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Bank Governance and the Bail-in in the EU

A Law & Finance analysis on the role of bail-inable creditors

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Leve finanziarie, leve economiche, leve giornalistiche: le tre leve fondamentali di ogni vera edificazione sociale, politica e culturale! Se mancano queste leve, non resta che la potestà – magra! – di fare discorsi sul valore della persona umana.

From a letter by G. La Pira to A. Fanfani, 13 February 1955

Dilexit veritatem

Marc Bloch, historian and partisan (1944)

Table of Contents

TABLE OF CONTENTS	i
LIST OF FIGURES	. xi
LIST OF ABBREVIATIONS	xiii
DISCLAIMER	.xv

PART I – BANK GOVERNANCE AND THE RESOLUTION FRAMEWORK

CHAPTER 1 – INTRODUCTION	3
CHAPTER 2 – BANK GOVERNANCE	29
CHAPTER 3 – THE EX-ANTE POTENTIAL OF THE EU BANK RESOLUTION FRAMEV	VORK59

PART II – THE IMPACT OF THE NEW RESOLUTION FRAMEOWRK ON BANK GOVERNANCE: A POSTIVE ANALYSIS

CHAPTER 4 - THE BAIL-IN BEYOND UNPREDICTABILITY	87
CHAPTER 5 - BAIL-INABLE SECURITIES AND FINANCIAL CONTRACTING	137
CHAPTER 6 - TOWARD AN OPTIMAL COMPOSITION OF BAIL-INABLE DEBTHOLDERS?	163

PART III - FINETUNING BANK GOVERNANCE AND REGULATION

CHAPTER 7 – THE CASE FOR REMUNERATING BANKERS THROUGH BAIL-INABLE DEBT225
CHAPTER 8 - THE CASE FOR GRANTING GOVERNANCE RIGHTS TO BAIL-INABLE CREDITORS
CHAPTER 9 – CONCLUSIONS
BIBLIOGRAPHY

Bank Governance and the Bail-in

Table of Contents

Table of Contents	i
List of Figures	xi
List of abbreviations	xiii
Disclaimer	XV

PART I

Chapter 1 – Introduction

1.	Problem Definition	5
2.	Research Question	.11
3.	Methodology	.15
4.	Scope and Limitations	.18
5.	Structure of the Dissertation	.21

Chapter 2 – Bank Governance

1.	Introduction	.30
2.	Is bank governance special?	.32
	2.1 Corporate Governance and its basic features	.32
	2.2 The special features of Bank Governance	.36
	2.3 Assimilation v. Specialty of Bank Governance	.40
	2.4 How to deal with bank specialty?	.42
3.	Governance and Regulation	.44

4.	Regulation of Bank Governance: A critical Assessment	48
5.	A quest for good governance	51
	5.1 Bank Governance and Debt	. 51
	5.2 EU Regulation of Bank Failure and Debt Governance	. 54
6.	Conclusion	. 55

Chapter 3 – The Ex-Ante Potential of the EU Bank Resolution Framework

1.	Introduction	. 60
2.	The road toward a European Banking Union	. 63
	2.1 Single Supervision	. 65
	2.2 Deposit Guarantee	. 67
3.	The EU regulation framework for failing banks	. 68
	3.1 From Bailout to Bail-in: the rationale	. 68
	3.2 The Bank Recovery and Resolution Directive (BRRD)	.71
4.	Ex-ante Tools and the Credibility of Resolution	. 76
5.	The ex-ante potential of the resolution regulation and debt governance	. 79
6.	Conclusion	. 82

PART II

Chapter 4 - The Bail-In Beyond Unpredictability

1.	Introduction	88
2.	Market Discipline in banking: a review of theories and regulation	91

3. fra	Market discipline and the Banking Union: economic rationale and legal mework
	<i>3.1 A glance at resolution and bail-in</i> 99
	3.2 A new channel for Market Discipline (?)102
4.	Market for bail-inable securities: the rules of the game105
	4.1 Defining the borders105
	4.2 Principals on creditor's treatment: the Hierarchy and the Equitable Treatment principles108
	4.3 Market discipline and competing policy objectives: No Creditor Worse-Off (NCWO) principle110
	4.4 Market discipline and competing policy objectives: The "8% contribution" threshold rule for granting public funds
5.	Effort in monitoring in an ideal environment
	5.1 Dreaming of a smooth resolution: assumptions for an ideal world118
	5.2 Nightmares into a dream?123
	5.2.1 No creditor worse off124
	5.2.3 8% threshold126
	5.3 A dream or a nightmare: where will we wake up?128
6.	Conclusion
7.	Appendix - A stylised application of the NCWO principle

Chapter 5 - Bail-Inable Securities and Financial Contracting

1.	Introduction	138
2.	Incomplete contracts and bail-inable securities	141
	2.1 A theory of debt	141
	2.2 Bank debt and its peculiarities	143
3.	Contractual freedom and regulatory constraints	146
	3.1 A brief overview of qualitative requirements	147
	3.2 Compliance of contractual devices	150
4.	Bargaining out of discretion: contingent convertibles	154
	4.1 Rationale and design features	154
	4.2 Cocos and risk-taking	156
	4.3 Governance features of Coco design	157
5.	Conclusion	160

Chapter 6 - Toward an Optimal Composition of Bail-Inable Debtholders?

1.	Introduction	164
2.	Why does this matter and how to study it	168
3.	Who should hold bail-inable securities?	174
4.	What we know about bail-inable holders	177
	4.1 Data and limitations	. 178
	4.2 Geographical distribution: EA vs non-EA	. 181

	4.3 Distribution by sector with EA holders187
	4.4. Sector holding and seniority192
5.	Divergent incentives and spillovers193
	5.1 Households194
	5.2 Bank crossholdings197
	5.3 Pension funds and insurance firms (PF&IFs)202
	5.3.1 Pension funds202
	5.3.2 Insurance
	5.3.3 Data and Trends 205
	5.4 Other Financial Institutions207
	5.4.1 Mutual Funds208
	5.4.2 Activist Hedge Funds209
	5.4.3 Data and trends212
6.	A way forward?214
7.	Conclusions
8.	Appendix

PART III

Chapter 7 – The Case for Remunerating Bankers Through Bail-Inable Debt

1.	Introduction	226
	Remuneration of executives and risk takers in banking: theory and dence	.228
	2.1 Agency theory, remuneration and the special case of bankers	.228

	2.2 Debt-based remuneration of executives and risk takers in banking	. 235
	2.3 Early cases of remuneration through debt	. 240
	2.4 A simple numerical example	. 243
3. pro	The regulation of bankers pay: international standards and policy oposals	. 246
4.	Regulation on remuneration in the EU	. 248
	4.1 Governance, Supervision and Disclosure of bankers' remuneration	. 249
	4.2 Substantive rules on remuneration composition and structure	.251
	4.3 Critical assessment	. 257
	4.3.1 Pay regulation and the economics of remuneration	258
	4.3.2 Pay regulation and Bank Governance	262
5.	Remuneration through bail-inable debt in European Banks?	. 264
	5.1 The State of the art	. 265
	5.2 Proposal for a new regulatory framework	. 267
	5.2.1 Remuneration through debt: identifying the instruments to award	268
	5.2.2 Remuneration through debt in context	270
	5.2.3 Remuneration through debt and the Resolution Framework	272
	5.3 Critical Assessment of the proposal	. 273
	5.3.1 Remuneration through debt and the economics of remuneration	273
	5.3.2 Remuneration through debt and bank governance	274
	5.3.3 Remuneration through debt and bank resolvability	275
6.	The devil's in the details: how to reform pay regulation	. 277
	6.1 A cautious approach: an unbiased possibility to remunerate through debt	. 277
	6.2 A radical approach: mandating remuneration through debt	. 279
7.	Conclusion	. 281

Chapter 8 - The Case for Granting Governance Rights to Bail-Inable Creditors

1.	Introduction
2.	Governance approaches to account for bank specialties
3.	Good governance and the role of creditors296
4.	A new Governance Status for creditors: the boundaries
	4.1 Creditors holding the governance rights
	4.2 The Nature of Governance Rights: contingent v absolute rights
5.	A new Governance Status for creditors: the contents
	5.1 The general Principle
	5.2 Governance rights granted at EU law level
	5.2.1 General features
	5.2.2 Appointment rights
	5.2.3 Decision rights
6.	Conclusion

