias of national authorities towards favoring expansion through subsidiaries is quite evident. Also, national authorities may resist the establishment of foreign bank branches if those branches are relatively large or have local systemic importance.

There have been recent proposals—in the context of the revision of the Capital Requirements Regulation and Directive—towards making the operation of international banks through subsidiaries more similar to an operation based on branches. This makes it closer to a truly European operation, independent to some extent of national idiosyncrasies and mimicking the expansion through branches. The idea is that this promotes risk-sharing and helps create pan-European banks that are less dependent on the country of origin. The proposals amount to relaxing liquidity and capital requirements for subsidiaries—provided these requirements are met at the group level—so as to promote the reallocation of resources across jurisdictions. In turn, this would increase the efficiency of the operation, contributing to some degree of risk-sharing across countries. However, some national authorities tend to oppose such alleviation of liquidity and capital requirements for subsidiaries, and are inclined to 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 transfer of 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 insur-

[5] See for example speeches by Nouy (2017) or Guindos (2018).

ance, 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 be funding deposit outflows in another jurisdiction. This could occur even with intrinsically sound subsidiaries that are affected by problems generated in the parent bank only indirectly.

Next, consider the perspective 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 up to 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 arguably greatly reduce the abovementioned resistance of national authorities to the way banks expand and to how resources are allocated across 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 should circumstances take a turn for the worse. Conflicts of interest between stakeholders in the home and host countries in these situations are almost inevitable (Eisenbeis and Kaufman 2008). As discussed above, there are multiple tensions between home and host authorities that are not easy to address and that raise challenges to cross-border integration.

Would completing the banking union fully address these tensions? To entirely eliminate them, the interests of all the 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 align the interests of all those involved. Given that financial stability continues to be primarily a national responsibility, as taxpayers are called upon to reimburse depositors in the event of failure, there remain conflicts between home and host authorities, despite the huge step made by the two existing pillars of the banking union. As discussed before, completing the banking union through a common deposit insurance scheme, with a common fiscal backstop, would certainly foster a better alignment of interests. This would avoid explicit or implicit barriers or difficulties to entry raised by home and, especially, host authorities. It would also avoid shifts in depositors' allocation decisions based on the perceived credibility of deposit insurance.

However, the million-dollar question is if completing the banking union will necessarily lead to more cross-border banking in Europe. Are the restrictions imposed by supervisors and regulators so severe that banks are discouraged from pursuing profitable business opportunities across borders? Or does this reluctance arise from banks' incentives—or lack thereof?

Several other factors may be hindering cross-border bank integration in Europe: legacy assets from the 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; Emter et al. 2018; Guindos 2018). How these business and regulatory obstacles interact with those emerging from an incomplete banking union is a question that remains unanswered.

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