Five Presidents' Report Series
Issue 01 / 2015 | 09 November

European Commission

European **Political Strategy** Centre

Regaining Citizens' Trust, Safeguarding Banks' Stability

Towards a European Deposit Insurance Scheme

As stated in the Five Presidents' Report, completing the Banking Union is a fundamental step towards making the Economic and Monetary Union (EMU) more sustainable and enabling it to deliver a better life for EU citizens. The overarching goal of the Banking Union is to break the link between a Member State's banks and its taxpayers, preventing a situation in which a failing banking sector endangers the sustainability of public debt or where the unsustainability of public debt endangers an otherwise solvent banking sector. The Banking Union was devised to tackle the former aspect of this link.[1] The current Banking Union setup, however, retains a substantial weakness: making sure citizens' deposits in banks are safe was a key element of crisis management - and overall a successful one - but as long as these Deposit Guarantee Schemes (DGSs) remain national, Member States' budgets continue to be exposed to risks in their banking sectors.[2] A common deposit insurance scheme, on the other hand, would increase resilience against future crises. Consequently, the Five Presidents' Report proposed setting up a European Deposit Insurance Scheme (EDIS) as the third pillar of a fully-fledged Banking Union, alongside bank supervision and resolution.[3]

Shielding Against Instability and Avoiding Bank Runs

Deposit Guarantee Schemes are designed to insure citizens against bank insolvency and thereby limit the possibility of systemic bank runs, which they largely did in the last crisis. However, due to the national character of the current Deposit Guarantee Schemes, Member States continue to be exposed to potential instability in their banking systems.

Countering Fragmentation of the Banking System

In the euro area context, a European Deposit Insurance Scheme would support the already ongoing efforts by the European Central Bank (ECB) towards the reintegration of the euro area banking system, partially fragmented by the sovereign crisis.

Limiting Fallout for Taxpayers

A common euro area scheme is more likely to be fiscally neutral over time than national Deposit Guarantee Schemes, because risks are spread more widely between different countries and because the private bank fees that pay for the guarantee funds are raised over a much larger pool of financial institutions.

Under the Single Resolution Board Umbrella

The Single Resolution Board (SRB) would be the best placed institution to house a true European Deposit Insurance Scheme, since it is already building up the necessary knowledge and experience on the resolution of EU banks, and also to avoid institutional duplication.

1. The Rationale for Deposit Guarantee Schemes

Deposit Guarantee Schemes are essentially **designed to limit the possibility of systemic bank runs**. At a minimum, this function implies paying depositors, up to a certain limit, when their bank becomes insolvent - this is usually referred to as a 'pay box' function. However, increasing financial stability in this way should be balanced with the need to prevent an unnecessarily high level of 'moral hazard'. In other words, to guard against potentially reckless levels of risk-taking by all economic agents, from depositors to banking institutions, which might occur if they were to believe they could always rely on an unconditional safety net. Therefore, most Deposit Guarantee Schemes **limit protection to deposits of households and non-financial companies, and even then only up to a certain amount**.

Evidence suggests that Deposit Guarantee Schemes have largely fulfilled this basic function in the recent crisis, albeit in many cases this was so only after the crisis necessitated changes in their scope and coverage.[4] With the exception of specific institutions and very few Member States, no large-scale, systemic bank runs were observed, even when a number of countries' banking systems faced tremendous pressure. At the same time, the financial crisis led to an expansion of the number of countries with Deposit Guarantee Schemes: by 2013, according to the IMF, 59% of countries had them, as opposed to 44% ten years earlier. There has been also a broadening consensus on the desirable features of such institutions: that they should have a **relatively high level of deposit coverage** (at least in terms of the number of depositors); they should be **ex ante funded** (as opposed to ex post, where the costs are paid by the remaining, post-resolution members of a national banking system); they need to be **obligatory**; and their mandate should go beyond 'pay box' functions to incorporate, for instance, an **involvement in the resolution process** (as is the case now for two thirds of all members of the international Financial Stability Board).[5]

Considering the massive size of some banks and their cross-border nature on the one hand, and the importance of deposits for citizens on the other, it is clear that further strengthening the system by a joint Deposit Insurance Scheme is the next, necessary step. **A European system would allow the risks and costs of financial shocks to be diversified** across countries, therefore benefiting each individual economy. Those gains are particularly important in a financially integrated region such as the EU, and even more so in the euro area.