Chapter 9 – Conclusions

1.	Good Governance for Banks		21
	1.1	Bank Governance and Financial Regulation3	21
	1.2	Debt Governance and the Resolution Framework	22
2.	The Imp	pact of the Resolution Framework in Bank (Debt) Governance3	23
	2.1	Market Discipline Through Price Adjustment3	23
	2.2 Regula	Contractual Incompleteness, Contingent Allocation of Control and atory Foreclosures	324

	2.3 The Composition of Bail-inable Debtholders Matters	
3.	Finetuning Bank Governance and Regulation	327
	3.1 The Case for Remuneration Through Debt	
	3.2 The Case for Governance Rights to Bail-inable Debtholders	
Bib	oliography	
Acknowledgements		
Summary		
Cui	rriculum Vitae	
Phl	D Portfolio	

List of Figures

Figure 1 - Banks Subordinated Debt Market in Italy74
Figure 2 - Article 44 and resolution objectives108
Figure 3 - Article 48 BRRD: Sequence of write down and conversion
Figure 4 - Basic Incentive Structure of bail-inable creditors
Figure 5 - Incentive Structure of bail-inable creditors when the NCWO principle is in place $.126$
Figure 6 - Incentive Structure of bail-inable creditors when the 8% threshold is in place127
FIGURE 7 - APPLICATION OF NCWO TO THE STYLISED BALANCE SHEET OF BANK A
Figure 8 - Level of losses under bail-in and liquidation regime in the baseline scenario134
Figure 9 - Level of losses under bail-in and liquidation regime in the clawback scenario135
Figure 10 - Level of losses under bail-in and liquidation regime in the Non-eligible liabilities
scenario
Figure 11 - Capital and bail-in eligible liabilities waterfall148
Figure 12 - Outline of the main qualitative requirements for bail-in eligible liabilities149
Figure 13 - Channels for creditors' influence
Figure 14 - Dimension to consider for analysing the impact of different holders of bail-inable
securities
Figure 15 - Geographical distribution (within or outside Euro Area) of holders of non-covered
DEBT SECURITIES. OWN CALCULATIONS
Figure 16 - Geographical distribution of holders according to the country of issuance
(domestic, Euro Area, Non-EA). ECB (2016)
Figure 17 - Geographical distribution of non-covered debt securities holders within Euro
Area. Pigrum (2016)
Figure 18 - Sector composition of non-covered debt held by EA investors $2017Q4$ in selected
EA COUNTRIES. OWN CALCULATIONS
FIGURE 19 - % VARIATION OF SECTOR HOLDINGS AS OF 2013. OWN CALCULATIONS
Figure 20 - $\%$ variation of sector holdings as of 2013 in Italy and the Netherlands. Own
CALCULATIONS
Figure 21 - Households Holdings trend between 2013 and 2017. Own calculations
FIGURE 22 - CROSSHOLDINGS TREND BETWEEN 2013 AND 2017. OWN CALCULATIONS201

FIGURE 23 - INSURANCE FIRMS & PENSION FUNDS HOLDINGS TREND BETWEEN 2013 AND 2017. O	WN
CALCULATIONS.	206
Figure 24 - Other Financial Institution holdings trend between 2013 and 2017. Own	
CALCULATIONS	213
FIGURE 25 - SUMMARY OF THE IMPACT OF DIFFERENT INVESTORS' CATEGORY	215
FIGURE 26 - SECTOR-BY-SECTOR NON-COVERED DEBT HOLDING IN 11 EA COUNTRIES	220
FIGURE 27- SECTOR COMPOSITION OF NON-COVERED DEBT HELD BY EA INVESTORS 2017Q4 FOE EA	сн ЕА
COUNTRY	221
FIGURE 28 - UBS REMUNERATION STRUCTURE FOR 2012 AND 2013	242
Figure 29 – "Bank A" Balance Sheet	243
FIGURE 30 - PROJECT OPPORTUNITY	244
Figure 31 - Risk Shifting Incentives	244
FIGURE 32 - REMUNERATION THROUGH EQUITY	245
FIGURE 33 - REMUNERATION (ALSO) THROUGH BAIL-INABLE DEBT	245
FIGURE 34- PHASES OF THE REMUNERATION PROCESS	255
FIGURE 35 - UNICREDIT DATA ON COMPENSATION STRUCTURE FOR 2018	261

List of Abbreviations

AIFMD	Alternative Investment Fund Manager Directive
AT1	Additional Tier 1 Instruments
BCBS	Basel Committee for Banking Supervision
BIS	Bank of International Settlements
BRRD	Bank Recovery and Resolution Directive
CBR	Combined Buffer Requirement
ССВ	Capital Conservation Buffer
CDS	Credit Default Swap
CEBS	Committee of European Banking Supervisor
CEO	Chief Executive Officer
CET1	Common Equity Tier 1 Instruments
CoCos	Contingent Convertible Instruments
CRA	Credit Rating Agency
CRD	Capital Requirement Directive
CRR	Capital Requirement Regulation
DCCP	Deferred Contingent Capital Plan
DGS	Deposit Guarantee Scheme
EA	Euro Area
EBA	European Banking Authority
EBU	European banking Union
ECB	European Central Bank
EDIS	European Deposit Insurance Scheme
EMU	Economic and Monetary Union
EU	European Union
FSB	Financial Stability Board
G-SIB	Globally Systemically important banks
GDP	Gross Domestic Product

IF&PF	Insurance Firms and Pension Funds
MDA	Maximum Distributable Amount
MiFID	Markets in Financial Instruments Directive
Mifir	Markets in Financial Instruments Regulation
MMF	Money Market Fund
MPOE	Multiple Point of Entry
MREL	Minimum Requirement for Own Funds and Eligible Liabilities
NCA	National Competent Authority
NCWO	No Creditors Worse Off
NPV	Net Present Value
OECD	Organisation for Economic Cooperation and Development
OFIs	Other Financial Institutions
PAF	Partner Asset Facility
RWAs	Risk Weighted Assets
SHS	Security Holding Statistics
SPOE	Single Point of Entry
SREP	Supervisory Review and Evaluation Process
SRD	Shareholders Right Directive
SRM	Single Resolution Mechanism
SRMR	Single Resolution Mechanism Regulation
SSM	Single Supervisory Mechanism
SSMR	Single Supervisory Mechanism Regulation
Т2	Tier 2 Instruments
TBTF	Too Big to Fail
TLAC	Total Loss Absorbency Capacity
UCITS	Undertakings for Collective Investment in Transferable Securities

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PART I

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Bank Governance and the Resolution Framework

Chapter 1 – Introduction

The Global Financial Crisis of 2007-2008 had a sensational impact in many different areas of society.¹ Its effects spanned beyond the financial and economic domain. On the contrary, the spillovers of the crisis spanned from strong political reactions, media commotion, to a more profound and long-lasting cultural impact, especially for the generation that experienced the crisis while approaching adulthood.

The famous sociologist Zygmunt Bauman claimed that the latest financial crisis represented a disruptive generational event, defining the end of the previous generation and introducing a "new normal" according to which people's hopes, fears and expectations were re-calibrated.

Every generation has its measure of outcasts. There are people in each generation assigned to outcast status because a 'generation change' must mean some significant change in life conditions and life demands likely to force realities to depart from expectations implanted by the conditions-quo-ante. [...] When looking back from the second decade of the 21st century, we can hardly fail to notice that when confronted with the profound changes brought about by the latest economic collapse, each one of those previous passages between generations may well seem to be an epitome of inter-generational continuity. Indeed, after several decades of rising expectations, the present-day newcomers to adult life confront expectations falling – and much too steeply and abruptly for any hope of a gentle and safe descent.²

This generational event provoked an impressive and almost unprecedented legislative response by several national and supranational institutions, shaping a new regulatory architecture both at a global and regional level.³ This holds true especially for the European

¹ Zygmunt Bauman and Carlo Bordoni, State of Crisis (John Wiley & Sons 2014).

