

## Principles of a Two-Tier European Deposit (Re-)Insurance System

By Daniel Gros<sup>1</sup>

### I. Introduction and Motivation

There is currently a discussion about the need for a European- (or euro area-) wide deposit insurance or guarantee system in the context of the plans to create a ‘banking union’ (BU). It is widely agreed that a full BU comprises three elements, namely common supervision, common funding for restructuring and common deposit insurance. Many academic observers (see, for example, the contributions to *Beck* (2012)) stress the need to introduce all three elements together. However, deposit insurance has de facto been dropped from the official agenda.<sup>2</sup> Some have argued that it is not needed and for others it is just politically too contentious (e.g. *Pisani Ferry/Wolff* (2012)).

The European Commission tabled a proposal for a directive on Deposit Guarantee Schemes (DGSs) already in 2010.<sup>3</sup> However, the scope of this proposed directive is quite limited as it aims only at harmonizing coverage, the arrangements for payout (e.g. the time limit for paying out depositors) and the financing of national DGSs. The Commission only proposes “mutual borrowing between DGSs, i.e. a borrowing facility in certain circumstances”. Somewhat surprisingly, an accompanying Joint Research Centre report (*JRC* (2011)) on deposit insurance does not consider the reinsurance model at all.<sup>4</sup>

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<sup>2</sup> The blueprint of the European Commission for a ‘genuine EMU’ contains only a passing reference to the need for “solid deposit guarantee schemes in all Member States”.

<sup>3</sup> [http://ec.europa.eu/internal\\_market/bank/docs/guarantee/20100712\\_proposal\\_en.pdf](http://ec.europa.eu/internal_market/bank/docs/guarantee/20100712_proposal_en.pdf)

<sup>4</sup> Under the heading “Pan-EU DGS”, this report “explored the option to establish a pan-EU DGS, either:

a. in the form of a single entity replacing the existing schemes, or

The case for maintaining deposit insurance at the national level is that in theory the national level remains best qualified to evaluate idiosyncratic risks of the banks under its watch. National DGSs should also have the right incentive to monitor individual banks as they would have to pay for any losses. In reality, however, most national DGSs (and national supervisors in general) operate within so many political constraints that they have little influence except for very small banks.

Experience has also confirmed that national authorities are not well placed to evaluate *systemic* risk, i.e. risks to their entire banking system. There are at least two sources of such shocks which often threaten the entire national banking system: i) local credit bubbles and ii) market segmentation and the sudden stops to cross-border funding.

*Local credit bubbles.* The national real estate bubbles were not recognised as such in Spain or Ireland, although foreign observers and EU institutions had repeatedly warned about unsustainable developments. Moreover, national authorities are also not well placed in practice to deal with banks that are well connected at the national political level, either because of size ('national champions') or because of the nature of their business (banks financing local real estate development). This leads to unacceptable delays in loss recognition and capital-absorbing losses, pushing losses first on national taxpayers and subsequently on European taxpayers.

*Market segmentation and the sudden stops to cross-border funding.* Liquidity is a systemic, market property and given that the interbank bank market is (or rather used to be) cross-border within the euro area, this is a source of shocks which national authorities are not well placed to assess.

The experience with Spain has shown that the confidence in the national banking system can be threatened (or completely lost, as in the case of Greece) when a very large shock (whether to liquidity or a local real estate bust) puts the entire system under such stress that the national guarantee system is clearly no longer capable of protecting depositors. Under these conditions, the entire economy will be in recession; and the sovereign will also come under so much pressure that it might no longer constitute a reliable back-up – leading to what has variously been described as a 'diabolical' loop between the banks and the sovereign.

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- b. in the form of a complementary fund to existing DGS ('28th regime'), or
  - c. structured as a network of schemes providing each other with mutual assistance ('European system of DGS')."

There is thus a need to re-insure national deposit insurance systems against large, systemic events.<sup>5</sup>

The need for reinsurance thus arises even without considering the specific problems posed by large cross-border bank groups. In reality, most large cross-border banks operate via subsidiaries. These subsidiaries contribute to the DGS of their host countries the same way as purely national banks, and the national DGS would have to pay out should one of these large cross-border banks fail. This provides some automatic burden-sharing.

