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Free market in death?

Europe's new bail-in regime and its impact on bank funding

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During the financial crisis, multiple government bail-outs of failing banks were necessary to prevent financial market meltdown. A legal framework to wind up banks effectively, quickly and without causing considerable contagion within the industry was missing. To protect taxpayers' money in the future, policymakers have therefore developed resolution rules for financial institutions over the past few years, in addition to strongly tightening capital and liquidity requirements.

One of the resolution tools is a possible bail-in of debt instruments. This is intended to ensure that for investors, higher returns also involve higher (default) risk, thereby re-establishing market discipline. Banks shall not be able to rely on implicit government guarantees any longer. As a consequence, banks' funding costs are likely to increase. On the other hand, bail-in provisions need to take the interconnectedness within the sector into account as well as banks' critical role in supporting the real economy. Resolution plans thus have to be very detailed and institution-specific.

Two bail-in concepts currently exist – Total Loss Absorbing Capacity (TLAC) and Minimum Requirement for Own Funds and Eligible Liabilities (MREL). Although they share a common objective, they differ in their scope and details. Regulators should align both concepts for efficiency reasons.

Any successful application of a resolution procedure requires that financial markets perceive the resolution framework as credible. Otherwise, resolution could lead to major turmoil if investors still expect a government bail-out and consequently misprice the costs of failure.

Indeed, market reactions show that the new bail-in regime is credible. Sovereign credit default swap (CDS) spreads have decoupled significantly from bank CDS spreads. Likewise, rating agencies broadly do not see government support forthcoming any more for European banks in distress.

Within the euro area, a new institution for bank resolution has been established, the Single Resolution Mechanism. Although critics might argue that the intended decision-making process is too complex to achieve results quickly, other obstacles might be more important.

Market depth for bail-in capable debt instruments and legal clarity are the most important issues for banks and their investors as banks have to issue a significant amount of eligible paper within a limited time period. Preventing (other) banks from holding this debt, as currently discussed, would substantially narrow the investor base. Similarly, differences in the national implementation of the European Union's Bank Recovery and Resolution Directive with respect to bail-in hierarchies may increase uncertainty and hence reduce investor demand. On top of the fundamental rise in the riskiness of bank debt, both these effects are highly likely to negatively impact bank funding costs further.

Introduction

Since the global financial crisis of 2007-09, the global banking sector has been subject to a tremendous number of regulatory reforms. The Basel III framework enhanced capital, liquidity and transparency requirements. A completely new institutional framework in the euro area established a single supervisory authority to ensure uniform supervisory governance. And a further round of new measures, often called Basel IV, is just around the corner, which will most likely tighten current prudential capital regulation even further.

Policymakers' overall objectives are to boost the resilience of the banking sector towards potential shocks, protect savers and their deposits, protect the single European market from fragmentation and break the sovereign-bank nexus, i.e. the strong feedback loops between the two sectors witnessed in the recent crises.

To address the latter problem, another major regulatory initiative must be added: the establishment of a resolution framework, especially for large and internationally active banks. In 2011 the Financial Stability Board's (FSB) "Key Attributes of Effective Resolution Regimes for Financial Institutions" set out the necessary rules and provisions to ensure a bank can be resolved without exposing the economy to a systemic shock and without necessitating a government bail-out.

Bail-in sequence under the BRRD | 1

Bail-in has to proceed in the following order in case of a resolution:

- Common Equity Tier 1
- Additional Tier 1
- Tier 2
- Subordinated liabilities
- Other eligible instruments such as senior unsecured debt or deposits not covered by a deposit guarantee scheme

Liabilities excluded from a bail-in:

- Covered deposits
- Secured liabilities
- Interbank operations with an original maturity shorter than seven days
- Liabilities arising from a fiduciary relationship with a customer
- Liabilities towards employees, tax and social security authorities and creditors critical for the daily functioning of the bank's operations

Source: European Commission

In the European Union, the Bank Recovery and Resolution Directive (BRRD) broadly implemented these attributes into European law. The BRRD's objective is to introduce and harmonise minimum procedures for resolving institutions at the national level in all EU member states, i.e. the BRRD sets the rules for a concrete resolution. And most recently on 1 January 2016, the Single Resolution Mechanism (SRM) together with the Single Resolution Board (SRB) and the Single Resolution Fund (SRF) took full effect as the responsible resolution authority for the euro area's banks[1].

In the future, each bank will have an individual resolution plan or "living will". Within this, one of the instruments that the European resolution authorities can utilise is the bail-in-tool. With this option not only shareholders but also subordinated creditors and senior unsecured debt holders are supposed to bear most of the resolution costs as these liabilities will either be written down or converted into equity. Hence, the resolution authorities seek to minimise the use of public funds, although this still remains an option under certain circumstances.[2] In other words, a government bail-out is no longer meant to be available to banks in financial distress in future.