² Zygmunt Bauman and Neal Lawson, A Chronicle of Crisis: 2011-2016 (Social Europe Edition 2017) 1.

³ Chris Brummer, *Soft Law and the Global Financial System: Rule Making in the 21st Century* (Cambridge University Press 2015).

Union, where the regulatory framework proved entirely inapt to face a systemic crisis, primarily because of fragmentation of national laws.⁴

Looking back at the financial crisis, two striking features capture the attention of layperson in Main Street:⁵ the enormous amount of bailout money given out by states⁶ and the absurd level of compensation to bankers whose bank went underwater because of the disproportionate risks they undertook.⁷ The first aspect relates to how banks fail, whereas the second pertains to the domain of bank governance and the incentives faced by bankers when making risky decisions.

Unsurprisingly, these areas attracted the attention of the post-crisis legislators. Politicians on both sides of the Atlantic committed to do everything within their power to prevent a similar meltdown from happening again in the future. The key motto was: "Never again".

For instance, in presenting the Dodd-Franck Act, President Obama stated:

This economic crisis began as a financial crisis, when banks and financial institutions took huge, reckless risks in pursuit of quick profits and massive bonuses. When the dust settled, and this binge of irresponsibility was over, several of the world's oldest and largest financial institutions had collapsed, or were on the verge of doing so. [...] Never again will the American taxpayer be held hostage by a bank that is 'too big to fail'.⁸

⁴ Charles Enoch and others, *From Fragmentation to Financial Integration in Europe* (International Monetary Fund 2013).

⁵ Used in opposition to Wall Street, referring to people that are not part of the financial world.

⁶ For instance, in the U.S. the Emergency Economic Stabilization Act of 2008 established the Troubled Asset Relief Program (TARP), the more relevant source of bailout money for US financial institutions. The TARP had the authorization to spend up to 700 billion \$. In the EU, the European Commission approved State Aid measures for 4.5 trillion euro, equivalent to the 37% of the EU GDP of 2008. See, European Commission, New crisis management measures to avoid future bank bailouts, MEMO/12/416. Available at https://ec.europa.eu/commission/presscorner/detail/en/IP 12 570 (accessed 04-04-2020).

⁷ Lucian A Bebchuk, Alma Cohen and Holger Spamann, 'The Wages of Failure: Executive Compensation at Bear Stearns and Lehman 2000-2008' (2010) 27 Yale J. on Reg. 257. It has been estimated that between 1993 and 2007, while serving as CEO, Mr. Fuld received almost half a billion dollars.

⁸ Remarks by the President on Financial Reform, 21 January 2010. Available at <u>https://obamawhitehouse.archives.gov/the-press-office/remarks-president-financial-reform</u> (accessed 16-02-2020).

In the EU, one of the major cornerstones of the post-crisis financial reforms consisted in establishing a European Recovery and Resolution Framework for ailing banks, whose declared main goals are to preserve the stability of the European financial market and to avoid "to the largest extent possible" resorting to the use of public money in handling banks' crises.⁹

This dissertation examines the post-crisis regulatory framework, assessing to what extent it implements those political commitments. More specifically, it investigates whether and to what extent those are contributing to avoid (i.e.: minimise the probability of) future financial meltdowns. In more technical words: this research assesses the impact of the resolution framework on the governance of banks, i.e. on the quality of their decision-making.

1. Problem Definition

The main problem this dissertation endeavours to address is the impact of the recovery and resolution framework for ailing banks on the governance of European banks. The ultimate aim is to understand how and to what extent a clear and credible institutional framework regulating banks' failures enhances the decision-making process of banking institutions and, in turn, their resilience.

This query involves many different aspects of banks' behaviour and their interrelations. It is, thence, essential to disentangle the main elements to address: bank governance and the recovery and resolution framework for ailing banks.

Bank governance represents the central aspect of this dissertation. Poor decision making and excessive risk incentives in the period leading up to the crisis proved to boost, if not to cause, the financial meltdown.

⁹ See Recital n 1 BRRD: "The financial crisis has shown that there is a significant lack of adequate tools at Union level to deal effectively with unsound or failing credit institutions and investment firms ('institutions'). Such tools are needed, in particular, to prevent insolvency or, when insolvency occurs, to minimise negative repercussions by preserving the systemically important functions of the institution concerned. During the crisis, those challenges were a major factor that forced Member States to save institutions using taxpayers' money. The objective of a credible recovery and resolution framework is to obviate the need for such action to the greatest extent possible".

In this regard, the final report of the "High-Level Group on Financial Supervision in the EU", chaired by Jacques de Larosière, stated:

"[Corporate Governance] is one of the most important failures of the present crisis. [...] Looking back at the causes of the crisis, it is clear that the financial system at large did not carry out its tasks with enough consideration for the long-term interest of its stakeholders."¹⁰

In a similar vein, a growing body of empirical research demonstrates how banks with "better" corporate governance performed worse during the crisis. For instance, Beltratti and Stultz concluded that

"Our results show that no evidence exists that banks with a better alignment of the CEO's interests with those of the shareholders had higher stock returns during the crisis. Some evidence shows that banks led by CEOs whose interests were better aligned with those of their shareholders had worse stock returns and a worse return on equity".¹¹

Nowadays, there is ample evidence showing that the shareholder centric governance paradigm incentivises excessive risk-taking, especially in good time, and that such excessive risk-taking contributes to build-up systemic risk. These features of bank governance result in the impossibility to foster social welfare by maximising shareholders' value.

Those few remarks suffice to understand a certain tension between the governance of non-financial corporations and bank governance. And even more, on the concept of "good corporate governance" for banks. In the aftermath of the financial crisis, the idea that "bank governance is special" attracted a certain degree of consensus.¹² Such specialty would open the door to substantial departures from the plain "shareholder value"

¹⁰ Jacques De Larosière and others, 'Report of the High-Level Group on Financial Supervision in the EU' [2009] European Commission. Brussels.

¹¹ Andrea Beltratti and René M Stulz, 'The Credit Crisis around the Globe: Why Did Some Banks Perform Better?' (2012) 105 Journal of Financial Economics 1.

¹² Marco Becht, Patrick Bolton and Ailsa Röell, 'Why Bank Governance Is Different' (2011) 27 Oxford Review of Economic Policy 437.

maximisation paradigm, widely employed in non-financial firms.¹³ Nevertheless, both the academic and the regulatory debates over bank governance fell short in operationalising the fact that bank governance is special.¹⁴

For instance, professors Armour and Gordon, discussing the desirable regulatory reforms in the area of bank governance, stated:

"We should emphasize that we are far surer of the significance of the problem we document than we are of the efficacy of our proposed solutions, which we present primarily as a heuristic framework for debate".¹⁵

Thus, when it comes to bank governance and the incentives stemming therein, proposing a theoretical framework to operationalise those specialties represents a quintessential goal. The inter-linkages between bank governance and regulation and the role of debt ought to constitute the foundation of this framework.

This latter observation directly leads to the second central component of this research. The European Legislator established a new and unprecedented framework on recovery and resolution of banks.¹⁶

The framework harmonises the tools and procedures to deal with bank distress through the whole European Union. The Bank Recovery and Resolution Directive (BRRD) regulates the procedures, the tools and the powers to handle bank distress, from the phase of preparation to resolution. It mandates Member States the task to designate an administrative authority, the Resolution Authority, to exercise the powers provided by the

¹³ The dissertation does not enter in the debate over the "shareholder value maximisation" paradigm in nonfinancial firms, but simply takes it for granted and evaluates whether the argument grounding this approach for non-financial firms hold in banking

¹⁴ Christoph van der Elst, 'Corporate Governance and Banks: How Justified Is the Match?' (2015) 284/2015.

¹⁵ John Armour and Jeffrey N Gordon, 'Systemic Harms and Shareholder Value' (2014) 6 Journal of Legal Analysis 35, 40.