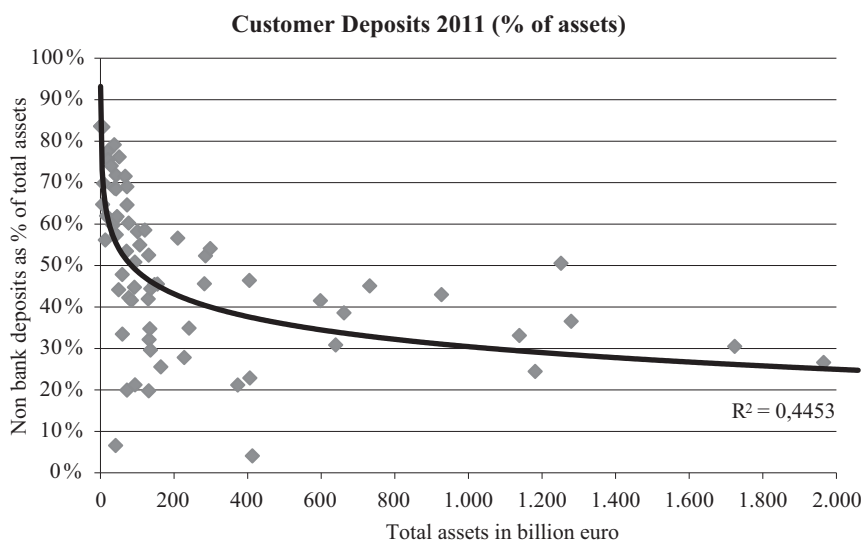
However, the burden-sharing is limited to the case of cross-border banks operating with subsidiaries. Losses at large cross-border banking groups (mostly classified as SIFIs, or significantly important financial institutions) pose other problems, as the distribution of assets across subsidiaries will determine where the losses arise. The experience with Fortis has clearly shown this phenomenon. SIFIs are usually saved by government intervention because of the threat they pose to systemic stability. Deposit insurers are thus not directly involved and anyway do not constitute the largest creditors because these large institutions are mostly universal banks for which deposit-taking is only one part of the overall business model with customer deposits amounting usually to much less than one-half of the balance sheet. Figure 1 below shows the share of customer deposits by bank size (measured as total assets) of the about 60+ euro area banks subjected to the stress test administered by the European Banking Authority (EBA) in 2010, which covered for all the member countries the largest banks accounting for at least one-half of assets at the national level.<sup>6</sup>

Existing mutual guarantee schemes provide another rationale for reinsurance. These schemes, notably among the German savings banks, exist

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<sup>5</sup> *Pisani-Ferry et al.* (2012) arrive at the same conclusion.

<sup>6</sup> The 2010 stress test exercise was conducted on a sample of 91 European banks. In total, national supervisory authorities from 20 EU member states participated in the exercise. In each of the 27 member states, the sample was built by including banks, in descending order of size, so as to cover at least 50 % of the respective national banking sector, as expressed in terms of total assets. As the stress test was conducted at the highest level of consolidation for the bank in question, the exercise also covers subsidiaries and branches of these EU banks operating in other member states and in countries outside Europe. As a result, for the remaining seven member states where more than 50 % of the local market was already covered through the subsidiaries of EU banks participating in the exercise, no further bank was added to the sample. The 91 banks represent 65 % of the total assets of the EU banking sector as a whole. For about 10 of these banks no data on customer deposits were available.



Source: CEPS database (see Ayadi et al., 2012).

*Figure 1: The Relative Importance of Deposits as a Function of Bank Size*

usually among groups of small savings institutions, all of which have a very similar business model. Groups of banks with a mutual guarantee system constitute essentially one large bank from the point of view of a deposit insurance system. There is no reason to dissolve systems that have worked well so far. But these groups clearly are not immune to systemic risk. A first reinsurance layer for groups of savings or cooperative banks which have a mutual guarantee agreement could be provided at the national level. But this is not sufficient since these groups account for a large share of deposits in some countries and could thus overtax the loss absorption capacity of the national authorities.

