Box 9

Who would pay more for a European deposit insurance scheme: small, medium or large banks?

On 24 November 2015, the European Commission published a proposal for a European Deposit Insurance Scheme (EDIS). The proposal concerned the creation of a European system of deposit insurance supported by a European fund and managed by the Single Resolution Board (SRB). One issue frequently raised in connection with this concerns how much various different banks should contribute to such an EDIS. In particular, one of the questions asked is whether, in order to reduce the reporting burden, smaller banks should make a lump-sum, rather than a risk-based, contribution. Another question is whether large banks, which are more likely to go into resolution than insolvency, should be charged a lower percentage of their covered deposits in contributions to the deposit insurance fund, given that these banks already contribute more to the Single Resolution Fund (SRF) and are less likely to need assistance from the EDIS.

These two questions have implications for financial stability. First, a lump-sum contribution could lead to increased moral hazard and incentivise risk-taking behaviour by banks; risk-based contributions, on the other hand, address moral hazard by ensuring that riskier banks pay more. Second, a non-risk-related reduction in the contribution to the EDIS in favour of large banks which hold a large share of euro area deposits could limit the capacity of the EDIS and thus reduce its beneficial effect on depositor confidence. In order to mitigate these concerns, a fully risk-based approach to the calculation of contributions should be adopted. The Commission's proposal follows this approach, providing for risk-based contributions to the Deposit Insurance Fund (DIF) at banking union level.

Using the methodology proposed by the European Banking Authority (EBA) for national deposit guarantee schemes, ⁹⁶ risk-based contributions for a sample of 1,675 euro area banks were calculated in order to see whether small banks or large banks would contribute more in relative terms to the EDIS. Building on the EBA methodology, the leverage ratio, the total risk-based capital ratio, the ratio of liquid assets to total assets, the return on equity (ROE), the ratio of risk-weighted assets (RWAs) to total assets and a measure of eligible liabilities for the minimum requirement for own funds and eligible liabilities (MREL) were used to construct a bank-specific risk weight that, in addition to the bank's amount of covered deposits, determines the contribution to be paid by each bank to the EDIS. ⁹⁷ This combination of indicators is comparable to the list of indicators proposed for the EDIS. The rationale for including the MREL is that it is an indicator of the potential EDIS exposure once a bank fails. The higher the MREL, the higher is the likelihood of resolution rather than liquidation and the higher the expected loss-absorption capacity, thus lowering the potential exposure for the EDIS. The study

See the "EBA Guidelines on methods for calculating contributions to deposit guarantee schemes". In this analysis, the sliding scale approach is used, as this approach needs fewer assumptions and uses a normalisation method that is better suited to preserving the level of information of the indicators. The 25th and 75th percentiles are taken as lower and upper bounds, respectively.

⁹⁷ MREL-eligible liabilities only include senior unsecured bonds. Regulatory capital is not included to avoid double consideration, given that it is already included in the risk-based capital ratio.

uses criteria and assumptions which are still under discussion and does not prejudge the final calculation method that will be decided by the European Council and Parliament.

Table A shows, for each decile of banks (grouped by total assets) in our sample of 1,675 banks, the sum of contributions, the average contribution per euro of covered deposits and the smallest and largest value of contributions per euro of covered deposits. Column 3 shows the aggregate amount of contributions paid by banks in each decile. The numbers suggest that the lowest decile (the smallest 10% of banks) in our sample would pay €0.11 billion or 0.28% of the €38 billion target size of the EDIS (corresponding to 0.8% of covered deposits in the sample). In contrast, the highest decile (the largest 10% of banks) would pay €28.5 billion or 75.09% of the overall EDIS target for the sample. These numbers should be seen in relation to the actual covered deposits of the banks in each decile to avoid the impression that the largest banks bear the brunt of the cost of the EDIS. In fact, the figures in column 4 suggest that the contributions of the smallest and largest banks are relatively low on average at approximately 1 cent and 0.83 cent, respectively, per euro of covered deposits on their balance sheet. ⁹⁸ Instead, it is the banks in the intermediate deciles that pay slightly more, ranging from 1 to 1.14 cents per euro of covered deposits. This finding is further underpinned by the lowest and highest contributions per euro of covered deposits in column 5, which demonstrate that the ranges for each decile are, by and large, comparable.

Table A

Absolute and relative risk-based contributions for different bank sizes

| Decile of banks by total assets | 2) Interval of total assets | | Total contribution to the EDIS per decile | Average contribution per euro of covered deposits | 5) Interval of contribution per euro of covered deposits | |
|---------------------------------|-----------------------------|------------------------|--|---|--|--------------------|
| | Smallest (€billions) | Largest (€billions) | (€billions and percentage of EDIS target size) | (9) | Lower bound (€) | Upper bound (€) |
| 1st | 0.02 | 0.15 | 0.11 (0.28%) | 0.0097 | 0.0024 | 0.0183 |
| 2nd | 0.15 | 0.26 | 0.25 (0.65%) | 0.0107 | 0.0035 | 0.0176 |
| 3rd | 0.26 | 0.38 | 0.34 (0.90%) | 0.0104 | 0 | 0.0181 |
| 4th | 0.38 | 0.56 | 0.48 (1.25%) | 0.011 | 0.003 | 0.0184 |
| 5th | 0.56 | 0.76 | 0.61 (1.62%) | 0.01 | 0.0003 | 0.0182 |
| 6th | 0.76 | 1.08 | 0.96 (2.52%) | 0.0109 | 0 | 0.019 |
| 7th | 1.09 | 1.66 | 1.39 (3.66%) | 0.0114 | 0.0024 | 0.0185 |
| 8th | 1.66 | 2.77 | 2.03 (5.34%) | 0.0109 | 0.0024 | 0.0178 |
| 9th | 2.77 | 6.49 | 3.3 (8.69%) | 0.0104 | 0.0007 | 0.0183 |
| 10th | 6.6 | 1807.57 | 28.5 (75.09%) | 0.0083 | 0.0003 | 0.0165 |

Sources: COREP and Bankscope,

Notes: Based on data for Q4 2015. Each decile corresponds to about 167 banks.

In summary, and under the caveat that the criteria and assumptions used for this study are not yet the final ones that will be adopted for the EDIS, the numbers indicate that small and large banks would not contribute excessively to the EDIS, relative to their volumes of covered deposits. This finding suggests that measures to reduce contributions for the smallest and/or largest banks, or the introduction of a (low) flat-rate contribution for the smallest banks,

This contribution is not payable upfront, but is built up over the years that the EDIS is being funded.

would be unwarranted in view of the relative contributions of those groups when compared with the group of medium-sized institutions. 99

Finally, the specificities of a banking system, such as the availability of large MREL cushions, ¹⁰⁰ can be taken into account in the risk-based contributions to the DIF, which is preferable from a financial stability perspective to lowering the EDIS target level.

though still relatively low, average contribution per euro of covered deposits for the highest decile of banks.

For a broader analysis of risk-based contributions to the EDIS, also taking the MREL into account, see Carmassi, J., Dobkowitz, S., Evrard, J., Silva, A. and Wedow, M., "Exposure of the European Deposit Insurance Scheme to bank failures and the benefits of risk-based contributions", *Macroprudential Bulletin*, Issue 3, ECB, April 2017, Chapter 3.