¹⁶ Bank Recovery and Resolution Directive (BBRD) - Directive 2014/59/EU of the European Parliament and of the Council of 15 May 2014 establishing a framework for the recovery and resolution of credit institutions and investment firms [2014] *OJ L 173.*

Directive¹⁷. Moreover, in the process leading to the "European Banking Union", a central Resolution Authority was established for the Eurozone countries.¹⁸

For the time being, it suffices to say that the overarching idea behind the recovery and resolution framework is that banks failures must be paid by the investors in the bank and not by the generality of taxpayers through bailout money. That overarching policy goal largely shapes the tools provided by the BRRD, especially in the phase of resolution. In particular, the bail-in, as opposed to bailout, represents not only the most innovative tool provided by the Directive but the quintessential concept behind the whole framework.¹⁹

In performing a bank bail-in, the Resolution Authority exercises the power to write down or convert into ordinary shares eligible liabilities issued by the bank under resolution. Among the instruments eligible for bail-in, the Directive includes equity, other instruments that are part of regulatory capital as well as long-term debt instruments. Therefore, the Directive creates a category of creditors, the bail-inable creditors, that are prone to suffer losses upon the decision of an administrative authority should the bank enter in distress.

It is pivotal to stress from the very beginning that bail-inable investors do not enjoy the gains from excessive risk-taking in good times, nor they have a say in corporate decisions according to statutory corporate law. Yet, in resolution, they face losses in the same way shareholders do, according to the seniority of their claim. Accordingly, the link between governance incentives, regulation and the role of (bail-inable) creditors represents the core problem to address throughout this book.

Indeed, debt governance represents the area of corporate governance where the departure from corporate governance in non-financial firms is more pronounced. Moreover, the situation of bank creditors is highly dependent on the existing regulation, being it the resolution framework for bail-inable creditors or the deposit insurance scheme for depositors. Nevertheless, the potential role of bail-inable creditors in the governance

¹⁷ Article 3 BRRD.

¹⁸ Single Resolution Mechanism Regulation (SRMR) - REGULATION (EU) No 806/2014 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 15 July 2014 establishing uniform rules and a uniform procedure for the resolution of credit institutions and certain investment firms in the framework of a Single Resolution Mechanism and a Single Resolution Fund and amending Regulation (EU) No 1093/2010.

¹⁹ Paul Calello and Wilson Ervin, 'From Bailout to Bail-In' 30 *The Economist* (2010).

of financial institutions did not represent the goal of the resolution framework. Accordingly, both policymakers and many academics widely neglected it.²⁰

From an ex-ante perspective, the fact that banks cannot rely any longer on the implicit guarantee of the State on their solvency is widely considered the main channel through which the resolution framework should influence bank decisions and markedly decrease the moral hazard of bankers in undertaking excessive risk.²¹

Therefore, discussing the ex-ante expectations stemming from the recovery and resolution framework necessarily means to engage in a set of problems that relates to the role of bail-inable creditors.²² Among these, a central feature is "resolvability". In the context of the dissertation, resolvability means the combination of two linked but separate aspects: the practical feasibility of a resolution (e.g.: issuing enough bail-inable securities)²³ and the political appetite for resolution. The first anecdotal attempts to use resolution powers clashed with considerable resistance by politicians, striving to avoid imposing losses on the investors of banks in resolution.²⁴

Having defined the subject matter, three kinds of problems arise. The first of these problems relate to how bank governance and financial regulation and supervision weave together. In this respect, two competing approaches exist.

On the one hand, the first approach postulates the assimilation of bank corporate governance with the governance of any other corporation. According to the assimilation theory of bank governance, substantive regulation should tackle the peculiarities of banking impacting on the incentives of decision-makers, such as capital, liquidity requirements, and supervisory oversight.²⁵ Thus, regulation and supervision should mimic

²⁰ Iris HY Chiu, 'Corporate Governance: The Missing Paradigm in the Mandatory Bail-in Regime for Creditors of Banks and Financial Institutions' [2014] Journal of business law 611.

²¹ Jianping Zhou and others, 'From Bailout to Bail-in: Mandatory Debt Restructuring of Systemic Financial Institutions' [2012] Journal Issue 3.

²² Emilios Avgouleas and Charles Goodhart, 'Critical Reflections on Bank Bail-Ins' (2015) 1 Journal of Financial Regulation 3.

²³ Minimum Requirement for Own Funds and Eligible Liabilities (MREL).

²⁴ Tobias H Tröger, 'Too Complex to Work: A Critical Assessment of the Bail-in Tool under the European Bank Recovery and Resolution Regime' (2018) 4 Journal of Financial Regulation 35.

²⁵ Dewatripont Mathias and Jean Tirole, *The Prudential Regulation of Banks*, vol 1 (MIT Press 1994).

market forces, substituting for the governance features that the peculiarity of banking disable, such as the ability of creditors to impose discipline on their borrowers.²⁶

On the other hand, the second approach proposes the complementarity of governance with regulation and supervision.²⁷ In this view, providing appropriate incentives to corporate actors complements the possible flaws and deficiencies of substantive regulation and supervisory oversight. The complementarity approach hints at the possibility of shaping the incentives of bank decision-makers not only through substantive regulation but also through governance regulation.

So far, both the literature and the policymaker focused mainly on how governance regulation can complement substantive rules and supervision.²⁸ In this regard, the regulation of remuneration packages board committees represent paradigmatic examples²⁹. Yet, so long as governance regulation does not consider the specificities of bank governance, this represents a narrow-minded approach and could cause unintended consequences.³⁰

This research builds on this second stream of literature and aims to address the abovementioned shortcomings of the literature and policymaking. In particular, this thesis adds to the scientific debate on bank governance and regulation the necessity to fine-tune substantive and governance regulation. This could provide bankers with a coherent and compelling incentive structure oriented toward the long-term resilience of the institution.

²⁶ Lane defined market discipline as the ability of financial markets to provide signals leading borrowers to engage in projects consistent with their solvency. Timothy D Lane, 'Market Discipline' (1993) 40 IMF Staff Papers 53, 55.

²⁷ John Armour and others, 'Bank Governance' (2016) ECGI Law Working Paper 316/2016.

²⁸ David A Becher and Melissa B Frye, 'Does Regulation Substitute or Complement Governance?' (2011) 35 Journal of Banking & Finance 736.

²⁹ See articles 91-95 of the Capital Requirements Directive, Directive 2013/36/EU of the European Parliament and of the Council of 26 June 2013 on access to the activity of credit institutions and the prudential supervision of credit institutions and investment firms, amending Directive 2002/87/EC and repealing Directives 2006/48/EC and 2006/49/EC. OJ L 176/2013

³⁰ As noted by Luca Enriques and Dirk Zetzsche, 'Quack Corporate Governance, Round III? Bank Board Regulation Under the New European Capital Requirement Directive' (2015) 16 Theoretical Inquiries in Law 211; Kevin J Murphy, 'Regulating Banking Bonuses in the European Union: A Case Study in Unintended Consequences' (2013) 19 European Financial Management 631.

The second problem deals with the impact of the current resolution framework on bank governance. This implies a positive analysis of the recovery and resolution framework and of the expectations it generates on bank decision-makers ex-ante.

This represents a specific aspect of the relationship between bank governance and substantive regulation that the thesis will focus on. For the time being, it suffices to say that the impact of the resolution framework on bank governance represents a heavily understudied issue³¹. Moreover, the interception between governance and resolution mainly comprises debt governance. i.e.: the incentives and channels through which creditors can influence the decision-making of their borrower in a way consistent with their solvency.³²

In addressing this gap in the literature, the thesis will show how the new resolution framework for ailing banks has the potential to enhance the quality of bank governance as well as bank resilience.

Last but not least, the third main problem related to the subject matter is to identify room for further regulatory interventions fine-tuning debt governance with the substantive resolution regulation and, consequently, enhancing the quality of bank governance.

2. Research Question

Based on the presentation of the problem, the fundamental question of this research is:

can the resolution framework for distressed banks enhance the quality of banks' decision making?

The answer to this overarching question cannot be given all at once. On the contrary, this question is split into sub-questions that will form different building blocks of the analysis. Assessing the impact and the potential of a regulatory framework requires answers to smaller, intermediate questions.