A comparison between the EU and US systems (See Annex 1 on *The US and German Deposit Guarantee Schemes)* further underlines this point: it is apparent that the EU and euro area DGS systems are much more recent, and that the current **size of the US Deposit Guarantee Scheme in relation to the covered deposits is more than three times that of the EU or the euro area** (after a sharp rebound from the depletion suffered during the 2008 crisis, see Table 1, p. 6). The US coverage is rather generous (it covers close to 80% of deposits, compared to less than 50% in the EU), and its DGS fund is fully capitalised ex ante, while in the EU several Deposit Guarantee Schemes are still funded ex post and several are still in the process of progressive capitalisation. However, **when the EU DGS system reaches its planned level of 0.8% of covered deposits, the coverage ratio will be similar to that in the US**. Another difference between the EU and US system is that, given the greater willingness of US regulators to 'resolve' banks, the actual use of DGS funds is much more frequent in the US than in the EU.

A side effect of the Deposit Guarantee Scheme harmonisation at the EU level is that deposits in some Member States are now insured at very large multiples of their GDP, implying likely difficulties for at least some Member States in honouring this guarantee unsupported (See Table 1, p. 6).[6]

BOX 1. Money in the Bank

For banks, customers' trust is sooner lost than won. So **avoiding bank runs was one of the priorities of crisis management** after 2008. Existing EU regulation, dating back to 1994, still allowed for large differences between Member States, for instance in the level of coverage and the scope of covered depositors, and financing of Deposit Guarantee Schemes had been left entirely in the hands of national governments. The Directive of March 2009 required all countries to increase coverage up to €100,000 by the end of 2010, and after a thorough review, rules on national DGS schemes were harmonised and simplified.[7]

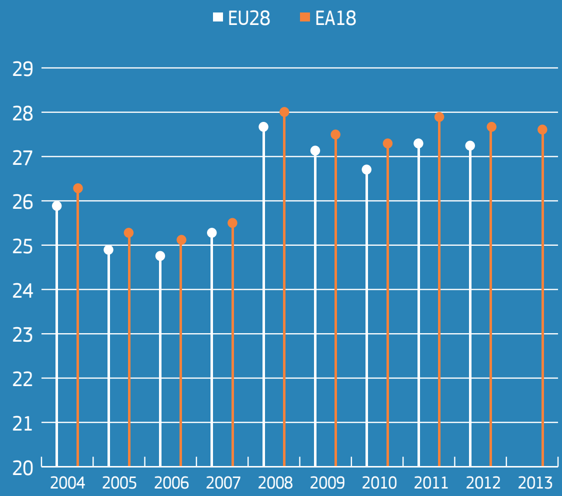
Deposit guarantee schemes are particularly important in the euro area, given that households have almost 30% of their consolidated financial assets in bank deposits (see Figure 1). Overall, Deposit Guarantee Schemes did the job throughout the crisis. Despite considerable and, at the time, apparently well-founded anxiety over deposits, systemic bank runs were mostly avoided. Individual banks in the UK and the Netherlands did experience bank runs while, arguably, a systemic bank run did happen at the height of the Cyprus crisis. In Greece, a slow-motion bank run of sorts - dubbed by some a 'bank jog' – took place throughout the crisis years, only to turn into a full-blown bank run after the 2015 referendum on whether or not to accept the conditions of a third rescue package. Eventually, in both the Cypriot and Greek cases, the temporary imposition of capital controls became necessary to stabilise banking systems.

