Geneva Reports on the World Economy Special Report 4

S4

Bail-ins and Bank Resolution in Europe

A Progress Report

Thomas Philippon and Aude Salord

	Introduction & Literature review : The future of bail-in resolution in Europe	Page 3
I	Overview of the European resolution framework for financial institutions	Page 4
II	Evidence and case studies of some European banks	Page 15
III	Challenges and recommendations	Page 30
	Contact	Page 41

Introduction

- Between 2008 and 2012, the European Commission approved €3.6 trillion of state aid measures to financial institutions, of which €1.6 trillion was used.

- EU Member States provided €591.9 billion (4.6% of EU GDP in 2012) of capital support to the financial sector.

- The objective of the new EU resolution framework is to allocate the losses from a bank's failure to private investors in order to enhance market discipline *ex ante* and preserve public finance *ex post*.

- The implementation of the bail-in tool raises two fundamental issues which are (A) the transition phase from the old to the new regime and (B) the credibility and predictability of the new resolution framework.

Literature review

Four lessons we can learn from the literature on bail-ins and banking resolution:

- The creation of **constructive certainty**, whereby the regulators should indicate the preferred path for resolution (i.e. investors are at risk if the bank fails);

- The respect of the **market economics**, i.e. loss expectation of the investors and established resolution process with clear recovery rules;

- The maintenance of the **continuity of the failed bank’s business**, i.e. access to the market infrastructure during the resolution procedures; and

- The establishment of clear rules relating to **liquidity assistance** following the opening of resolution procedures (e.g. liquidity assistance through the ECB).

PART I

Overview of the European resolution framework for financial institutions

I. Overview of the EU resolution framework

1.1 – BRRD, State Aid, Banking Union and prudential supervision

- The new Bank Recovery and Resolution Directive ("BRRD") of May 2014 aims at harmonizing the procedures for resolving all banks in the European Union, including Systemically Important Financial Institutions ("SIFIs").

- The BRRD covers bank's living wills and an early intervention framework in the phase before resolution as well as the resolution process itself.

- Under the BRRD framework, State Aid granted to failing banks shall comply with the EU competition rules and with specific conditions relating to the objective of the state aid granted (e.g. preserve financial stability) and to the form of the state aid (e.g. state guarantee to back liquidity facilities).

I. Overview of the EU resolution framework

1.1 – BRRD, State Aid, Banking Union and prudential supervision

- From a governance perspective, the Banking Union relies on two pillars: Single supervisory Mechanism (SSM) and Single Resolution Mechanism (SRM).

- The Single Resolution Board (SRB) is part of the SRM and coordinates banks' resolution at the European level. The decision to put a financial institution into a resolution procedure is taken by the ECB or by the SRB.

- The SRB is accountable to the European Parliament and the European Council.

- A formal Memorandum of Understanding has been agreed upon between the ECB and the SRB, whereas the collaboration between the SSM and the SRB has not been defined as part of a specific agreement and is informal in nature.

I. Overview of the EU resolution framework

1.1 – BRRD, State Aid, Banking Union and prudential supervision

- The BRRD is one element of a set of financial regulations relating to prudential supervision. Prudential supervision and resolution process are connected to each other in the structure of the BRRD framework.

- Banks shall fulfill the level of minimum requirements for own funds and liabilities ("MREL") set by the SRB, while reflecting the resolution strategy laid down in the recovery plan. The MREL requirement is completed by the Total Loss-Absorbing Capacity ("TLAC") applicable to SIFIs from 2019.

- Further amendments has been proposed to the Capital Requirements Directive ("CRD") and to the Market in Financial Instruments Directive ("MiFID") by the EU Commission, relating i.a. to the leverage ratio, net stable funding ratio, capital add-ons and large exposure limit.

I. Overview of the EU resolution framework

1.2 – Essential features of the BRRD resolution framework

- Essential role given to public authorities in the case of the failure of a financial institution (i.e. the resolution authority shall be a public administrative authority).

- Main objectives are the continuity of the critical functions of the failing financial institution, the financial stability, the protection of public funds and of depositors.

- The maximization of the enterprise's value is only a secondary objective, which is a notable difference compared to corporate insolvency law.

- The BRRD allows for both a single point-of-entry approach and a multiple point-of-entry approach. The resolution procedure can be conducted on a single entity level or on a consolidated basis on a case-by-case basis.

I. Overview of the EU resolution framework

1.2 – Essential features of the BRRD resolution framework

- Scope of the BRRD based on a formal definition of the term "financial institution" and covers financial institutions, subsidiaries and holding companies.