³¹ With some notable exceptions, see for instance Chiu (n 21).

³² Lane (n 27) 55.

Therefore, the investigation is divided into three main sub-questions which pertain to, respectively, the theoretical framework, the positive and the normative sides of the central research question.

1. What is the relation between bank governance and substantive financial regulation? And, in particular, what is the relation between debt governance in banking and the resolution framework?

This first question involves the fundamental and somehow philosophical question of what good governance for banks is. To answer this question, the thesis critically discusses the main economic theories on both corporate governance and banking regulation, highlighting the inter-relations between the two spheres and discussing how these influence one another. In particular, the analysis questions the traditional paradigm of "shareholder value maximisation" as the benchmark of "good corporate governance" fostering social welfare. Due to the specific capital structure of banks and the institutional design of financial regulation, there are compelling reasons to argue that some deviations from that traditional paradigm are warranted.

This allows taking the analysis a step further as compared to the well-documented fact that "bank governance is special" and attempt to operationalise such specialty. In so doing, bank governance and the rules shaping it are conceptualised as a medium between the peculiar incentives of bank's decision-makers and the goals of the substantive regulations.

The main take away point is that regulators cannot take for granted the incentive alignment of bankers to their desiderata simply through regulation. On the contrary, corporate governance rules may fine-tune bankers' incentives with regulatory goals. The discussion on bank corporate governance and its relationship with substantive regulation highlights the crucial role of debt governance and a sound resolution framework as a missing piece in the academic and regulatory debate.

This opens the way to narrow down the focus of the analysis to the specific impact of the European Resolution Framework on the governance of European banks, wondering whether it actually, or potentially, enables debt governance. Compared with the previous literature, the thesis brings the debate on the relationship between governance and regulation a step forward. The analysis embraces the complementarity approach to bank governance and enriches the existing literature by analysing the role of governance regulation³³.

Establishing the link between the resolution framework and bank governance also adds to the existing state of the literature on bank resolution that largely neglects governance considerations.³⁴

From the perspective of bank governance, linking it to the resolution framework provides a fresh view on the long-lasting debate on "good bank governance"³⁵, advancing the understanding of how to operationalise the distinctive features of bank governance in regulation.

2. What is the impact of the current resolution framework on bank governance?

The second question is to understand the impact of the resolution framework as it is on the corporate governance of banks. This work will look predominantly at debt governance. More specifically, this question addresses whether the resolution framework alters the incentives of debtholders in a way consistent with the long-term stability and resilience of the bank. This general query boils down to many questions related to the channels through which debt governance operates in non-financial firms. Does the resolution framework enhance the level of market discipline imposed on banks? Does the resolution framework allow contractual solution with which the investors can efficiently allocate control powers? Does the composition of the investors in bail-inable securities matter for corporate governance?

These smaller, more specific, questions are answered through the scrutiny of the regulatory design of the resolution framework. The analysis discusses whether and how it impacts on the incentives of debtholders and their relationship vis-à-vis other corporate

 ³³ The role of governance regulation, with a sharply different approach and result, was also the focus in Steven L Schwarcz, 'Rethinking Corporate Governance for a Bondholder Financed, Systemically Risky World' (2017)
 58 Wm. & Mary L. Rev. 1335.

³⁴ Chiu (n 21).

³⁵ Renée B Adams and Hamid Mehran, 'Is Corporate Governance Different for Bank Holding Companies?' (2003) 9 Economic Policy Review 123.

constituencies. In other words, these aim at understanding whether corporate governance incentives of bankers are fine-tuned with the goals set down by the resolution framework.

Answering this sub-question widens the understanding of the current literature on the ex-ante impact of the EU resolution framework. Up until now, the debate focusses on whether and to what extent the resolution framework increases the ability and willingness of investors to correctly price bank subordinated debt, internalising the costs of a future failure.³⁶ The thesis shows how such a debate is only a small fraction of the entire picture. In so doing, the dissertation considers the price adjustment channel but is not limited to that. It also takes into consideration other channels of creditors' influence, such as contracts and closed-door pressure. In this latter regard, the composition of debtholders proves to be quintessential, tough almost entirely neglected by the existing literature.³⁷

3. Can normative intervention improve the fine-tuning of governance incentives with the resolution framework?

Finally, this third question moves to a more normative approach to the subject matter, wondering whether additional statutory intervention on bank governance can help finetuning bankers' incentives with the regulation. In so doing, the proposals do not aim at completeness and exhaustiveness. Rather, those address two salient aspects of corporate governance such as remuneration and voting rights, relating those to a broader view of bank governance in which debt governance plays a central role in fostering the long-term solvency and resilience of the bank.

The specific contribution of each policy proposal to the scientific and policy debate is discussed more at length in Section 5 and the proceeding of the dissertation. Nonetheless, at this point, it is essential to point out that the dissertation will consider both cash flow rights of bank management and voting rights of constituencies other than shareholders. The two aspects necessarily complement each other. This already represents an aspect of originality compared to the existing literature that often approaches separately to cash flow and voting right, as if they were watertight containers.

³⁶ See Tröger (n 25). From an empirical perspective see Fabrizio Crespi, Emanuela Giacomini and Danilo V Mascia, 'Bail-in Rules and the Pricing of Italian Bank Bonds' (2018) 25 European Financial Management 1321.
³⁷ Wolf-Georg Ringe and Jatine Patel, 'The Dark Side of Bank Resolution: Counterparty Risk through Bail-In' (2019) 31.

3. Methodology

The methodology will be chosen according to the research question(s). Generally speaking, the methodological approach follows the need to identify and understand the relation between two traditionally distinct spheres: governance and substantive financial regulation, and in particular resolution regulation.

The theoretical framework builds on the traditional theoretical approaches to both corporate governance and financial regulation. In particular, bank corporate governance is approached through the agency theory of the firm.³⁸ Insights from the incomplete contract theory and contingent allocation of control enrich the agency approach to governance.³⁹ These are particularly suitable for the analysis of the ex-ante creditors' role in corporate governance.

On the other hand, the traditional theory on banking and banking regulation helps explaining how incentives in the financial sector are different from the ones assumed in the governance of non-financial firms. The discussion builds on the standard model of bank fragility and run risk.⁴⁰

Another crucial contribution shaping the methodological approach is the moral hazard resulting from the implicit guarantee on banks' solvency.⁴¹

Finally, a further important element is the concept of "systemic externalities" stemming from banking activities, i.e.: the idea that the risks undertaken by individual institutions spill over the entire financial system and the real economy.⁴² This feature reveals to be crucial for the incentive analysis. Indeed, banks in making decisions about their risk profile do not

³⁸ Michael C Jensen and William H Meckling, 'Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure' (1976) 3 Journal of financial economics 305. Following agency theory, Andrei Shleifer and Robert Vishny defined corporate governance as: "the ways in which suppliers of finance to corporations assure themselves of getting a return on their investment". Andrei Shleifer and Robert W Vishny, 'A Survey of Corporate Governance' (1997) 52 The journal of finance 737, 737.

³⁹ Philippe Aghion and Patrick Bolton, 'An Incomplete Contracts Approach to Financial Contracting' (1992) 59 The review of economic Studies 473.

⁴⁰ Douglas W Diamond and Philip H Dybvig, 'Bank Runs, Deposit Insurance, and Liquidity' (1983) 91 Journal of political economy 401.

⁴¹ A crucial aspect of the analysis is, indeed, to assess whether moral hazard concerns have been addressed by the new regulatory framework.

⁴² Steven L Schwarcz, 'Systemic Risk' (2008) 97 Geo. LJ 193.

internalise the (systemic) social costs of their activities.⁴³ This implies that traditional wisdom in corporate governance, according to which maximising shareholders value fosters social welfare, is not likely to hold in banking.