But safeguarding citizens' deposits came at a risk: a number of Member States now guarantee deposits several times higher than their GDP, which potentially undermines the validity of their guarantees in the worst-case scenario. As long as guarantee schemes remain purely national, the risk that some banks will in principle be 'too big to cover' will remain. Citizens seem to agree: while a resurgence in deposits counts as an indicator of trust, in a 2013 Eurobarometer poll **47% of respondents thought that European actions would be even more effective in guaranteeing their deposits.**[8]

Yet, this is not merely a question of safeguarding private savings: for a number of reasons - pressures in financial markets, among others - the relative importance of deposits in euro area banks' funding has increased with the crisis (See Figure 2). Hence better guaranteeing deposits is **a vital step towards further stabilising the EU banking system**, which in turn is **a way to give the real economy increased access to finance**. It would also support the ongoing efforts by the European Central Bank to reintegrate the financial system in the euro area, which was partially fragmented by the crisis, notably its exceptional liquidity programme, known as 'Quantitative Easing' or QE.

Figure 1: Bank Deposits of Households

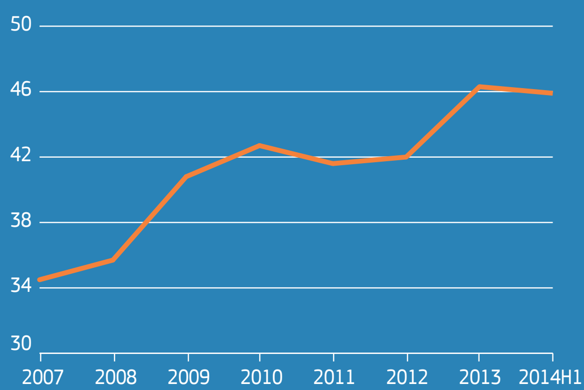
% of total household financial assets



Source: Eurostat

Figure 2. Importance of Deposits as Source of Bank Funding in the Euro Area

% of total assets



Source: European Central Bank

2. Options for a European Deposit Insurance Scheme

There are several possible options to devise a European Deposit Insurance Scheme (EDIS).[9] They include:

a. a full replacement of the existing system by a single, euro area Deposit Insurance Scheme;
b. the creation of a complementary 'top-up' euro area Deposit Insurance Scheme (a '20th DGS' regime);
c. a reinsurance mechanism to the existing euro area Deposit Guarantee Schemes;
d. a system of inter-Member State (E)DGS cross-lending.

Option a) above amounts to the elimination of the currently existing national Deposit Guarantee Schemes and their **full replacement by a common European scheme**. Option b) would mean the creation of a **complementary European Deposit Insurance Scheme** while preserving the existing national schemes, while option c) also preserves the existing national schemes, but does not create any additional European schemes. Instead, it just adds **an institution that 'reinsures' those national guarantee schemes**. Finally, option d) does no more than to **enhance the existing inter-lending agreement between the national Deposit Guarantee Schemes**.

The creation of a single euro area Deposit Insurance Scheme remains politically controversial, but **it is necessarily the final objective of the process**, as it is the natural counterpart of the Single Supervisory Mechanism (SSM) and the Single Resolution Board. It could be implemented following a progressive mutualisation path, similar to that of the Single Resolution Fund (SRF). Option d), a sort of modified status quo, would most likely be both **very complex to manage and suboptimal from the point of view of systemic stability**, not breaking the bank-sovereign link in any additional and meaningful way.

Options b) and c) would seem to be both **implementable in the short term and provide improvements to the current setup. They could be seen as intermediate steps towards the creation of a single euro area scheme**. Both would imply additional EU legislation, with a corresponding need of adjusting the respective Member State laws. The main difference between them lies in the way of collecting fees: in the reinsurance setup, the national Deposit Guarantee Scheme collects levies and then transfers a share of those to a euro area institution to fund the mutualised reinsurance layer. In the '20th regime' case, on the other hand, the euro area-level institution that manages the European Deposit Insurance Scheme would lay levies directly into the national banks, in parallel to the national-level ones.