The potential bail-in of debt seems to be a major change of course in dealing with struggling banks, but is this bail-in framework in fact credible and subsequently applicable? To address this question the following analysis will look at market reactions when the bail-in mechanism was established. It will also address the design of the institutional framework, the question of who is the optimal investor for bail-in capable debt instruments, and implications for banks' funding costs.

[1] Within the SRM, the SRB is responsible for the resolution of banks under direct supervision of the Single Supervisory Mechanism (SSM) and of cross-border groups. The national resolution authorities are responsible for all other entities but act within the SRM framework.

[2] Article 56(3) BRRD: "The government financial stabilisation tools shall be used as a last resort after having assessed and exploited the other resolution tools to the maximum extent practicable whilst maintaining financial stability".

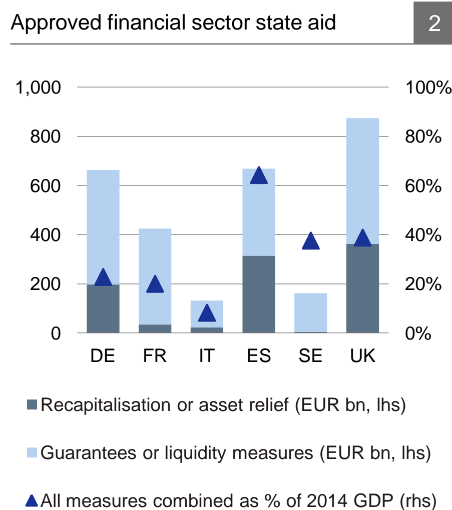
The case for bail-in

In theory, an investment in an asset yields a return depending on the underlying risk – the higher the risk (in terms of volatility or probability of default), the higher the potential return. During the financial crisis, this fundamental economic principle did not seem to hold for some of the banks that got into trouble or for their investors.

Hitherto, policymakers in most economies could only choose between two options concerning failing banks: letting these institutions go bankrupt or bailing them out with public funds. However, the first option brought with it tremendous uncertainty about the consequences especially during and in the aftermath of the financial crisis given the strong interconnectedness and lack of transparency in the global banking system. Therefore the costs arising from a bank's insolvency were hard to predict: knowledge about contagion effects with other financial institutions was limited and the negative repercussions for the real economy seemed incalculable or too serious.

Hence, in order to prevent a potential vicious circle affecting the whole economy, policymakers usually opted for the second alternative, although this decision was often associated with enormous costs, too. However, these costs were at least known to some extent (see chart 2).[3] A third option, an orderly resolution, largely did not exist.

Approved financial sector state aid 2



Includes all measures from 2008 to Sep. 2014

Sources: European Commission, Eurostat, Deutsche Bank Research

There had not been any resolution authority in Europe prior to the financial crisis, in contrast to the US where the FDIC has been a credible resolution authority for a long time. The FDIC successfully closed hundreds of banks during the crisis. Its resolution power has been confined to smaller banks though, especially depository institutions. Winding up large globally active banks has not been possible in either Europe or the US.

Thus, the normal feature of financial markets, that risk and return go hand in hand, was removed for many of the banks' debt and equity investors as they did not have to bear the costs of failure.

Policymakers have sought to change this with the new resolution legislation. Within this framework the bail-in mechanism has three intended objectives:

First, banks' investors rather than the general public are supposed to bear the costs of bank failures. The costs will not disappear, but will be reallocated. With a smaller number of people bearing the costs, the individual contribution is considerably higher than in the case of a tax-funded bailout. This provides an incentive for investors to monitor the entities they invest in more carefully. Of course this requires either professional investors or, in the case of retail investors, particularly high standards of investment advice from banks and asset managers when they distribute these products.

Second, banks are no longer to rely on implicit government guarantees. Critics often claim that systemically important institutions and their investors can expect bail-outs in the event of financial distress as these banks are labelled "too big to fail"[4]. In that case, both parties would have an incentive to either take more risks on their books or monitor their investments less stringently as they would expect public funds to cover any shortfall in an emergency. This also implies lower funding costs for those banks. Of course, this argument only holds under the assumption that higher risks tend to lead to higher profits.

[3] Between 2008 and September 2014, EU member states approved EUR 821 bn in recapitalisation measures and EUR 3,893 bn in guarantees to the financial sector. Combined, this was equivalent to one-third of EU GDP in 2014.

[4] Economic literature also uses other terms like "too important to fail" or "too systemic to fail" to emphasize the importance of interconnectedness within the banking sector and the potential complexity of a resolution and to avoid relying only on pure size in terms of total assets.

Third, contagion effects for other financial institutions or the broader market are to be limited. With the bail-in tool, a quick recapitalisation may become possible as there is an ex ante ranking order of eligible liabilities. Graver consequences such as an immediate business shutdown or firesale of assets may not be necessary.

In sum, the bail-in tool is supposed to fully re-establish true market discipline in the European banking sector and to end the idea of "free market in life, nationalised in death"[5] for banks in financial distress.

TLAC and MREL – same same but different

The current discussion about the bail-in of debt instruments centres around two distinct concepts – Total Loss Absorbing Capacity (TLAC) and Minimum Requirement for Own Funds and Eligible Liabilities (MREL). Although both measures follow the same overall objective, they are different in their respective scope and features.

