

Make Your Publications Visible.

A Service of



Leibniz-Informationszentrum Wirtschaft Leibniz Information Centre

Krahnen, Jan Pieter; Rocholl, Jörg

Working Paper

Designing the funding side of the Single Resolution Mechanism (SRM): A proposal for a layered scheme with limited joint liability

SAFE White Paper, No. 10

Provided in Cooperation with:

Leibniz Institute for Financial Research SAFE

Suggested Citation: Krahnen, Jan Pieter; Rocholl, Jörg (2013): Designing the funding side of the Single Resolution Mechanism (SRM): A proposal for a layered scheme with limited joint liability, SAFE White Paper, No. 10, Goethe University Frankfurt, SAFE - Sustainable Architecture for Finance in Europe, Frankfurt a. M.,

https://nbn-resolving.de/urn:nbn:de:hebis:30:3-335109

This Version is available at: https://hdl.handle.net/10419/88680

Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

Terms of use:

Documents in EconStor may be saved and copied for your personal and scholarly purposes.

You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.

If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.







Jan Pieter Krahnen - Jörg Rocholl

Designing the funding side of the Single Resolution Mechanism (SRM): A proposal for a layered scheme with limited joint liability

White Paper Series No. 10

Center of Excellence SAFE Sustainable Architecture for Finance in Europe

A cooperation of the Center for Financial Studies and Goethe University Frankfurt

House of Finance | Goethe University
Grüneburgplatz 1 | D-60323 Frankfurt am Main

Tel. +49 (0)69 798 33684 | Fax +49 (0)69 798 33910 vanberg@safe.uni-frankfurt.de | www.safe-frankfurt.de

Designing the funding side of the Single Resolution Mechanism (SRM): A proposal for a layered scheme with limited joint liability

Jörg Rocholl*, Jan Pieter Krahnen†

December 9, 2013

Introduction:

This note proposes a new set-up for the fund backing the Single Resolution Mechanism (SRM). The proposed fund is a Multi-Tier Resolution Fund (MTRF), restricting the joint and several supranational liability to a limited range of losses, bounded by national liability at the upper and the lower end. The layers are, in ascending order: a national fund (first losses), a European fund (second losses), the national budget (third losses), the ESM (fourth losses, as a backup for sovereigns). The system works like a reinsurance scheme, providing clear limits to European-level joint liability, and therefore confining moral hazard. At the same time, it allows for some degree of risk sharing, which is important for financial stability if shocks to the financial system are exogenous (e.g., of a supranational macroeconomic nature). The text has four parts. Section A describes the operation of the Multi-Tier Resolution Fund, assuming the fund capital to be fully paid-in ("Steady State"). Section B deals with the build-up phase of the fund capital ("Build up"). Section C discusses how the proposal deals with the apparent incentive conflicts. The final Section D summarizes open questions which need further thought ("Open Questions").

^{*} President, ESMT European School of Management and Technology, Berlin. T.: +49-30-21231-1010, E.: joerg.rocholl@esmt.org, www.esmt.org/jorg-rocholl.

[†] Professor of Finance, Goethe University, and Director of the Center for Financial Studies (CFS) and the Center of Excellence SAFE, Frankfurt. T.: +49 69 798-33699, E.: krahnen@finance.uni-frankfurt.de. www.finance.uni-frankfurt.de.

A. Steady State

Once the fund capital is fully paid-in, the MTRF can operate in the steady state. In this scenario, the liability for losses will be allocated according to the following scheme:

- o First (initial) losses are allocated to a purely national fund (level 1). If losses exceed national fund capacity, they are allocated to a European fund (level 2) up to a maximum amount, after which additional losses are allocated to the national budget (level 3). If the sovereign budget is unable to cover remaining losses, the ESM steps in as a guarantor of last resort (level 4).
- Level 1 and level 3 together limit the possibility of moral hazard, level 2 provides limited diversification against macro shocks, level 4 cuts off the direct link between bank solvency and home country solvency.