Within the framework built on these methodological specifications, the question of the impact of regulation on the decision making of banks is, ultimately, an empirical matter. Yet, the dissertation does not engage itself in statistical and econometric exercises for several reasons. First, granular data on transactions, prices, supervisory decisions, etc. are not publicly available.⁴⁴ Second, the resolution framework was established in the EU relatively recently. Political and media commotion accompanied its implementation, and its enforcement is to this date uncertain. Therefore, any statistical exercise suffers from the high degree of noise surrounding bank resolution. Third, the literature has not identified a bullet-proof design for causal identification of the impact of governance on the stability of individual banks and the financial system as a whole.

Hence, qualitative methods investigating the incentives structure of relevant actors in bank resolution appear to be more promising in fostering the understanding of bank corporate governance and the ex-ante effects of the resolution framework.

Nevertheless, available empirical evidence should, to the largest extent possible, drive the research. Consequently, empirical studies carried out by financial economists on the role of governance in the latest financial crisis will be largely relied upon.

Even though nobody identified a clear causal flow between governance the crisis, all the available studies point at one clear-cut evidence. The banks that, according to traditional metrics, were thought to have better corporate governance performed worse during the financial crisis.⁴⁵ Therefore, when proposing departures from the standard paradigms of

⁴³ Armour and Gordon (n 16).

⁴⁴ For instance, Chapter 6 attempts to assess the composition of the holders of bail-inable securities. Yet, only data aggregated at country level are available; whereas granular data at transaction level are collected by the competent and resolution authorities but kept confidential.

⁴⁵ The load of literature on this specific issue is now considerable. Many studies will be reviewed and discussed throughout the book. For the time being, it suffices to refer to one of the first and most influential study by Andrea Beltratti and René Stultz, showing that banks whose governance was more aligned to shareholders' interests performed worse during the crisis. See Beltratti and Stulz (n 12).

corporate governance, available empirical studies will play the role of "validity check" of the arguments advanced in the thesis.

Assumptions represent an inevitable part of any Law and Economics research. Through the dissertation, assumptions are kept to a minimum, not to lose a complex view of reality. Nonetheless, few assumptions are necessary so to make sense of the convoluted relation of governance incentives and regulation. The full credibility of the resolution framework will often be assumed. Full credibility of the resolution framework means that the competent and resolution authorities always and consistently use their powers so that market players can base their decisions also on the expectation of the future application of the resolution powers.

This is functional to identify the discrete impact of resolution in the governance mechanisms. Nonetheless, the assumption is subsequently relaxed to provide a more nuanced picture of the incentives in a world where bank resolution is not fully credible.

To satisfactorily answer the research question(s), the thesis employs positive and normative methodologies.⁴⁶ The formulation of a theoretical framework for examining the role of corporate governance of banks in their resilience as well as their relationship with the rules on resolution of distressed banks employs positive analysis. The same goes for assessing the impact of the new European Resolution framework on bank corporate governance.

On the contrary, normative and prescriptive analysis drives the last part of the dissertation, where specific policy proposals are advanced, intending to enhance bank governance in relation to the resolution framework.

The aim of the thesis is not to stop to positive economics, answering the question "what is", but endeavours to take a step forward and study "what ought to be". Yet, normative questions cannot be independent of positive questions.⁴⁷ Rather, answering positive questions represents a necessary precondition to approach normative questions sensibly.

⁴⁶ Jan M Smits, 'Law and Interdisciplinarity: On the Inevitable Normativity of Legal Studies' (2014) 1 Critical Analysis of Law 75.

⁴⁷ Uskali Maki and Uskali Mäki, *The Methodology of Positive Economics: Reflections on the Milton Friedman Legacy* (Cambridge University Press 2009) 4.

It follows that the thesis is consequentialist: the positive part builds on the theoretical framework. In turn, the normative part builds on the shortcomings of bank governance highlighted in the positive analysis.

4. Scope and Limitations

The ways in which the resolution framework for ailing banks shapes the incentives of bailinable creditors in good times represent the focal point of the thesis. This, indeed, appears as the most suitable focal point to answer the research questions. In particular, the subject of the investigation is threefold. First, investigating how the incentives provided by the resolution framework shape the role of bail-inable creditors on the governance of banks. Second, investigating the relationship of the bail-inable creditors with banks and vis-à-vis other corporate actors, such as the management or shareholders. Third, investigating whether the changes in bank governance and the role of creditors have the potential to enhance the stability and resilience of banks.

This research questions a multiplicity of dimensions, and accurately identify its scope may appear challenging. To this end, defining its borders by subtraction and highlighting its limitations seem to be the more sensible way to proceed. The proceeding of this section defines the limitations of this research across its relevant dimensions. Namely, its geographical, time-related, subjective and objective dimensions.

As for the geographical limitation; the research mainly focuses on the European Union and, in some instances, more specifically on the Eurozone. There is a dichotomy in the EU law on banking regulation between substantive rules and the rules on the institutional framework and the procedures of implementation and enforcement of the substantive regulations.

The substantive rules are binding for each Member State, to build a level playing field in the internal market. On the other hand, in the aftermath of the global financial crisis and the European sovereign debt crisis, the European legislator undertook the task to create a European Banking Union for the countries belonging to the Eurozone⁴⁸. In undertaking this

⁴⁸ Herman Van Rompuy and others, 'Towards a Genuine Economic and Monetary Union', vol 5 (2012).

enormous effort, the European legislator created, for instance, a centralised authority in charge of the supervision and resolution of the banks located in the Eurozone.⁴⁹ It is not time to lose our way in the intricacies of the institutional architecture of the European Banking Union. Yet, this brief caveat proved necessary as this research mainly focuses on substantive rules that apply to the whole European Union. However, in some instances, the specific way of proceeding within the Eurozone makes not only an institutional difference but also a substantive one. In this case, the discussion will also focus specifically on the Eurozone.

Conversely, this research does not carry on a comparative analysis of different regulatory regimes. Thus, the references to US and UK regulations are limited and strictly functional to better focus the key concepts of the European regime.

The second dimension to consider is the time-related dimension. This aspect pertains to the fraction of the lifecycle of a bank considered. The focus of the research is on the expectations generated by the regulatory framework and the backward induction that decision-makers might do. Thus, the thesis does not treat the immediate vicinity of insolvency neither the governance incentives in resolution procedures. Rather, the thesis zooms in the incentives of the relevant actors in good times: when the economy is booming, and bankers have incentives to take disproportionate risks contributing to piling-up systemic risk.⁵⁰

The third relevant dimension concerns the subjects in the spotlight. In this regard, bailinable creditors have, indisputably, the leading role. Granting bail-inable creditors the leading role on the scene means that the dissertation will develop those as round characters rather than flat once, highlighting all their relevant characteristics and the evolutions are experiencing. The scene also features a wide array of supporting casts, such as other corporate constituencies and regulatory agencies. Yet, those other actors are mainly part of the scene for their relationships vis-à-vis bail-inable creditors. Thus, their full

 ⁴⁹ Jean Pisani-Ferry and others, 'What Kind of European Banking Union?' [2012] Brugel Policy Contribution.
 ⁵⁰ Claudio Borio, 'The Financial Cycle and Macroeconomics: What Have We Learnt?' (2014) 45 Journal of Banking & Finance 182.

characterisation is not always indispensable so that the reliance on existing literature is extensive.

Finally, the last relevant dimension to consider is the object of the analysis. Several aspects of the resolution framework have the potential to generate expectations on corporate actors. However, it is not possible to devote the same degree of attention to all these different aspects. In this regard, the element to decide whether to include or not any specific aspect is the role the bail-inable creditors have in that regard. Therefore, represent the main objects of the investigation are expectations ingenerated by the resolution tools, particularly the bail-in and the potential those have to impact the decision making of corporate constituencies ex-ante.

Following this line of reasoning, the thesis does not directly address the preparation phase to resolution, and especially the rules on resolution planning and resolvability assessment. It only makes few sporadic references so long as those are functional to better examine the position and the governance role of bail-inable creditors. Moreover, the dissertation does not directly assess the impact of the proposal advanced throughout the analysis on the resolution planning. Despite the clear links between this aspect and the core topic of the thesis, the choice is justified as resolution planning mainly pertains to the role of the Resolution Authority and has little to do with investors' and managerial incentives. Nonetheless, this represents a worthwhile aspect that is left to further research.