In both b) and c), levies could be risk-adjusted between different Member States and banks (reflecting the fact that some banks or national banking systems are riskier than others). Also in both cases, those funds would be accessed only in case of a shock that is larger than the national schemes can absorb, and after they have used the resources in their respective national Deposit Guarantee Schemes, as a way to prevent moral hazard at the national level.

In any of the options above (and just like in the Single Resolution Fund), this common European Deposit Insurance Scheme would be **privately funded through ex ante, risk-based fees, paid by all the participating banks** and devised in a way that would prevent moral hazard (however, as the existing national Deposit Guarantee Schemes already collect risk-based fees, a euro area system based on the transfer of the national fees would arguably itself be risk-based). In the EDIS context, while the existence of the Single Supervisory Mechanism and the Single Resolution Fund already act as partial deterrents against 'free riding' behaviour, the use of **risk-based variable fees** (therefore higher for riskier banks) **set *and* collected by a central euro area institution** (therefore avoiding the 'institutional capture' that arguably affected some bank systems in the run-up to the sovereign debt crisis) **would likely be the best way to avoid moral hazard**.

Therefore, the European Deposit Insurance Scheme scope should also coincide with that of the Single Supervisory Mechanism, which would mean that it would be obligatory for all euro area members but open to be joined by other Member States. Additionally, under any of the alternatives discussed above, the aggregate system could be cost-neutral, with the same level of fees being collected from the EU's bank system.

3. The Institutional Location of an EDIS and the Need for a Backstop

Where a European Deposit Insurance Scheme should be located institutionally remains an important question. Instead of creating an additional institution, it is possible to **house the EDIS in the newly created but already operational Single Resolution Board (SRB)**, hence addressing the potential shortcomings of separating resolution and deposit insurance in the euro area.

It is already the case that the Single Resolution Board has to interact closely with the Single Supervisory Mechanism and with the national Deposit Guarantee Schemes, as they are part of the bank resolution process. There is merit in enabling the Single Resolution Board to combine resolution and deposit guarantee functions more formally, going beyond a simple 'pay box' set up. This would make the most of the fund management expertise it will develop with the Single Resolution Fund. In addition, the Single Resolution Board's experience with the progressive mutualisation of the 'national compartments' of the Single Resolution Fund provides a natural reference for the evolution from a top-up or reinsurance scheme towards a fully mutualised EDIS. The successful capitalisation of the Single Resolution Fund is also likely to provide comfort to Member States when it comes to the implementation of a genuine European Deposit Insurance Scheme.

Additionally, historical experience (See Annex 1 on *The US and German Deposit Guarantee Schemes)* also shows that a Deposit Guarantee Scheme at some point in time needs **a formal, pre-agreed and transparent backstop framework,** given that the accumulated amounts in even fully-funded Deposit Guarantee Schemes are unlikely to be sufficient in case of systemic crises. At least in the euro area case, the backstop function could be achieved through a credit line to the Single Resolution Board by the European Stability Mechanism (ESM). This would, however, demand a change in the ESM treaty.[10]

Importantly, legal considerations are not restricted to the need to revise the ESM treaty, but go to the very 'hybrid' nature of the different parts of the Banking Union itself: for instance, the Single Supervisory Mechanism regulation is based on Article 127(6) of the Treaty on the Functioning of the EU (TFEU), which was included in the Treaty to enable the conferral of supervisory responsibilities to the ECB and is therefore euro area specific. On the other hand, the Single Resolution Mechanism regulation, which established the SRB, is based on Article 114 TFEU, which deals with the EU internal market and therefore applies to all 28 Member States. An EDIS will likely follow the Single Resolution Board strategy and be created under article 114 TFEU.

Box 2: The Single Resolution Board

The Single Resolution Board (SRB) houses and manages the Single Resolution Fund (SRF), the joint euro area fund that is to be used in the case of bank resolution financial needs over and above those available at the national resolution authorities which is to reach €55 billion after an 8 years mutualisation period. It became operational in January 2015, is located in Brussels and has among its Managing Board members of the ECB and of the national resolution authorities, who are its main interlocutors. However, for the SRB to become fully operational, the ratification of the SRF agreement by all euro area Member States must still be completed.