Comparison of MREL and TLAC requirements 3

	MREL	TLAC
Objective	– Both requirements shall ensure that in the event of a bank failure there are sufficient liabilities that can absorb losses to maintain the critical economic functions of a bank, without the need for public funds.	
Scope	– All banks in the European Union	– Global systemically important banks (G-SIBs)
Requirements and timeline	– MREL is set for each bank individually by the resolution authority – MREL shall be at least 8% of total liabilities and own funds – MREL can be determined since the beginning of 2016. For all major banking groups within the Banking Union, the SRB plans to set MREL in Q3/Q4 2016. – Resolution authorities may also determine a transitional period of up to 48 months for banks to fully comply with MREL	– TLAC is a common minimum standard for all relevant banks – from 1 January 2019: at least 16% of RWA and at least 6% of the Basel III leverage ratio denominator – from 1 January 2022: at least 18% of RWA and at least 6.75% of the Basel III leverage ratio denominator – G-SIBs headquartered in emerging markets have to meet the 16% RWA / 6% leverage ratio requirement no later than 1 January 2025 and the 18% RWA / 6.75% leverage ratio requirement no later than 1 January 2028

Sources: FSB, SRB, Deutsche Bank Research

The differences between MREL and TLAC notwithstanding, European resolution authorities want to implement MREL for European global systemically important banks consistently with the TLAC framework.[6] Indeed, it would make little sense, be costly and inefficient if a European G-SIB had to fulfil two different requirements that aim for the same goal. Thus, a complete harmonisation of both concepts at least for the affected institutions should be considered.

[5] Raaflaub, P. and Branson, M. (2013). Putting Capitalism Back Into Banking, Wall Street Journal (online edition).
[6] Single Resolution Board, second industry dialogue meeting, 12 January 2016.

Of course, there is a trade-off between a common minimum standard and institution-specific requirements. The case-by-case MREL decisions, which are a core element of resolution planning, will probably reduce comparability between different banks and risk undermining the level playing field in European banking supervision. However, given the enormous differences between individual institutions, it may be more important still that MREL takes banks' specific characteristics into account, which also seems to be the primary goal in resolution legislation.

Bail-in: placebo or effective medicine?

The financial crisis of 2007-09 and the European sovereign debt crisis were the latest episodes of the sovereign-bank nexus in some countries. The interdependence between sovereign risk and bank risk can thereby work in both directions:

First, a riskier banking sector can result in higher sovereign risk (i.e. risk for the sovereign) because the likelihood of a costly government bail-out of troubled banks increases[7].

Second, as banks' sovereign exposures are usually predominantly versus their domestic government, losses on these instruments, e.g. from a public default, are a direct (and often substantial) risk for banks. In addition, a sovereign default usually has grave consequences for the domestic economy where banks typically run large operations and therefore suffer from weaker corporate and household sectors. Even in a less severe scenario, a distressed sovereign can at the very least lead to an increase in banks' funding costs[8].

To analyse the market perception about the specific link between these two risks in Europe, the following section concentrates on two aspects, CDS spreads and debt ratings.

Sovereign and bank CDSs

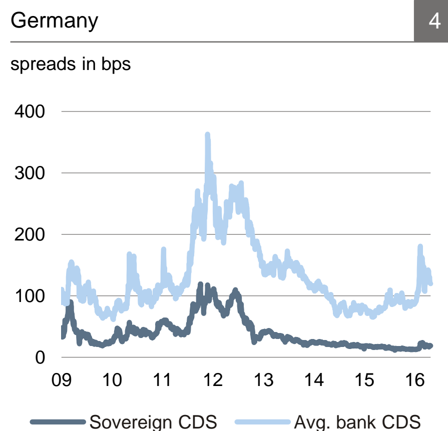
CDS spreads can serve as an indicator of how market participants, especially large investors, assess the probability of default of an issuer. A higher spread generally indicates a higher default probability of the underlying entity, be it a sovereign or a company.

For our analysis, we set up a sample of 20 large banks in six major European economies. First, we check whether the sovereign risk and the corresponding banking sector risk were strongly interconnected in the aftermath of the financial crisis by examining the ratio of the average bank CDS spread to the sovereign CDS spread for each country in our sample.

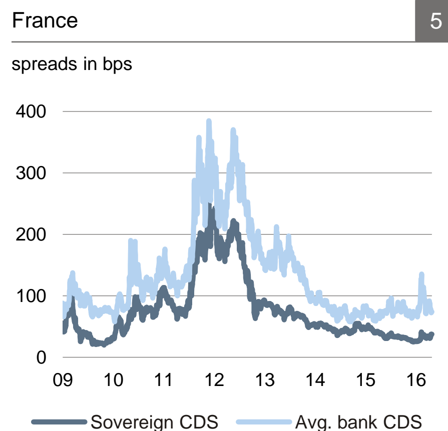
Second, we analyse whether a potential link between them has been broken up due to the new European resolution framework. If resolution is seen as credible by the market, the ratio should be lower initially and significantly increase after resolution rules were established at the beginning of 2015. To date, no actual resolution experience has been gathered as no bank has yet been resolved under the BRRD since it entered into force.