There has been some debate about the need for a European approach to deposit insurance. For example, *Pisani-Ferry/Wolff* (2012) argue that a common deposit insurance fund is not needed at this point. The reason given is that deposit funds insure against the failure of a single, small financial institution, but not against the failure of the euro area financial system. This is undoubtedly true. But their argument strengthens actually the case made here for the need for some back-up for national DGSS that experience a shock that is systemic at the national level, but not at the euro-area level. The experience with Spain and Ireland has shown that this type of shock can certainly arise. Depositor confidence every-

where should be strengthened if it is known that there exists a credible back-up for national deposit insurance funds.

A single common European (euro area) Deposit Insurance System managed by a common agency, which can also manage resolution (EDIRA) as proposed by *Gros/Schoenmaker* (2012), would be preferable to take care both of large cross-border banks and systemic risks (which can arise from national banks, sometimes even collections of small banks). But, unfortunately, this seems to be seen as a step too far in the present political context, although the existing national deposit guarantee systems are usually without teeth and without real funding. Moreover, these national DGS are usually not managed by independent institutions which could actually resolve a bank if needed. By contrast, the Federal Deposit Insurance Corporation (FDIC) in the US is completely unconcerned by the local political difficulties that might arise when it swoops in and resolves an ailing bank over a weekend. During this crisis the FDIC has been able to resolve hundreds of (admittedly mostly small) banks, whereas in Europe very few banks have been resolved or allowed to fail. The FDIC follows a strict ‘waterfall’ of claims with junior debt first to be wiped out and even senior bond-holders often suffering large haircuts. The FDIC model would thus be preferable for the EU as well, but unfortunately it does not seem to have any chance of being adopted at present.

It is interesting to note that one of the key arguments for the creation of the FDIC was the fact that deposit guarantee had been a responsibility of the states. But during the crisis of the early 1930s, most of the deposit schemes at the state level had become insolvent (*Golembe* (1960)) as contagion led to a cascade of local banking panics which overwhelmed the capacity of the local DGSs of the time.<sup>7</sup>

One of the key reasons why state deposit insurance systems failed was the fact that the small undiversified banks exposed to local real estate bubbles and agricultural difficulties were prone to systemic crisis (*Thies/Gerlowski* (1989)). This problem remains even today. The Spanish and Irish deposit insurance funds would be overwhelmed by the multiple failures within a small undiversified group of banks resulting from a local boom and bust. Federal re-insurance would diversify this risk of local shocks.

The need to provide insurance against systemic shocks remains today as important as ever. This need motivates the following concrete proposal.

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<sup>7</sup> See *Aizenman* (2012) on the lessons from the US for Europe in an historical perspective.

## II. Basic Principles of Reinsurance

A first point is that what is needed is reinsurance, not a mutual guarantee (as among the Sparkassen in Germany). This implies that the reinsurance scheme proposed here will not put the deposits of savers in virtuous countries at risk.

A new institution – the European Reinsurance Fund (EReIF) – would have to be created. This institution would collect premia from all national DGSs and would pay out in case losses at the national level exceed a certain threshold.

### *1. Compulsory Reinsurance with a Deductible*

The compulsory element is indispensable. Otherwise a serious adverse selection bias would arise. Differences in risk profiles are no reason to allow any national DGS to opt out.

(National) Deductible: As for any insurance, there should be a first loss tranche, or deductible, which is borne at the national level. This means that the losses that might arise if a small-to-medium-sized bank fails somewhere would have to be covered by the national DGS alone. This ‘deductible’ should be of such a size that the national DGS could pay out without endangering its own viability. It should be proportional to the size of the national fund accumulated, which in turn should be large enough to deal with the failure of any single domestic bank (but not necessarily the EU-wide deposits of the large cross-border banking groups). The European Commission has proposed to set as a target for each national DGS a fund equivalent to 1.5 % of (insured) deposits. The national DGSs should then dedicate a part of the risk premia they collect from their banks to reinsure themselves with the EReIF. As a rough guess about one-third to one-half of the premia collected at the national level might be needed for the reinsurance against systemic or large national shocks.

The contract between the EReIF and the national DGS would thus specify that the EReIF would pay out if, over a time period to be specified (say 2–3 years), the total claims on the national DGS exceed (e.g. two times) the fund accumulated nationally. Another way to specify the reinsurance event would be to fix the deductible (or national first-loss piece) in terms of a percentage of GDP.