In the same way, a plethora of rules, standards and guidelines on more traditional features of bank governance are not directly part of the research. This is the case for the rules on the risk-management function, the composition of the board, the fit-and-proper requirements for bank directors and owners, the group structure and the rules on group governance. Some degree of attention is devoted to the rules on directors' the remuneration and risk-takers. The final part of the thesis discusses those governance arrangements regarding bail-inable debt and the potential role of bail-inable creditors in corporate governance.

20

5. Structure of the Dissertation

It is now convenient to provide a synopsis of the arguments, key concepts, theories and ideas shaping the dissertation. This roadmap will help the reader to keep sight of the overall flow of the thesis, without losing the way in the labyrinthic details of EU banking regulation.

The dissertation consists of three main parts: the first builds the theoretical framework. The second performs a positive analysis of the impact of the BRRD on the governance of banking institutions. The third proposes two distinct normative improvements to the current regulatory framework for addressing the shortcomings highlighted in the second part.

Part I comprises Chapters 2 and 3. Its focus is on setting a sound theoretical framework, discussing the two main building blocks of the thesis: bank governance and the recovery and resolution framework. It highlights how these two areas are inter-related and how the literature largely neglected these inter-relations.

Chapter 2 introduces bank governance, highlighting why and how corporate governance of financial institutions is special as compared with non-financial corporations. It discusses the role of negative (systemic) externalities of banking activities, and the perverse incentives structure faced by shareholders, especially in good times.

The second part of the chapter moves the focus to the regulations of bank governance and pinpoints how these pieces of regulation are often not tailored to the specificities of bank governance. Rather, these often represent a mere crystallisation of existing best practices or, even worse, an attempt to extract political benefit from a harsh attitude towards the banking industry in the aftermath of the financial crash.

Finally, the chapter discusses the role of debt governance in banking and how its usual channels are largely unavailable. It argues that, if appropriately enabled by specific regulatory intervention, debt governance has the potential to positively complement the effort of the regulator and the supervisor in achieving the resilience of the bank. In this respect, governance regulation should be conceptualised as a medium, necessary to fine-tune the special incentives of bank constituencies and goals of substantive regulation.

Compared to the rest of the literature, this chapter proposes a new approach to operationalize the specialty of bank governance, identifying two crucial features: the role of regulating governance in linking substantive regulation and governance incentives; and the importance of debt governance.

Chapter 3 operationalises the theoretical construct proposed in the previous Chapter. Indeed, it wonders whether the new European recovery and resolution framework for ailing banks might, almost inadvertently, represent an effective medium between substantive regulation and governance incentives.

To this end, the chapter discusses the institutional as well as the substantive architecture of the new regulation. Subsequently, it zooms in the resolution tools provided by the BRRD and in particular the bail-in tool, discussing the expectations it is supposed to ingenerate. The chapter also links the ex-ante potential of the BRRD with debt governance. In so doing, it shows how and the conditions under which their intertwinement can enhance the quality of bank governance trough the role of bail-inable creditors.

This chapter mainly reviews and systematize the existing literature on bank resolution and its potential to have ex-ante effects. Nonetheless, building upon the framework of Chapter 2, this chapter marginally innovates the literature on bank resolution. In particular, the chapter discusses the conditions necessary for debt governance to be enabled. Moreover, the approach to debt governance is broader as compared with the rest of the literature on ex-ante effects of resolution, taking into consideration not only price adjustments, but also contracts and the role of different holders of bail-inable securities.

Part II comprises Chapters 4, 5 and 6. This part positively analyses the impact of the BRRD on bank governance. Part II discusses whether the intertwine between the resolution framework and debt governance enhances the quality of bank corporate governance. In so doing, the various chapters of this Part individually discuss distinct aspects of debt governance: market discipline through price adjustment (Chapter 4); contingent allocation of control through contracts (Chapter 5); the discrete impact of different debtholders and different compositions of debtholders (Chapter 6).

Chapter 4 addresses a traditional channel of debt governance, which is marketdiscipline through price adjustment. This chapter shows that the BRRD provides inherently

22

sub-optimal incentives to bail-inable creditors to monitor banks' activities and accordingly adjust pricing because of competing policy objectives pursued by the Directive.

In dealing with market discipline through price adjustments, the existing literature had focused on the elements of uncertainty, over complexity and lack of credibility. The chapter adds to the existing literature, highlighting how disciplining incentives are inherently diluted, even assuming smooth functioning and full credibility of the resolution framework.

Chapter 5 investigates whether bail-inable creditors can discipline their borrower (i.e.: the bank) through contractual arrangements attached to bail-inable securities. This chapter, building on the incomplete contract theory of debt, passes through the main contractual disciplining mechanism checking whether they are available to bail-inable creditors given the current financial regulation, highlighting once again a trade-off between financial stability and market discipline.

The chapter concludes that financial contracting over bail- inable securities lack the potential for disciplining banks because of the existing regulation on qualitative requirements for capital and eligible liabilities. to impact on corporate governance positively.

The analysis of financial contracting fills a void in the literature. No specific studies focused on the available contractual mechanisms for long-term creditors in the banking context. In so doing, the chapter finds that the financial stability considerations prevail over market discipline ones. This finding also adds to the broader literature on the trade-off between financial stability and moral hazard.

Chapter 6 intends to address the composition of bail-inable debtholders and the relevance of counterparty risk in resolution. This chapter underlines a wide-spread inattention of both academics and policymakers on these issues, addressing the relevant trade-offs and providing informative data on bail-inable security holders. It highlights that the market is adjusting towards a desirable composition of holders even though a considerable room for improvement is still available, and a mix of different investors might yield superior outcomes.

This exercise deepens the current understanding of the impact of the new framework on market preferences, providing evidence on both the credibility of the resolution framework and the perspectives of effective application of the new tools.

Finally, the chapter discusses some possible ways forward, underlining the importance of increasing the share of sophisticated investors that are specialised in dealing with bailinable securities, especially for junior positions. It proposes a balanced mix of investors with different business models and time horizons so to minimise systemic risk while maximising governance benefits. The chapter concludes that to incentivise market players to shift toward more efficient composition, granting ex-ante governance rights is warranted.

Part III (Chapter 7 and 8) acknowledges the shortcomings of the regulatory framework highlighted in Part II and moves to a normative analysis. In particular, it argues in favour of two policy proposals aimed at fine-tuning bank governance and substantive regulation.

The approach to this normative part combines and complements the study of cash flow rights of the management (Chapter 7) with the study of the voting rights to bail-inable creditors (Chapter 8). Such complementarity is pivotal and unifies the policy proposals of Part III. Such a unified approach is rather uncommon in the literature, that usually treats cash flow rights and voting rights separately.

Chapter 7 proposes a radical change in the current remuneration practices, including bail-inable debt within the variable component of remuneration packages. The current regulatory framework and resulting practices in the EU appear heavily unsatisfactory since they decreased the link between pay and performance. Moreover, it does not consider the specificities of bank corporate governance; consequently, the negative externalities it generates are still not accounted for.

The chapter sets the economic rationale for remuneration, highlighting the special case of the banking industry and explaining why debt can be particularly useful in such a framework. Against this theoretical framework, the chapter critically assesses the EU regulation on the structure of remuneration packages. This highlights how the policy goal of optimising risk-taking incentives of bankers is far from being reached and, more importantly, that it cannot be achieved without a radical change in the regulatory paradigm.

The chapter shows why that shift necessarily implies to include bail-inable debt in remuneration packages. It also shows how it would tighten the link between pay and performance and address the specificities of bank governance. Finally, as an additional positive spillovers, remuneration through debt would also enhance the resolvability of the institution. The final part of the chapter develops a detailed policy proposal that focuses both on the content of the regulation and on the possible implementation strategies.

The chapter builds on the extensive literature on remuneration in banking and innovates in two main ways. First, it fine-tunes governance incentives and the resolution framework. This allows not only to have positive effects on the incentives of bankers but also to have positive spillovers on the credibility of the resolution framework and the resolvability individual institutions. Moreover, the chapter demonstrates that cash flow rights should change according to the specificities of bank governance through mandatory regulation.