[7] Gerlach S., Schulz A. and Wolff, G.B. (2010). Banking and Sovereign Risk in the Eurozone, CEPR Discussion Paper 7833.
[8] Committee on the Global Financial System (2011). The impact of sovereign credit risk on bank funding conditions, CGFS Papers No 43, BIS.

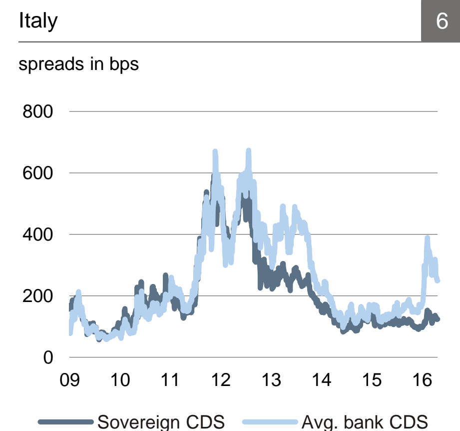
The following charts show the development of sovereign and average bank CDS spreads in the six countries of our panel from 2009 until April 2016:



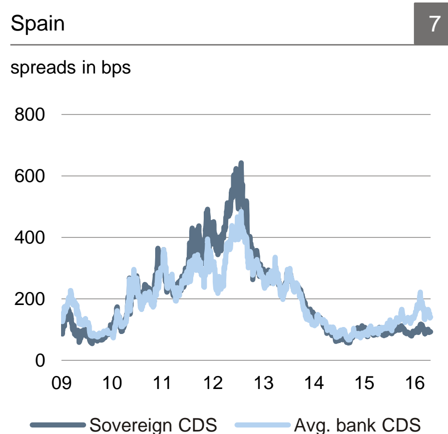
Sources: Bloomberg Finance LP, Deutsche Bank Research



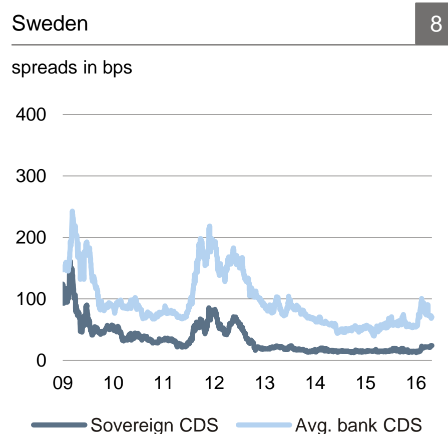
Sources: Bloomberg Finance LP, Deutsche Bank Research



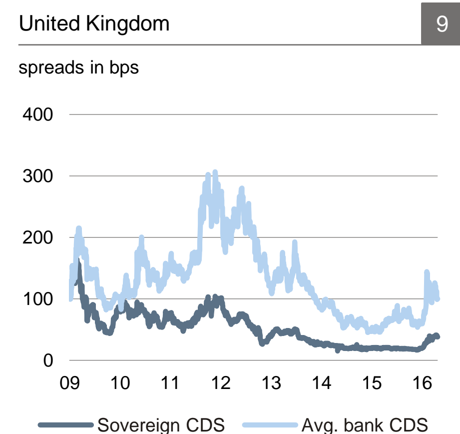
Sources: Bloomberg Finance LP, Deutsche Bank Research



Sources: Bloomberg Finance LP, Deutsche Bank Research



Sources: Bloomberg Finance LP, Deutsche Bank Research



Sources: Bloomberg Finance LP, Deutsche Bank Research

Over the entire period, CDS investors priced the sovereign risk of Germany, France, Sweden and the UK substantially below the corresponding banking sector risk. In Italy and Spain, by contrast, the risk premia for the sovereign and banks were nearly identical for a long time, but started to diverge at the beginning of 2015.

During the European sovereign debt crisis, both bank CDS spreads and sovereign CDS spreads soared and finally peaked in late 2011/12. This signalled investors' scepticism about the solvency of EMU peripheral countries. But simultaneously, as banks in these countries held a large stock of domestic sovereign debt, a sovereign default would have had a large impact on their balance sheets and their solvency was questioned, too[9].

With Mario Draghi's announcement to "do whatever it takes to preserve the euro", the continued rise in CDS spreads stopped. Since then, they have not exceeded those peaks anymore, indicating that market participants assess the default of a sovereign or a bank as being less likely.

[9] In June 2012, Spanish banks held 9.8% of their total assets in domestic government debt securities and loans; Italian banks held 14.3% respectively.

As these market developments took place, EU policymakers intensified the legislative process towards a resolution regime. On 27 June 2013, the EU finance ministers reached an agreement on the Bank Recovery and Resolution Directive. On 10 July 2013, the European Commission proposed the Single Resolution Mechanism for the Banking Union. Finally, on 15 April 2014, the European Parliament adopted both, the BRRD (effective start date: 1 January 2015) and the SRM (effective start date: 1 January 2016).