Reinsurance is thus completely different from lending among national DGSs, as proposed by the European Commission. A national DGS will

need financial support only if the country experiences a systemic crisis. But these are exactly the conditions under which the other DGS systems will not want to lend and it will be difficult to force the stronger DGSs to lend to others in crisis. Moreover, this mutual lending will constitute a vehicle for contagion, which should be avoided.<sup>8</sup>

There will be limits to the amount the EReIF pays out. The limit is likely to be large enough to cover systemic events in small- to medium-sized Member States. The empirical literature indicates that the average cost of a banking crisis is around 5 % of GDP. Even for a country like Spain, this would translate into € 50 billion, and should thus be manageable by a fund of this order of magnitude.

A systemic shock to a large country could not be handled by the EReIF alone. In such a case, recourse to the ESM will be unavoidable because any systemic crisis of a large member country will lead to systemic consequences for the entire euro area economy. It will then be up to the fiscal authorities represented in the ESM to decide whether European taxpayers' money should be used to intervene.

How much protection could be provided by the reinsurance model proposed here? If one assumes that one-half of the premia are needed to cover against systematic risk, the protection provided by EReIF would be inverse to the size of the country. For example, for a small country which accounts only for 5 % of all deposits, the common fund would be 20 times as large as the national fund. Even for a country accounting for 10 % of all deposits (e.g. Spain), the EReIF would still be ten times larger than the national fund and thus be much more able to deal with a loss that might be too large to be dealt with at the national level.

## *2. Premiums and Management*

Risk premia should of course reflect differences in risk. Systemic events materialise rarely. It will thus be very difficult to calculate the appropriate premia. There will be long periods during which no systemic event occurs, and hopefully many countries will never experience a systemic crisis. But one could use the expertise of the large European reinsurance industry to assess the proper premium for this type of rare event. A real institution will be needed; a mere 'post box' system without expertise at the centre will not work because it would not be able to

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<sup>8</sup> A 2001 JRC study did not consider the reinsurance approach.

properly assess the risk of the national DGS. It is of course essential that the institution that sets the premia for the reinsurance is completely independent of political influence in its risk assessment. This seems to exclude the European Stability Mechanism (ESM) in its present form because its staff has little autonomy under a Board that is dominated by the national finance ministers whose main mandate is to look after the interests of their national taxpayers, and not the stability of the whole system. One could of course imagine that the ESM evolves into a 'European Monetary Fund' which provides the back-up to solvent but illiquid sovereigns and banks. This would require an experienced professional staff with substantial independence. This could be built up, but would take a long time.

The EReIF would not need to have expert knowledge in bank management, but would need to look out for systemic, macroeconomic risk. In principle, this expertise is already available in the European Systemic Risk Board (ESRB). It would thus be important to find an institutional solution under which this expertise can be used by the EReIF. For example, the EReIF could be empowered to increase the premia it charges to the national DGSs concerned if the national authorities had ignored a warning and a recommendation from the ESRB to undertake certain actions to forestall a potential danger to price stability.<sup>9</sup>

The EReIF should also be able to judge the overall quality of the national DGSs, which requires expertise in systems management, rather than analysts of bank balance sheets. The EReIF should thus have the right to inspect the quality of national supervision and the practice of national DGSs, checking for example whether premia are properly adjusted for risk. Here it could benefit from the expertise of the Directorate General for Competition Policy (DG Comp) of the European Commission. In the private sector such a supervision of the reinsured is usually not feasible. This is why a fundamental principle of private reinsurance contracts is "The Duty of Utmost Good Faith" (*Devery/Farrell* (2008))<sup>10</sup>. Un-

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<sup>9</sup> A warning under the excessive imbalances procedure that is managed by the Commission and decided by the ECOFIN Council could of course be taken as another signal to the EReIF that the DGS of the country in question faces a greater risk of a systemic event.

<sup>10</sup> "One of the most fundamental principles in reinsurance – indeed, what sets the reinsurance field apart from most other industries – is the concept of utmost good faith (also known as "uberrimae fides"). The duty originated in the context of marine insurance law, when underwriters had no practical means of inspecting reinsured ships or cargo in distant ports."



der this principle; the EReIF should be present at the table once a national DGS is nearing the borderline where a pay-out from the EReIF would be triggered. The EReIF would then need to give its consent to measures that would reduce loss-absorption capacity (e.g. the plan by Bankia to reimburse certain instruments that are formally counted as tier one capital at one-half the face value). Here again, a collaboration with DG Comp would make sense.