Conclusion

Deposit Guarantee Schemes are important both for citizens and for banks, and hence a cornerstone of financial stability. The EU has improved its Deposit Guarantee Scheme setup since the crisis, but a more integrated system is still necessary, as it would enable a greater diversification of risk that would benefit the stability of all countries and better protect household savings.

The Single Resolution Board would be the best placed institution to house the nascent European Deposit Insurance Scheme. The process of the creation of such a scheme may imply a temporary 'mutualisation' period, similar to that of the Single Resolution Fund, via a top-up or reinsurance framework, but the endgame should be a fully-fledged and common European Deposit Insurance Scheme.

Finally, experience shows that Deposit Guarantee Schemes and resolution bodies need a backstop. The European Stability Mechanism, after treaty changes, could perform this function, once corresponding legal questions are addressed. This integrated setup will be both more functional and effective in reducing moral hazard, free-riding behaviour and institutional capture.

Table 1: Deposit Guarantee Schemes in the EU and the US (€2012 figures for the EU, $2014 figures for the US)

Figures show both the great heterogeneity in European Deposit Guarantee Schemes and their relative undercapitalisation when compared with the US Deposit Guarantee Scheme.

	Date of inception of explicit DGS	Statutory coverage limit in 2013 (in reported currency)	Coverage limit / GDP per Capita 2013 (in %)	Total deposits (Billion €)	DGS covered deposits (Billion €)	Size of DGS fund / Covered deposits (%)
Austria	1979	€ 100,000	282	324.9	173.4	0.0
Belgium	1974	€ 100,000	304	529.0	229.1	0.9
Cyprus	2000	€ 100,000	557	104.4	51.9	0.04
Estonia	1998	€ 100,000	724	10.8	5.3	3.3
Finland	1969	€ 100,000	292	136.5	77.8	1.2
France	1980	€ 100,000	321	1577.3	1103.5	0.2
Germany	1998	€ 100,000	306	3171.8	1575.3	0.2
Greece	1995	€ 100,000	631	175.0	104.8	3.8
Ireland	1989	€ 100,000	302	194.0	80.0	0.5
Italy	1987	€ 100,000	397	1511.6	490.5	0.0
Latvia	1998	€ 100,000	906	17.8	6.0	4.4
Lithuania	1996	€ 100,000	861	13.4	6.7	0.0
Luxembourg	1989	€ 100,000	125	215.9	30.4	0.0
Malta	2003	€ 100,000	603	28.0	7.0	0.1
Netherlands	1978	€ 100,000	289	863.7	447.0	0.0
Portugal	1992	€ 100,000	665	221.5	110.2	0.2
Slovakia	1996	€ 100,000	778	45.9	24.2	0.8
Slovenia	2001	€ 100,000	606	23.5	14.9	0.0
Spain	1977	€ 100,000	473	1568.8	674.9	0.4
EA			**495.93**	**10733.9**	**5212.7**	**0.32**
Bulgaria	1999	€ 100,000	1870	29.0	18.4	8.6
Croatia	1997	€ 100,000	1016			
Czech Republic	1994	€ 100,000	731	123.6	65.3	1.5
Denmark	1987	€ 100,000	233	166.9	105.5	0.7
Hungary	1993	€ 100,000	1028	60.0	30.3	0.9
Poland	1995	€ 100,000	1029	278.6	103.2	1.8
Romania	1996	€ 100,000	1547	64.3	27.4	2.4
Sweden	1996	€ 100,000	238	267.1	140.9	2.3
UK	1982	£85,000	354	2922.2	1218.8	0.0
US	**1933**	**$250,000**	**471**	**7888**	**6231.5**	**1.0**

1: DGS funded ex post (no accumulated DGS fund); 2: Estimate, as the total of the multiple German DGSs is confidential (see Annex 1); 3: average value.
Source: 'Updated estimates of EU eligible and covered deposits', JRC, 2014, and Demirgüç-Kunt et al, IMF, 2014.