To analyse the potential effect of the newly established European resolution regime on CDS spreads, we separate our data set into two series: the first goes from the collapse of Lehman Brothers in September 2008 until the end of 2014. The second starts on 1 January 2015 when the BRRD had to be implemented in national law in the European Union.

Table 10 summarises the development of the ratio of the average bank CDS spread to the corresponding sovereign CDS spread.

Ratio of average bank CDS spread to sovereign CDS spread 10

Country	Lehman collapse - end 2014	2015 - April 2016
Germany	3.51	6.07
France	1.90	2.30
Italy	1.13	1.56
Spain	1.06	1.33
Sweden	3.09	3.84
United Kingdom	2.70	3.30

Sources: Bloomberg, Deutsche Bank Research

Overall, our results show that the ratio of the average bank CDS spread to the sovereign CDS spread was relatively high initially in Germany, Sweden and the UK. Markets perceived those countries' ability to handle banks in distress as more robust without putting their own solvency at risk. On the contrary, sovereign and average bank creditworthiness was regarded virtually the same in Italy and Spain.

Since the beginning of 2015, the ratio increased substantially in all six countries. It went up most in Germany, which has the strongest-rated sovereign and is the European benchmark issuer. But investors now also differentiate much more between bank and sovereign risk in all the other countries, with the closest link still seen in Spain and Italy.

The decoupling effect was most obvious at the beginning of this year: While bank CDS spreads rose significantly for a number of reasons, including worries about macroeconomic growth and banks' business prospects, sovereign CDS barely budged, in stark contrast to previous periods.

With sovereign CDS spreads recently moving lower in absolute terms than average bank CDS spreads, it is also clear that the interconnectedness or contagion between the two sectors until 2014 may have worked primarily from banks to sovereigns: markets anticipated (costly) bail-outs and therefore priced sovereign risk more closely to the corresponding banking sector risk.

That markets perceive the new resolution framework as credible, is of course a precondition for a successful application of such a procedure. Otherwise, resolution could lead to massive financial market turmoil if the costs of failure were not priced correctly, with investors still expecting a government bail-out. The European resolution legislation therefore seems to successfully re-establish market discipline.

Rating assessment

Another indicator reflecting the potential likelihood of public support in case of financial distress is the assessment of rating agencies. Their judgement reflects an individual – but usually less volatile – view on the creditworthiness of an issuer based on company information, the market environment and the legal framework.

If resolution rules are seen as credible, rating agencies should have lowered their expectations about potential government interventions in the banking sector in response to the new institutional framework.

And indeed, immediately after the adoption of the BRRD in May 2014, Moody's changed its rating outlook to negative for 82 European banks and maintained a negative outlook for 74 other banks, based on the assumption of decreasing government support for institutions in financial distress[10].

Furthermore, it also reviewed its general rating methodology for banks' debt instruments to offer investors a clearer view of the expected loss for each asset class in the absence of any support. Within this review, Moody's also confirmed its view of a decreasing likelihood of government support for European banks[11]. All 20 banks in our sample have been affected by the revised government support assumption; even though their ratings were not affected immediately.

Another agency, Fitch Ratings, applies support ratings reflecting its view on the likelihood that a financial institution will receive extraordinary support to prevent a default on its senior obligations. Extraordinary support can typically come from two sources: shareholders or the public authorities of the home country.

Charts 11 and 12 show the rating scale and how the median support rating by country of the 20 banks in our sample changed due to the European resolution approach. In five out of six countries, the support rating went down to the lowest possible level as a result of the adoption of the BRRD, with Fitch viewing the resolution framework as credible.

An outlier is Sweden. The only small rating downgrade from 1 to 2 (which still means a high probability of government support) indicates that Fitch believes the Swedish authorities are much more likely than their peers elsewhere to support their banks if need be – and that they also have the necessary flexibility in and control over resolution. However, Sweden is still bound by EU state aid rules as well as the BRRD which makes this assumption look questionable.

The UK is also not a part of the euro area but here the banks' support rating went down from 1 to 5, too. In Fitch's view, this is because the existing national legislation and the BRRD implementation indeed allow for resolving banks without sovereign support.

To conclude, in response to the new resolution rules, rating agencies have substantially lowered their expectations of public support for EU banks. Therein, they share the view of CDS investors that the established resolution regime is credible, which is a necessary precondition for any future application of it.

Fitch Ratings – support rating scale 11

1 – A bank for which there is an extremely high probability of external support. The potential provider of support is very highly rated in its own right and has a very high propensity to support the bank in question.
2 – A bank for which there is a high probability of external support. The potential provider of support is highly rated in its own right and has a high propensity to provide support to the bank in question.
3 – A bank for which there is a moderate probability of support because of uncertainties about the ability or propensity of the potential provider of support to do so.
4 – A bank for which there is a limited probability of support because of significant uncertainties about the ability or propensity of any possible provider of support to do so.
5 – A bank for which there is a possibility of external support, but it cannot be relied upon. This may be due to a lack of propensity to provide support or to very weak financial ability to do so.