The set-up of the funds on the four layers is as follows:

- o Level 1: National resolution funds are set up in all EU states.
 - Fund premiums payable by banks are defined uniformly at the EU level, e.g. depending on intensity of interconnection with other banks measured by the two following proxies: (a) on the volume of bank liabilities (except insured deposits), (b) nominal volume of derivatives.
 - Fund premiums are proportional to a bank's contribution to systemic risk, which justifies the intervention by the resolution authority in the first place, according to the Bank Resolution and Recovery Directive (BRRD). Thus, the factors (a) (b) are set such that they capture a bank's systemic risk contribution (consistent with the German Resolution and Recovery Legislation of January 2011).
 - An alternative premium model, setting the fund premiums proportional to national GDP, is not encouraged. Because: it implies that large banks pay less if domiciled in small countries, which creates incentives for banks to migrate to smaller countries.
- o Level 2: A European resolution fund is set up for all (SIFI-) banks in the EA. Fund premiums are set akin to those at the national level.
 - Burden equivalence for Eurozone banks: While all premium payments flow to the national fund in EU countries, these payments are split between national and European funds for all Eurozone banks. Burden equivalence levels the playing field among EU banks, as institutions in Eurozone countries are not charged more than non-Eurozone banks. However, as a consequence, the national fund in Eurozone countries will need more time to reach full pay-in.

Reinsurance multiple: The maximum payoff from the European fund to one or more national institutions is limited. There are essentially two options: first, the protection provided by the fund is a function of bank size (akin to the level 1-fund) and second, the protection is a function of home country GDP.

In the first case (bank size as protection base), the solidarity of European countries with a troubled bank in one state increases with the size of the country's banking system.

In the second case (national GDP as protection base), the solidarity of European countries with a troubled bank in one state increases with the size of its economy.

A choice is not easy to make; we prefer the second alternative – relating European fund protection to national GDP – complemented by a maximum draw on the fund, e.g. 50% of the fund's total. This rule incentivizes countries to develop a moderate Banking-Assets/GDP ratio without excessive benefit for large GDP countries. Conversely, the first alternative, relating European fund protection to the size of the banking sector may induce countries to entertain a large banking sector despite being a rather small economy.

Thus, in our preferred model, fund protection at the European level is a fraction of home-country GDP. This fraction may be small (e.g., 1% of GDP, or €36 billion in the case of Germany 2012) or large (e.g., 3-5% of GDP) — in any event, it adapts the volume of the European reinsurance to the size of the national economy.

- Level 3: The third layer of the MTRF model is the national budget, meaning that losses exceeding the reinsurance multiple offered from the European fund will have to be covered by the national taxpayer. This will be enforced up to the point where the national fiscal authorities default on their debt (a sovereign default). For further discussion of this point, see section D (Open Issues).
- Level 4: The fourth layer, subsequent to national funds being exhausted, and in order to avoid a national default, is provided by the ESM. It may or may not provide its protection in the form of a subsidy, or a loan. This is in line with the ESM mandate as it cuts the link between banking crisis and sovereign default.

B. Build up

Several years of build-up are required until a steady state is achieved. Any event of damages or losses (credit event) during the build-up phase needs to be covered by an additional agreement, designed to back up the emerging resolution fund. During the build-up phase,

national resolution funds (Level 1) can draw upon a credit line offered by the nation state, up to the full amount of the emerging national resolution fund. Credit terms are to be set according to market rates. Likewise, the European (actually: Euro Zone – Level 2) fund can draw upon a credit line provided by the ESM, up to the full amount of the emerging European fund. As a result, the institutions proposed in the MTRF model are fully operative from day one.

C. Incentives

A scheme of joint and several supranational liability has inherent incentive conflicts on the level of national industrial policy and also on the level of individual bank risk taking. This section describes the incentive structure of the proposed system.

 Credit Default Swaps: In order to set the fund premiums payable by banks proportional to risk, one might rely on the market price of credit insurance (credit default swaps; CDS rates). These prices are readily available for most large financial institutions on a regular basis.