- Opening of the resolution procedure submitted to quantitative conditions, which are alternatively a breach of regulatory requirements (e.g. capital requirements), the overindebtness or the illiquidity of the failing financial institution.

- Additional qualitative conditions must be cumulatively fulfilled, as follows: (1) the decision to place the financial institution under resolution must be taken by the prudential supervision authority, (2) the absence of private sector alternative and (3) the resolution procedure is necessary for the public interest (i.e. the fulfillment of the resolution objectives).

I. Overview of the EU resolution framework

1.3 – Precautionary recapitalization under the BRRD framework

- In some specific cases, a demand for extraordinary public financial support will not be considered as an opening case of a resolution procedure.

- This exception covers (1) a State guarantee to back liquidity facilities, (2) a State guarantee of newly issued liabilities or (3) an equity participation of the State (if none of the quantitative conditions above-mentioned is fulfilled).

- A precautionary recapitalization is only allowed if (1) the State aid is compliant to the EU state aid framework, (2) the public financial support is temporary and of precautionary nature, (3) the support aims at preserving the financial stability and (4) the support shall not be used to offset losses of the financial institution.

I. Overview of the EU resolution framework

1.4 – Essential powers granted to the public resolution authority

- Legal power to replace the management of the financial institution and operate and conduct the activities of the institution as well as dispose of its assets.

- Legal power to appoint a special manager to implement the resolution measures following the decision of the resolution authority (e.g. takeover transaction).

- Restructuring of the financial institution following the application of the bail-in tool based on a business reorganization plan; or

- Orderly winding-down of the failing financial institution if it is considered as a gone-concern, with the objective of realization of the assets of the institution.

I. Overview of the EU resolution framework

1.5 – Resolution tools - Presentation

- Sale of business tool - Transfer to an independent third-party of shares, assets, rights and/or liabilities of the financial institution - without consideration of applicable legal or contractual impediments.

- Bridge institution tool - Transfer to a legal entity partially or fully owned by one or more public authorities of shares, assets, rights and/or liabilities of the financial institution - without consideration of applicable legal or contractual impediments.

- Asset separation tool - Transfer of any assets, rights or liabilities of the financial institution to a newly founded asset management vehicle.

- Bail-in tool - Writting-down of the claims of the financial institution's creditors if the financial institution is restructured and considered as a going-concern.

I. Overview of the EU resolution framework

1.6 – Resolution tools - Specificities of the bail-in tool

- Ranking of creditor's claims shall be compliant with the order of priority of their claims under normal insolvency proceedings (equality of same class creditors).

- Numerous exceptions to this principle are listed in Article 44 BRRD. Especially, covered deposits, secured liabilities, short-term liabilities, liabilities to specific trade and commercial creditors will not be written-down.

- Furthermore, specific exceptions can be granted by the resolution authority on a case-by-case basis in exceptional circumstances, as follows: (1) impossibility to bail-in the liabilities within a reasonable time, (2) avoidance of widespread conta-gion, (3) maintenance of the continuity of the critical functions of the institution; or (4) avoidance of a destruction in value.

I. Overview of the EU resolution framework

1.6 – Resolution tools - Specificities of the bail-in tool

- Application of the no creditor worse-off principle, pursuant to which no creditor shall incur greater losses if the financial institution had been wound up under normal insolvency procedures.

- Independent valuation of the creditor's claims through an independent third-party, following the implementation of the resolution measures.

- Bail-in of at least 8% of the total liabilities including capital instruments of the financial institution including capital instruments through write-down or debt con-version if public financing sources (i.e. public equity support or temporary public ownership) are used.

I. Overview of the EU resolution framework

1.7 – Specific issues relating to the implementation of the BRRD framework

- Transition phase of the BRRD - Retroactive application of the bail-in tool before the 1. January 2016, leading to legal uncertainty for the banks' resolution started before 31 December 2015 (e.g. Banco Espirito Santo).

- Implementation gap between BRRD bail-in and MREL/TLAC requirements - The loss-absorbing capacity in the Banking Union will be implemented with the MREL and TLAC requirements in 2019, so that existing bail-inable liabilities on banks' balance-sheets may be insufficient.

- State-aid framework - The case Monte Dei Paschi shows that the disposition on the State aid framework can be interpreted in a broad manner - i.e. even in the absence of financial instability.