Source: Fitch Ratings

Median support rating before and after adoption of European resolution rules 12

Banking market	Before	After
Germany	1	5
France	1	5
Italy	2	5
Spain	2	5
Sweden	1	2
United Kingdom	1	5

Sources: Fitch Ratings, Deutsche Bank Research

[10] Moody's Investor Services (2014), https://www.moodys.com/research/Moodys-changes-outlooks-to-negative-on-82-long-term-European--PR_300582
[11] Moody's Investor Services (2015), https://www.moodys.com/research/Moodys-publishes-its-new-bank-rating-methodology--PR_320662

Resolution in practice

Now that important preconditions for the application of the new resolution regime are fulfilled, how would it actually work in practice? What is the concrete institutional framework and potential obstacles resulting from it?

The envisaged resolution process for banks in the euro area under the SRM is as follows (in non-euro countries, domestic authorities remain in charge): To initiate a resolution procedure, the ECB or the SRB has to determine that a bank is failing or likely to fail. If this is the case, the SRB has to examine whether two conditions are fulfilled: i) there is no private sector alternative to resolution and ii) resolution is necessary in the public interest.

SRM resolution tools: 13

In case of a resolution, the authorities have different options to ensure an orderly process with the least possible impact on the real economy and the public finances. Specifically, these tools are:

– Sale of business: the bank's assets or liabilities can be totally or partially disposed
– Establishment of a bridge institution: parts or all of the business can be transferred to a controlled temporary entity
– Asset separation: assets the liquidation of which could cause market disruption can be transferred to an asset management vehicle
– Bail-in option: equity and debt can be written down or converted

Source: European Commission

If these boxes can be ticked, the "responsible resolution authority"[12] submits the ex-ante prepared resolution scheme to the European Commission. Within 24 hours of the transmission, the Commission has three options:

1. it can approve the scheme,
2. it may reject it with regard to "discretionary" aspects in the resolution plan (e.g. disproportionate use of resolution tools or inadequate use of SRF funds),
3. within 12 hours from the transmission, the Commission can send the scheme to the European Council and propose to
   i. reject the scheme for failing the public interest criterion or
   ii. approve or reject material modifications made by the Commission regarding the amount the SRF provides to the scheme.

If Commission or Council have expressed any objection with respect to bullets 2 or 3, the SRB has to modify the resolution scheme within eight hours. Only if the Council rejects the scheme on the public interest criterion, the bank concerned will be wound up under national insolvency law and not be resolved.

Altogether, no later than 32 hours after the first transmission of the scheme to the Commission, the SRB is supposed to transmit the fully approved scheme to the national resolution authority, which has to implement it under the supervision of the SRB.

Some may argue that this framework is too complex to reach a decision within the short time available and among all participating institutions. Simply, there has been no "real-world" experience in applying the new rules to date.

Critics might argue that the involvement of the Council makes the whole process politically rather than economically motivated. A sovereign could be tempted to protect its largest banks ("national champions") in the event of financial distress. But as the Council has in fact limited influence, this does not seem to be a convincing argument. The Commission is the only institution which may formally reject a resolution plan if it has objections concerning certain discretionary aspects.

Nonetheless, within this framework the resolution authorities have to design very precise resolution plans ex-ante which should cover all potentially available instruments. The more sophisticated the plans, the less they will be called into question during the decision-making process and the faster a resolution decision can be adopted. In addition, contagion effects to other banks can also be reduced: with market participants knowing that a clear bail-in hierarchy and distinct resolution plans for their major counterparties exist, i) ex ante trust in an

[12] Depending on the size and importance of a bank, this is either the SRB for large banks or a national resolution authority for all other banks.

orderly resolution rises and ii) the risk of negative bail-in surprises during resolution declines. This should also help to limit herd behaviour.

Another factor giving rise to investor uncertainty is that the BRRD is an EU directive and not an EU regulation. Member states therefore have some flexibility in implementation, i.e. they do have some legal leeway – with regards to the bail-in hierarchy, for example. This makes resolution more complicated and less predictable, especially in the case of cross-border banks operating in countries with partly contradictory bail-in rules but also different bank funding structures. Moody's sees this fragmented approach as "credit negative" as it increases the risk for investors who do not know their exact bail-in status[13]. The agency points out that some countries, for example, explicitly offer protection for larger depositors, whereas others have reduced the protection for certain categories of senior debt. In addition, although EU member states had to adopt the BRRD by 31 December 2014, , some countries had still not implemented it into national law almost one year later [14].