Annex 1: The US and German Deposit Guarantee Schemes: Lessons for the EU and the EA.

The **US Deposit Guarantee system is rather straightforward and has a large, formal backstop**. It can access up to $500 billion from the US Government, on the top of its own fund, whose size – currently around $63 billion - is also communicated to the markets. On the other hand, compared with the US, **the German system seems to be unusually complex and non-transparent, and it also relies on ad hoc backstop commitments**. On balance, a simpler, more transparent and rules-based system with clear backstop arrangements would seem more effective, both in normal and crisis periods.

USA

In spite of the existence of several financial regulators in the US, the Federal Deposit Insurance Corporation (FDIC) integrates supervision, resolution and deposit guarantee functions, having the central role in the last two. The FDIC has been in charge of deposit protection for member banks since 1933.[11] The Federal Government provided initial funding for FDIC with $290 million from the US Treasury and the Federal Reserve, equivalent to about 5% of the US 1933 GDP (an amount roughly similar to the ESM size in relation to current euro area GDP).

The Deposit Insurance Fund, which is the main source of the resources for the FDIC to protect deposits, is funded by banks that pay premiums for the FDIC's insurance coverage, which the FDIC invests: its 2014 total revenue was $9.0 billion (or 0.052% of US GDP).[12] The Deposit Insurance Fund totalled $62.8 billion in the last quarter of 2014 (up from a deficit of $ 20.9 billion in 2009). The FDIC aims to accrue in the long term a ratio of fund to insured deposits of 2%: as the 2014 total FDIC insured deposits were $6.2 trillion, the current coverage ratio is just around 1%. To achieve the long term target, the interim requirement is to reach to minimum ratio of 1.35% by 2020.

Since the 2009 Insurance Fund shortfall, the FDIC is also allowed to borrow as much as $500 billion (about 3% of US GDP) from the Treasury if the Treasury, the Federal Reserve and the White House believe it is warranted. Otherwise, the agency can borrow up to $100 billion from the US Treasury.[13]

The standard insurance amount is $250,000 per depositor, per insured bank, for each account category: FDIC insurance covers all deposit accounts, including checking, savings and money market deposit accounts, plus certificates of deposit.[14]

In addition to ensuring deposits, the FDIC also supervises many of the country's banks and operates and administers receivership of failed institutions. The resolution powers of the FDIC were significantly extended with the Dodd-Frank Act of 2010 to also cover systemically important financial institutions. The FDIC now has far-reaching resolution powers for both insured depository institutions and bank holding companies.[15]

Federal Republic of Germany[16]

Although Germany is not the only country with multiple DGSs in the EU (other examples are Austria, Cyprus, Italy and Portugal), its arrangements are arguably the most complex. This reflects the three-pillar structure of the German banking system. Deposit Guarantee Schemes in Germany consist of:

- Two statutory compensation schemes, one for private commercial banks (Entschädigungseinrichtung deutscher Banken GmbH) and one for public banks (Entschädigungseinrichtung des Bundesverbandes Öffentlicher Banken). They are privately run but publicly supervised (by the German Federal Financial Supervisory Authority, the BaFin). They provide protection for deposits up to €100,000.
- Two institutional protection schemes (IPSs), one operated by savings banks and one for cooperative banks. Members of IPSs are exempted from mandatory membership in a statutory compensation scheme. IPSs aim to protect the viability of their member institutions (e.g. by providing guarantees), thereby also guaranteeing deposits, but do not have direct arrangements for depositor reimbursement. All public-sector savings banks (Sparkassen), state banks (Landesbanken), state building and loan associations (Landesbausparkassen) as well as co-operative banks (Genossenschaftsbanken) are members of IPSs.
- Two voluntary protection funds for private commercial banks and public-sector banks. There is no coverage limit for the voluntary scheme of public-sector banks. The voluntary scheme for private banks currently offers protection (this includes checking, term and savings deposits) for each creditor up to 30% of the relevant liable capital of each bank. The ceiling will be reduced over the next ten years (until Dec. 31, 2014: 30%, until Dec 31, 2019: 20%, until Dec 31, 2024: 15%, as of Jan 1, 2025: 8.75%). The adjusted ceilings will apply to deposits set up or renewed after Dec. 31, 2011.