In fact, CDS contracts are functionally similar to a national or supra-national insurance, if the credit event is defined comparably. Thus, market based CDS may be considered an alternative to a state-run insurance fund.

However, CDS and fund premiums are not fully equivalent, since CDS contracts may be terminated (or not prolonged) at any time, removing coverage, while fund insurance cannot be terminated easily. We therefore propose to stick to a state fund rather than a CDS system. Nevertheless, CDS prices are useful as they provide useful input in determining the appropriate fund premiums for individual banks.

- o **Bail-in**: The design of the fund needs to be incorporated into the resolution and recovery regime defined by the Bank Recovery and Resolution Directive (BRRD). In particular, the bail-in possibilities must be exhausted first.
- Competition: The existence of an MTRF should not interfere with competitive pressure in banking markets. Therefore, its funds will largely be used to ensure proper functioning of the banking system in the event of a systemic shock, as described in detail in the BRRD. Furthermore, and outside systemic risk events, the MTRF will mainly be responsible for the liquidation of failed banks without causing a systemic risk event in the process.
- European fund: as explained above, the protection provided by the joint liability at the European level could be proportional to either the size of the banking system, or the size of home country GDP. The former not only encourages the emergence of large banking systems in small economies, it also allows to substitute national liability (at level 3) for joint liability (at level 2) which is undesired in a European context.

Note, however, that the proposed formula (GDP-proportional European protection) puts pressure on small countries with large banking systems, as their banks can expect less European protection per balance sheet Euro than an otherwise identical bank which is domiciled in a larger economy. This may produce some political headwinds.

D. Open issues

There remain open issues with respect to the design of the MTRF, for instance regarding the scope of the regime.

- Scope: Which banks fall under the umbrella of the 4-layer resolution scheme? All banks which are supervised by the SSM? Including banks from opt-in countries? If so, what are the conditions these countries (and their banks) have to meet in order to be eligible for level 2 and level 4 assistance?
- o **Extent:** The exact burden sharing formula between level 3 (national budget) and level 4 (ESM) needs to be specified ex-ante. Conceivably, the national budget has to move first, but there may be a cap which is either defined by the default state, or by a percentage of GDP, e.g. 3% of GDP.

Fund management:

Level 1-fund management: What are management principles for the national fund, ensuring its solvency, a level playing field in rate setting, and a responsible supervision and investment strategy? In the case of Germany, how will the three pillar banking system be treated?

Level 2-fund management: Will the European fund be a passive account, or an actively managed institution? In the latter case, it could be a nucleus of a Federal Deposit Insurance Corporation-like authority. Conversely, if the fund stays passive, the SRM may be designed as an active institution. Then, it would also qualify as a nucleus for a future FDIC-like role within the European supervisory and resolution machinery.

Furthermore, the premiums charged on the systemic risk proxies (see Section A, Level 1, above) should also be sensitive to the quality of the deposit guarantee scheme in place, paying a lower rate, if it represents a lower risk to the fund. Such a risk adjustment would serve as a useful incentive for banks or national authorities to strengthen their protection schemes, rather than weakening those in order to live on supranational cover.

Finally, by reviewing the creditworthiness of all protection schemes the resolution authority, as an institution of its own, has access to first-hand

- information rather than having to rely on the willingness of supervisors to share information.
- Long term perspective: The architecture of the resolution fund should be such that, when time is ripe, a transformation into a set-up which is desired politically in the long-run can be achieved. For example, the resolution scheme may be transformed one day into a European FDIC-type institution, independent of and separate from the ECB. For that purpose sunset provisions for all or parts of the scheme may be desirable.
- o **Opt-in:** How will the scheme handle countries that chose to join the SSM, despite not being part of the Euro Zone?
- o **Relationship to the Deposit Guarantee Scheme:** It needs to be worked how the DGS complements the Multi-Tier Resolution Fund in a concrete rescue operation.