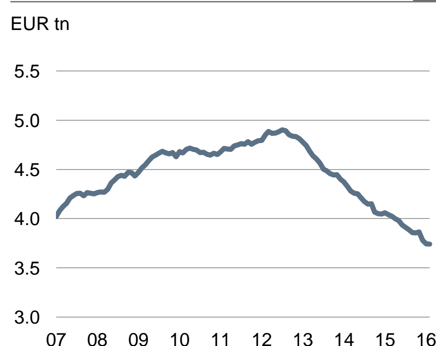
Thus, two things seem to be necessary: firstly, it should be a key priority for EU policymakers to harmonise national bail-in rules. This is an essential step towards greater legal clarity and could be achieved best in the context of the review of the BRRD already scheduled to be carried out by the Commission no later than 1 June 2018.

Secondly, banks need to explicitly define the terms and conditions of all the debt instruments they have issued with respect to the hierarchy of the specific instrument in a resolution scenario and a potential bail-in participation. Otherwise demand from investors will drop, driving up funding costs as well.

Bail-in capable debt – the search for investors

Who should actually invest in bail-in capable debt instruments? As issuance volumes by many European and international banks will be significant, market depth is a crucial factor.

Outstanding long-term debt securities issued by euro-area MFIs 14



Sources: ECB, Deutsche Bank Research

Judging from recent bank bond market developments, it is unclear whether market depth is really sufficient. In the euro area, the overall amount of outstanding long-term debt securities issued by MFIs has declined by 23% since 2012 (see chart 14) while total assets have fallen by only 6%.

This trend may either be demand-driven or supply-driven. In the latter case banks would have reduced issuance volumes voluntarily. Indeed, euro-area banks have not grown substantially in the last few years but had to significantly increase their equity capital. Also, private-sector deposits grew by more than 3% per year on average in the same period, despite record-low deposit rates. Finally, the ECB now provides liquidity not only for free but even pays banks under certain conditions if they use the additional funds to increase lending. Hence, given a lack of balance sheet growth and the abundance of funding alternatives, the need for banks to issue debt securities may have dwindled.

On the other hand, it would be more worrisome if the shrinkage in the market was due to demand constraints. From the investors' point of view, initially this could reflect the uncertainty resulting from the discussions since the end of 2011 about a possible bail-in of these instruments. Since loss-sharing became the new rule (while the exact legal position often remains unclear), bank bonds are

[13] https://www.moodys.com/research/Moodys-Fragmented-approach-to-BRRD-implementation-across-Europe-is-credit--PR_338218
[14] By 30 November 2015, the BRRD had not yet, or only partially been transposed by 9 member states: Belgium, the Czech Republic, Cyprus, Lithuania, Luxembourg, Poland, Romania, Slovenia and Sweden. http://europa.eu/rapid/press-release_STATEMENT-15-6200_en.htm

indeed considerably less attractive for investors – witness the decoupling of bank CDS spreads from sovereign CDS spreads.

Hence, there is evidence for both supply- and demand-side factors. The latter might prove particularly relevant given the prospective market size. Two impact studies have been conducted for both bail-in concepts, MREL and TLAC. Firstly, the EBA estimated an MREL shortfall for 64 European banks ranging from EUR 13 bn to EUR 674 bn depending on the benchmark threshold and the eligible instruments.[15]

Secondly, the Financial Stability Board looked at the shortfall to be bridged to meet the final TLAC requirements that will apply to G-SIBs from 1 January 2022: depending on which instruments are considered the range is between EUR 457 bn and EUR 1,130 bn. Excluding emerging market G-SIBs, the shortfall still ranges from EUR 107 bn to EUR 776 bn.[16]

Both calculations show a wide dispersion in the shortfall of bail-in capable debt instruments. This hardly facilitates the assessment of whether market depth for these instruments (i.e. investor demand) will be sufficient nor does it promote clarity for investors. Nevertheless, it is obvious that a significant amount of bail-in debt has to be issued in the next few years.

Therefore, regulators and stakeholders are currently discussing the question of how to raise these substantial volumes as well as who is allowed to invest in them, and they have come up with different suggestions:

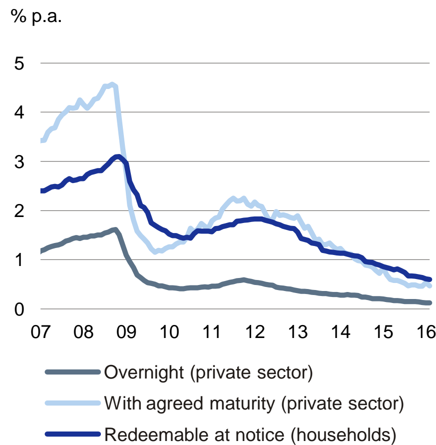
The Liikanen Commission (2012) suggested that bail-in instruments should be held outside the banking system, for example by investment funds and life insurance companies, to limit the interconnectedness in the sector. Another advantage would be that the resolution authorities would find it easier to apply the bail-in rules in the event of a systemic crisis. But banning banks from the market for bail-in capable debt instruments would weaken demand even further. In addition, some observers have also argued that supervisory authorities should ensure that the default risk does not end up on banks' balance sheets even indirectly when banks insure other institutional investors in bail-in debt, for example e.g. via CDSs.[17] Limiting the credit protection banks may sell would in turn dampen investor demand and thus further narrow down the potential investor base for banks' bail-in debt.