Beyond being complex, the structure is also quite non-transparent: while financial statements are regularly submitted to BaFin and the Bundesbank, almost no information on the financial condition of the various schemes is made publicly available.[17] Also, there is no explicit backstop, but rather ad hoc actions. For instance, in 2008 the German Chancellor made a public commitment to fully protect household deposits. While the exact features of such a commitment were never specified, it was understood as meaning that the German federal authorities would provide the necessary backing for household deposits if the resources of the Deposit Guarantee Schemes were exhausted. German Deposit Guarantee Schemes are also unusually generous, with the voluntary component described above effectively implying the full protection of participating deposits, regardless of their size.

The basic German three-pillar DGS structure is likely to be retained with the new Deposit Guarantee Schemes Directive, enacted as a response to EU harmonisation efforts, but adapted in some respects. With the new Directive all credit institutions that take deposits must be part of a statutory/officially recognised Deposit Guarantee Scheme (until now, IPS members were exempt from the obligation to join a statutory scheme). IPSs can be recognised provided that requirements of the Deposit Guarantee Schemes Directive are met, which include granting legal right to compensation, providing for payout and accumulating sufficient funds. The BaFin will have enhanced authority to comprehensively supervise all recognised scheme.

Notes

1. See, for instance, de Groen, W-P., (2015), 'The ECB's QE: Time to break the doom loop between banks and their governments' and Wolff, G., (2015) 'European banking supervisor should limit banks' exposure to all eurozone governments, not just Greece'.
2. Given that the bail-in hierarchy as established by the Bank Recovery and Resolution Directive (BRRD) stipulates that the resources of national DGSs need to be drawn first, it can be argued that the strengthening of this step, even if through partial risk-sharing, enhances the effectiveness of and increases consistency with the existing joint euro area Single Resolution Fund.
3. Five Presidents' Report, 'Completing Europe's Economic and Monetary Union', http://ec.europa.eu/priorities/economic-monetary-union/docs/5-presidents-report_en.pdf
4. Demirgüç-Kunt, A., Kane, E and Laeven, L. (2014), 'Deposit Insurance Database', IMF Working Papers 14/118, International Monetary Fund.
5. FSB, 2014, 'Thematic Review on Deposit Insurance Systems'
6. The same EU Directive also boosted the payment of the funds and imposed common and greater disclosure and information standards.
7. See http://ec.europa.eu/finance/bank/guarantee/index_en.htm.
8. http://www.europarl.europa.eu/pdfs/news/expert/infopress/20131014IPR22251/20131014IPR22251_en.pdf
9. See, for Instance, Gros, D., (2013), 'Principles of a Two-Tier European Deposit (Re-)Insurance System' and Joint Research Center (2010), 'JRC Report under Article 12 of Directive 94/19/EC as amended by Directive 2009/14/EC'.
10. Bearing in mind the conditionality requirements as under TFEU 136(3)
11. Credit unions – a fairly marginal part of the US bank system - are covered by National Credit Union Share Insurance Fund (NCUSIF, managed by National Credit Union Administration, NCUA).
12. FDIC Annual Report 2014.
13. Ibid.
14. https://www.fdic.gov/deposit/deposits/
15. P. Wruuck (2015) 'Deposit Guarantee Reform in Europe: A Systemic Perspective', Deutsche Bank Research.
16. *Ibid.*
17. See 'Germany: Technical Note on Crisis Management Arrangements', IMF, 2011.