PART II

Evidence and case studies of some European banks

II. Evidence and case studies of some European banks

2.1 – Theoretical bail-in example

- Example of a bank balance sheet with a size of 100 (total assets), capital requirements of 7% RWA, RWA / assets = 5% and capital requirements expressed as 3.5% of total assets. The bank is currently well capitalized since 5% > 3.5%:

Total assets	100	Total liabilities	100
Loans	90	Equity	5
Securities	10	Junior debt	5
		Senior debt	5
		Deposits	85

II. Evidence and case studies of some European banks

2.1 – Theoretical bail-in example

- Application of a small loss of 2% of the total assets. Equity drops to 3%, leading to a violation of the capital requirements. Following the bail-in of 2% of junior debt and the conversion into two units of equity, whereby 2% of losses are borne by the shareholders, the bank is recapitalized back to 5%:

Total assets	98	Total liabilities	98
Loans	90-2=88	Equity	5-2+2=5
Securities	10	Junior debt	5-2=3
		Senior debt	5
		Deposits	85

II. Evidence and case studies of some European banks

2.1 – Theoretical bail-in example

- Application of a large loss of 6% of the total assets. Shareholders are wiped out completely and junior debt holders lose one unit of debt and four units of the debt is converted into equity. One unit of senior debt is converted into equity, so that the initial level of 5% of capitalization is reached:

Total assets	94	Total liabilities	94
Loans	90-6=84	Equity	5-5+4+1=5
Securities	10	Junior debt	5-1-4=0
		Senior debt	5-1=4
		Deposits	85

II. Evidence and case studies of some European banks

2.2 – Case studies of some European banks

- Overview of the balance-sheets of the European banks considered - one year prior to the restructuring:

Name	Period	Assets (A)	CE/A	JD/A	SD/A	3Y Imp
Dexia 1	2008	604,600	2.41%	0.81%	33.74%	1.0%
Amagerbanken	2008-2011	4,169	7.46%	4.34%	5.59%	7.3%
Anglo-Irish	2008-2010	96,652	4.21%	5.46%	24.41%	36.4%
Hypo Real Estate	2008-2010	400,174	1.52%	1.40%	54.50%	1.0%
Dexia 2	2011-2012	566,735	3.39%	0.69%	37.14%	1.7%
Bankia	2012	298,367	3.85%	0.11%	15.96%	6.6%
SNS Reaal Group	2013	133,663	1.72%	1.30%	16.62%	1.6%
Laiki	2013	31,364	0.82%	0.42%	1.53%	.
Alpha Bank	2013	58,357	1.05%	0.43%	0.81%	7.5%
Average			2.94%	1.66%	21.14%	7.88%

II. Evidence and case studies of some European banks

2.2 – Case studies of some European banks

- The assets are represented in million euros. The ratios are measured one year before the failure of the respective bank.

- CE = common equity. JD = junior debt. SD = senior unsecured debt, excluding all deposits. 3Y imp = three-year cumulative impairment rate, calculated based on customer loans losses, leading to declining interest and operating income.

- The table shows that the average three-year asset loss is just under 8% and typically higher than equity but less than the sum of equity, junior and senior debt together - except for Laiki and Anglo-Irish bank.

II. Evidence and case studies of some European banks

2.3 – Hypo Real Estate ("HRE") failure

- HRE is the result of a spin-off from HypoVereinsbank in 2003. In 2007, HRE acquired Depfa, an Irish public finance company. Following the losses accumulated by Depfa, the German banking association provided €35 billion of liquidity to HRE, backed by a State guarantee in September 2008.

- The German state acquired 90% of the shareholders' equity and proceeded to a squeeze-out of the remaining shareholders. Public capital injections represented €9.95 billion. In 2010, non-performing, non-strategic assets were transferred to a government-backed vehicle. Realization losses were supported by the German State.

- Some Tier 2 instruments called *Genussrechte* were arbitrarily bailed-in, due to special legal features. Tier 1 instruments could not receive haircuts outside of a bankruptcy procedure.

II. Evidence and case studies of some European banks

2.4 – SNS Reaal Group failure

- Dutch banking and insurance group which underwent a government equity injection in 2008 and a nationalization in 2013, due to losses in the real estate sector.

- In February 2013, the total loss incurred was €1.8 billion in capital losses. Moreover, €2.5 billion of capital needs were required to meet minimum capital requirements of the group.

- The government and Dutch banks funded €2.2 billion of the recapitalization and a total of €2.1 billion in hybrid capital and subordinated debt were expropriated. The government acquired a share of €565 million of the hybrid capital.