### 3. Transition

A final question is how to deal with legacy problems in some of the banking systems that are already under stress. For countries like Greece, Ireland, Spain and Portugal, the banking problems have already become systemic. If the national governments temporarily lose access to financial markets and are thus not able to provide immediate backing to their own DGS, these legacy problems will have to be resolved by recourse to lending from the ESM. Resolution will then involve winding down non-viable bank operations and recapitalising viable bank operations under the broad supervision of the European Central Bank in the context of the new Single Supervisory Mechanism (SSM), but the responsibility for the losses would remain with the national authorities under whose watch they arose.

However, in the meantime, the new system could already start, with the EReIF gradually building up its capital. The next systemic crisis will be somewhere else and some time off. There should thus be enough time to build a new institution and accumulate enough funding before the next systemic crisis hits.

## III. Conclusions

National deposit insurance is not stable in a monetary union. With supervision now moving towards the European level, there is an urgent need to reconsider the framework for deposit insurance as well.

This paper has proposed a two-level framework in which deposit insurance would remain a national responsibility, only subject to some minimal standards set by an EU directive, but the national DGSs would be required to take out reinsurance against systemic shocks. The responsibility for losses by individual (and non-systemic) institutions would thus remain at the national level. But the existence of the European Reinsur-

ance scheme would stabilise the system even if a large, systemic shock destabilises the local economy and puts the national guarantee in doubt.

Reinsurance does not imply a full, across-the-board guarantee. The fears that a common deposit insurance scheme would lead to large transfers across countries is thus unfounded.

No legal framework can fully forestall the danger that a member country under extreme stress decides to leave the euro and reintroduce a national currency. However, the existence of reinsurance for household deposits would make it less likely that such extreme stress arises and would provide another incentive for any country experiencing a large shock to remain within the common currency area.

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## Summary

### Principles of a Two-Tier European Deposit (Re-)Insurance System

There is general agreement that banking supervision and resolution have to be organised at the same level. It is often argued, however, that there is no need to tackle deposit insurance because it is politically too sensitive.

This note proposes to apply the principles of subsidiarity and re-insurance to deposit insurance: Existing national deposit guarantee schemes (DGSs) would continue to operate much as before (with only minimal standards set by an EU directive), but they would be required to take out re-insurance against risks that would be too large to be covered by them. A European Reinsurance Fund (EReIF) would provide this reinsurance financed by premia paid by the national DGSs, just as any reinsurance company does in the private sector. The European Fund would pay out only in case of large losses. This 'deductible' would provide the national authorities with the proper incentives, but the reinsurance cover would stabilize depositor confidence even in the case of large shocks.

It will of course take time to build up the funding for such a reinsurance fund. This approach is thus not meant to deal with legacy problems from the current crisis. (G21, G28, G32)

## Zusammenfassung

### Ein Europäisches System der Einlagenrückversicherung

Europa geht in Richtung „Bankenunion“. In einem ersten Schritt wird die Verantwortung für die Aufsicht auf die Europäische Zentralbank übertragen. Es besteht auch Konsens, dass als nächster logischer Schritt dann auch ein europäischer Bankenrestrukturierungsfonds notwendig wäre. Aber eine europäische Einlagenversicherung erscheint vielen als politisch nicht möglich.

Nationale Einlagensicherungssysteme sind aber im Falle von systemischen Krisen nicht ausreichend um das Vertrauen der Anleger zu stabilisieren. Dieser Beitrag schlägt deshalb ein System von Rückversicherung vor. Die existierenden nationalen Einlagenversicherungssysteme (DGS) müssten nicht verändert werden und könnten weiter arbeiten wie bisher, müssten aber eine obligatorische Rückversicherung abschließen um sich gegen das Risiko eines systemischen Schocks abzusichern, den sie selbst allein nicht bewältigen könnten. Diese Rückversicherung würde durch einen Europäische Rückversicherungsfonds (EReIF) geleistet werden welcher sich durch Prämien wie ein normaler Rückversicherer finanziert. Kleinere Schadensfälle würden weiterhin von den nationalen Einlagenversicherern abgewickelt werden. Der europäische Rückversicherer würde nur bei systemischen Krisen in Anspruch genommen werden. (G21, G28, G32)