By contrast, the Basel Committee does not want to ban banks from holding bail-in capable debt, but would like banks to deduct this exposure from their Tier 2 capital[18]. This is consistent with the general Basel III approach towards bank investments in other financial institutions. Thus, in a resolution scenario, a potential write-down would have no impact on the bank's regulatory capital, but on its P&L. Therefore contagion effects may still be an issue.

An outright ban for certain investors is not necessarily consistent with conventional economic thinking. The current regulatory framework already limits banks' investment options and therefore takes potential contagion into account. In addition to the existing deduction rules, exposures to a single borrower are capped at 25% of own funds for regulatory purposes (large exposure limit). A new, additional deduction rule for bail-in capable instruments could reduce investment incentives for banks further but still offer more flexibility and economic freedom than an outright prohibition.

[15] EBA final Draft Regulatory Technical Standards on criteria for determining the minimum requirement for own funds and eligible liabilities under Directive 2014/59/EU, 2015.
[16] Financial Stability Board (2015). Summary of Findings from the TLAC Impact Assessment Studies.
[17] Krahnen, J. P. (2014). Implementing bail-in properly, SAFE Policy Letter No. 35.
[18] Basel Committee on Banking Supervision (2015). Consultative Document on TLAC Holdings.

Deposit rates* in the euro area 15



* New business

Sources: ECB, Deutsche Bank Research

So who would be the optimal investor? Someone professionally able to hedge against the default risk of these instruments or someone aware of the default risk but interested in a potentially higher return. However, the sector from which the investor comes should not play a central role.

Under the new bail-in rules, as opposed to a public bail-out, the risks and costs of bank failure do not disappear but will be allocated to a smaller number of investors. They should be aware of the particular features of those instruments and the associated risks. However, recent cases like the bail-in of retail bonds in Italy in November 2015 or the market turbulences around AT1 instruments at the beginning of 2016 reveal that there is still a learning process under way regarding the actual involvement of retail and institutional investors in a resolution scenario.

Last but not least, with the chances of a bail-out disappearing, the higher loss probability for investors is likely to go hand in hand with rising funding costs for banks in the medium term. In addition, banks might have to face temporarily higher funding costs during the transitional period (which is also set individually for each bank by the resolution authority) to reach the final MREL level, if they need to raise large amounts of bail-in capital in a short period of time and investors are aware of this pressure. Likewise, as already mentioned, the legal uncertainty stemming from the directive character of the BRRD could further tighten funding conditions for banks. However, the current market environment for European banks offers overall very low funding costs thanks above all to the ECB's quantitative easing programme and deposit rates at a historically low level (see graph 15).

Conclusion

Market participants view the new European resolution regime as a credible and therefore applicable mechanism for dealing with banks in distress, our analysis of six large European banking markets shows. Since the introduction of the BRRD, sovereign risk has significantly decoupled from banking sector risk as the ratio of bank CDS spreads to sovereign CDS spreads has increased considerably. In addition, the new regime has also triggered a rating review by major rating agencies which have significantly lowered their assumptions about potential government support.

Nevertheless, banking resolution without any government support is broadly uncharted territory in Europe. A tool kit for an orderly resolution is now available that should function in theory, but the “acid test” for the new rules is still outstanding. Future resolution cases will reveal if the intended mechanisms can be applied in practice, especially within the given time schedule and in due consideration of all political institutions to be included in the process. Further potential obstacles could either be i) a resolution plan offering too much discretionary scope for discussion among the SRB, Commission and Council, preventing a fast adoption of the plan or ii) the fragmented implementation of the BRRD across European jurisdictions. Therefore, the involved institutions should indeed act and apply the new rules as soon as possible, to check their practicality and to see where there is a need to revise. It is crucial for all parties involved – resolution authorities, banks and the broader investor community – to gain trust in the new framework. This can only happen in relatively calm times, and definitely not during another systemic financial crisis.

Two crucial questions remain: will there be enough investors for bail-in paper, and what is the risk premium they will require for the elevated loss probability, given the disappearance of the bail-out option?

The discussions about setting additional limits for banks regarding their investments in bail-in capable debt instruments may go too far and are not necessary. The current regulation already provides enough incentives to reduce cross-holdings and therefore potential contagion effects within the banking sector. Instead, the optimal investor is the one who can professionally hedge against the default risk of bail-in instruments or is willing to take on the higher risk in exchange for higher expected returns.

Funding costs of European banks, ceteris paribus, are likely to rise in the medium term, with the absolute magnitude blurred by the current rate environment. The effect may, however, be compounded in the transitional phase when banks probably have to issue a significant amount of bail-in debt in a relatively short time, depending on the MREL implementation in the EU.

In the future, bank equity and debt holders will bear the largest portion of resolution costs while taxpayers will be protected. So the total costs will not disappear but will instead be reallocated. With that, the old banking sector paradigm of a “privatisation of profits and socialisation of losses” has lost a large portion of its validity.

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