II. Evidence and case studies of some European banks

2.4 – SNS Reaal Group failure

- The table below gives an overview of the timeline of the restructuring of SNS Reaal Group:

Crisis year	Event	Public recapitalisation	Implicit recapitalisation	Investor writedowns	Shareholders money	Comments
2008	First government equity injection	€750 million capital increase from the Dutch state in the form of hybrid capital securities				
2013	State control and ownership	€2.2-2.8 billion share capital injection by government	€420 million buyback transaction	Bore most of the loss burden	€72 million, or a 17% average haircut	Shares as well as hybrid capital and subordinated debt of the bank were nationalised

II. Evidence and case studies of some European banks

2.5 – Summary of the case studies

- The table below gives a summary of public interventions (millions of euros):

	Public capital injections	Asset guarantees	Debt guarantees
Dexia 1	6,400	17,000	100,000
Amagerbanken	148	-	1,800
Anglo-Irish	29,318	-	42,681
Hypo Real Estate	9,950	-	145,000
Dexia 2	5,500	-	90,000
Bankia	18,000	-	53,963
SNS Reaal Group	2,800	-	-
Laiki	-	-	-
Alpha Bank	4,600	-	-

II. Evidence and case studies of some European banks

2.5 – Summary of the case studies

- The table below gives an overview of the haircuts and burden sharing of the European banks considered:

Name	Equity loss	Junior debt loss	Senior debt loss	Public recapitalisation	Guarantee value	Recapitalisation need	PSI
Dexia 1	-73%	0%	0%	1.1%	2.0%	4.8%	10%
Amagerbanken	-100%	-100%	-68%	3.5%	10.0%	29.1%	54%
Anglo-Irish	-100%	-78%	0%	30.3%	9.6%	48.4%	17%
Hypo Real Estate	-95%	-12%	0%	2.5%	8.6%	12.6%	13%
Dexia 2	-96%	0%	0%	1.0%	3.8%	8.0%	11%
Bankia	-100%	-20%	0%	6.0%	4.2%	14.1%	14%
SNS Reaal	-100%	-100%	0%	2.1%	0.0%	5.1%	59%
Laiki	-100%	-100%	-60%	0.0%	0.0%	24.5%	100%
Alpha Bank	-52%	-66%	0%	7.9%	0.0%	9.9%	20%
Average	*-91%*	*-53%*	*-14%*	*6.0%*	*4.2%*	*17.4%*	*33%*

II. Evidence and case studies of some European banks

2.5 – Summary of the case studies

- The columns “equity loss”, “junior debt loss” and “senior debt loss” represent the haircut rates for each respective class of stakeholders.

- The column “public recapitalization” is the sum of all capital injections by public authorities for the respective bank. The column “recapitalization need” is the sum of public recapitalization, of guarantees granted and of losses incurred by the private investors.

- The guarantee values are calculated based on the face value of the guarantee multiplied by the CDS spread of the respective bank for a three-year insurance.

- The column “PSI” represents the contribution of the private sector to the total recapitalization of the respective bank.

II. Evidence and case studies of some European banks

2.5 – Summary of the case studies

- The average PSI of the table above is 33%, so that taxpayers provided approx. 2/3 of the total recapitalization of the European banks considered. The case HRE shows a low PSI participation (13%), whereas the PSI participation is significantly higher in the SNS Reaal Group case.

- If shareholders, junior and senior creditors had participated at least up to 8% of the total liabilities of the respective bank, the average PSI would have been 64%. With a loss participation of 12%, the average PSI would have been 77%.

- The efficient application of the bail-in rules could hence significantly reduce the public sector costs linked to banks' failures.

II. Evidence and case studies of some European banks

2.6 – Outlook: the case of Banco Popular

- First formal resolution of a failing European bank under the BRRD framework in June 2017. Early application before the implementation of the loss-absorbing framework.

- Complete wipe-out of shareholder's equity and of junior Additional Tier 1 (AT1) and of Tier 2 (T2) capital instruments: total loss-sharing of € 3.3 billion. Senior creditors and institutional depositors remained unaffected.

- Sale to Banco Santander for a nominal sum of € 1 and subsequent raising of € 7 billion to clean-up the bank's balance-sheet.

- Looking forward: application of the European resolution framework during a systemic crisis and/or in the absence of a sale's to a third-party.

PART III

Challenges and recommendations

III. Challenges and recommendations

3.1 – Establishing credibility: common good, private cost

Proposal 1 - The SSM should break with the European tradition of ‘too little, too late’ by acting early and proactively, even if this creates some (limited, short-term) financial volatility.

Proposal 2 - The board of the SSM should be made more independent, with more permanent members, along the lines of the board of the SRB.

III. Challenges and recommendations

3.2 – The need to monitor who holds bail-inable instruments

Proposal 3 - The revision of the Capital Requirements Directive (CRD4) and the Markets in Financial Instruments and Investment Directive (MiFID) should include a rule that bail-inable debt instruments cannot be sold directly to retail investors.

Proposal 4 - The ECB/SSM should maintain a database to identify the main holders of bail-inable debt.

III. Challenges and recommendations

3.3 – Design of stress tests

Proposal 5 - The stress tests should include a moderately negative scenario in addition to the baseline and the severely adverse scenarios. The moderately adverse scenario should be used instead of the baseline to decide on bail-in versus precautionary recapitalization.

III. Challenges and recommendations

3.4 – Harmonization and predictability of insolvency and collateral security laws

Proposal 6 - Conduct a survey to quantify the potential differences in treatment of creditors under the collateral securities laws in the EU member states in order to provide some legal clarity to investors across the Union, and perform an assessment on the transposition differences relating to the creditor hierarchy under the TLAC / MREL requirements.

Proposal 7 - In the long run, we recommend that the Banking Union adopt a dedicated bankruptcy chapter for financial institutions to ensure a disconnect between the bank insolvency legislation and the corporate insolvency legislation.

III. Challenges and recommendations

3.5 – Timing and coordination

Proposal 8 - Clarify the right of the SRB to weigh in on supervisory matters. Establish a Memorandum of Understanding laying down the conditions of the cooperation between the SRB and the SSM, including the joint review of recovery and resolution plans and information sharing in a crisis scenario.

III. Challenges and recommendations

3.6 – Living wills and liquidity

Proposal 9 - Regulators should impose higher MREL on banks that do not provide credible living wills, in particular with respect to how they would manage liquidity in resolution, in either SPE or MPE framework.

Proposal 10 - ELA for banks in resolution should be moved from national central banks towards the ECB, perhaps in a dedicated facility. At least the required consent of the council of governors should be strengthened. It might also make sense to use the Single Resolution Fund (SRF) to provide liquidity instead of only capital.

III. Challenges and recommendations

3.7 – Cross-border resolution and the choice between SPE and MPE

Proposal 11 - A litmus test for whether the Banking Union is complete is whether the Eurozone can be considered a single jurisdiction as far as liquidity and capital are concerned. Ring-fencing inside/outside the Eurozone can make sense, but ring-fencing within the Eurozone defeats the purpose of the Banking Union. MREL, SRF and the European Deposit Insurance Scheme (EDIS) must be strong enough to ensure that liquidity and capital remain freely mobile within the Eurozone, both before and during resolution.

III. Challenges and recommendations

3.8 – Derivatives, short-term liabilities and safe harbor

Proposal 12 - Give the resolution authority more flexibility in relation to the duration of the automatic stay applicable to financial transactions, with the right to extend the automatic stay for a duration greater than 24 hours.

Proposal 13 - Reformulate the exception granted to short-term unsecured senior debt from the bail-in power, so that the exception does not rely on a duration (seven days) but rather on the qualitative elements of such short-term debt. The definition should be restricted to partially funded, revolving or other open lines of credit necessary for the continuation of the operations essential to the financial institution, as in the US framework.

III. Challenges and recommendations

3.9 – Reduced discretion of bail-in rules

Proposal 14 - Submit the granting of a precautionary recapitalization to stricter conditions, including the fulfilment of quantitative and qualitative elements, to avoid discretionary use of the public sector funds before the opening of a resolution procedure.

Proposal 15 - Limit the bail-in exemption to clearly defined categories of debt with no playing-room granted to the resolution authority.

III. Challenges and recommendations

3.10 – Creation of a privilege of new money

Proposal 16 - Amend the resolution framework to add a privilege of new money with a clear privilege in the claim ranking hierarchy given to the creditor granting a new liquidity facility during the resolution procedure. The definition of the privilege of new money should be as wide as possible to include private sector support as well as public back-stop facilities, and should be comparable with the privilege of new money in Chapter 11 of the US Bankruptcy Code.

Contact

International Center for Monetary and Banking Studies (ICMB)
International Center for Monetary and Banking Studies
Chemin Eugène-Rigot, 2
1202 Geneva
Switzerland

Tel: (41 22) 734 95 48
Web: www.icmb.ch