Chapter 8 proposes a deep statutory reform in the area of bank governance, exploiting the potential positive synergies with the BRR framework and, in particular, the incentive structure of the so-called "bail-inable creditors". The overarching aim of such a proposal is to fine-tune bank governance and substantive regulation and, subsequently, truly enhancing the quality of decision-making of banks in terms of risk-taking. At the same time, the proposed reform should increase the ex-ante credibility of resolution.

The second part of the chapter operationalises that theoretical construct, proposing to grant bail-inable creditors with a limited set of decision and appointment rights. A general principle of sufficient accountability of banks governance arrangements toward bail-inable creditors should complement this limited set of rights, so to allow for differentiated and proportionate implementation.

The analysis demonstrates how granting bail-inable creditors with ex-ante governance rights can represent a tool to correct for shareholders' perverse incentives and make debt governance work in banking. The policy proposal advanced in the chapter would complement substantive regulation and the oversight activity of the competent authority. The governance role of creditors has the potential to be particularly helpful in preventing disproportionate risk-taking decisions in good times when regulatory and supervisory standards are lax and systemic risk piles-up.

Legal studies face the tedious tendency, for their authors, to become quickly obsolete. This particularly holds true in an area of the law such as banking, where rules are continuously and deeply revised because of evolving economic conditions, changes in social and political preferences and quick innovations in the financial industry. Vast parts of this work are, unfortunately, not immune from such dissatisfying attribute.

Nonetheless, it is my firm belief that some of the core ideas put forward in the proceeding of this book are lasting and adaptable to different times, regulations and factual situations. In particular, the necessity to fine-tune the special governance incentives and substantive regulation through regulatory intervention on corporate governance as well as the discussion over debt governance in the financial industry have the potential to survive the transient legal norms in force at the moment of writing.

Chapter 1 – Introduction

Part I – Bank Governance and the Resolution Framework

Chapter 2 – Bank Governance

Abstract

This chapter introduces the special nature of bank governance and its linkages with substantive regulation. The first part highlights why and how corporate governance of financial institutions is special as compared with non-financial corporations. It discusses the role of negative externalities of banking activities and the perverse incentives structure faced by shareholders, especially in good times.

Given the specificities of the governance incentives of banks the argument for deviating from the conventional wisdom on "good governance" in non-financial firms is strong; yet, the literature has not been able to operationalise it. The chapter fills this gap and proposes a framework where the specialty of bank governance translates into tailored governance regulation. In this framework, governance regulation aims at bridging the wedge between the goals of substantive regulation and the incentives of bankers.

The second part of the chapter moves the focus on the existing regulations on bank governance and assess their ability to provide tailored responses to the specificities of bank governance. The findings show that these often represent a crystallisation of existing best practices.

Finally, the chapter discusses the role of debt governance in banking and how its usual channels are widely unavailable. It argues that, if appropriately enabled by specific regulatory interventions, debt governance can complement the effort of the regulator and the supervisor in achieving the resilience of the bank. In this respect, governance regulation should be conceptualised as a medium, necessary to fine-tune the incentives of bank constituencies and the goals of substantive regulation.

Keywords: Bank Governance; Perverse Incentives, Debt Governance, Governance Regulation.

1. Introduction

In the aftermath of the Global Financial Crisis, corporate governance failures were blamed as one of the chief causes of the meltdown in Europe and elsewhere. The OECD, for instance, published a condemnatory report on bank governance, claiming that "the financial crisis can be to an important extent attributed to failures and weaknesses in corporate governance arrangements".¹

Such a negative and clear-cut judgment triggered a season of political attention and activism in regulating bank governance. The aim was to restrain excessive risk-taking and correct perverse incentives of financial regulation. However, many scholars immediately raised serious concerns on this regulatory wave and its aptness to promote good governance of banking institutions.²

Moreover, when it comes to corporate governance of financial institutions, there is a more profound and still unanswered question: what is good governance for banks? The idea that bank governance is special and that what good governance in banks and non-financial institutions may differ is nowadays a widespread feeling.³ Nonetheless, a compelling theory on good bank governance and its defining tools is currently missing. Moreover, the load of theoretical and empirical studies on bank governance consistently produced evidence that bank with better governance performed worse during the Global Financial Crisis.⁴

¹ Grant Kirkpatrick, 'The Corporate Governance Lessons from the Financial Crisis' (2009) 2009 OECD Journal: Financial Market Trends 61.

² See, for instance, Luca Enriques and Dirk Zetzsche, 'Quack Corporate Governance, Round III? Bank Board Regulation Under the New European Capital Requirement Directive' (2015) 16 Theoretical Inquiries in Law 211; Guido Ferrarini, 'CRD IV and the Mandatory Structure of Bankers' Pay' (2015) 289; Kern Alexander, 'Regulating Bank Governance and the EU Capital Requirements Directive' (2017) 28 European Business Law Review 809.

³ Among many others, see Marco Bodellini, 'Corporate Governance of Banks and Financial Stability: Critical Issues and Challenges Ahead' (2018) 39 Business Law Review 160.

⁴ Andrea Beltratti and René M Stulz, 'The Credit Crisis around the Globe: Why Did Some Banks Perform Better?' (2012) 105 Journal of Financial Economics 1; Rüdiger Fahlenbrach and René M Stulz, 'Bank CEO Incentives and the Credit Crisis' (2011) 99 Journal of Financial Economics 11; David H Erkens, Mingyi Hung and Pedro Matos, 'Corporate Governance in the 2007--2008 Financial Crisis: Evidence from Financial Institutions Worldwide' (2012) 18 Journal of Corporate Finance 389; Luc Laeven and Ross Levine, 'Bank Governance, Regulation and Risk-taking' (2009) 93 Journal of Financial Economics 259; Luc Laeven, Lev Ratnovski and Hui Tong, 'Bank Size, Capital, and Systemic Risk: Some International Evidence' (2016) 69 Journal of Banking & Finance S25; Allen N Berger, Björn Imbierowicz and Christian Rauch, 'The Roles of Corporate

Intuitively, improving the decision-making of financial institution through governance regulation represents a hard task so long as what is good bank governance remains largely unknown.

This chapter takes on from such a conundrum and discusses what is good bank governance, advancing the understanding of good bank governance and good governance regulation.

The main take away point is that good bank governance does not arise endogenously, simply allocating control to whom value it most. Therefore, both substantive and governance regulation needs to stimulate the emergence of good governance. In so doing, governance regulation should closely mirror the special features differentiating bank governance from the governance in non-financial corporations. At the same time, governance regulation should fine-tune banks' decision-making with the policy goals set by substantive regulation.

Following this approach, the analysis confirms and systematises the dissatisfaction toward the current governance regulation, with a particular focus on the EU regulation of bank governance.⁵

Subsequently, the analysis puts a spotlight on debt governance: the distinctive features of bank governance consistently deal with the role of creditors. Thus, this chapter claims that any consideration on good bank governance ought to embed debt governance and this, potentially, calls for governance regulation. Finally, such regulation should be fine-tuned with the new recovery and resolution framework for ailing banks.⁶ Indeed, regulatory innovation considers the incentives of bank creditors, conditionally on the maintenance of

Governance in Bank Failures during the Recent Financial Crisis' (2016) 48 Journal of Money, Credit and Banking 729.

⁵ The Capital Requirement Directive - Directive 2013/36/EU of the European Parliament and Of the Council of 26 June 2013 on access to the activity of credit institutions and the prudential supervision of credit institutions and investment firms, amending Directive 2002/87/EC and repealing Directives 2006/48/EC and 2006/49/EC.

⁶ The Bank Recovery and Resolution Directive (BRRD) - Directive 2014/59/EU of the European Parliament and of the Council of 15 May 2014 establishing a framework for the recovery and resolution of credit institutions and investment firms. OJ L 173, 12.6.2014 and the Single Resolution Mechanism Regulation (SRMR) - REGULATION (EU) No 806/2014 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 15 July 2014 establishing uniform rules and a uniform procedure for the resolution of credit institutions and certain investment firms in the framework of a Single Resolution Mechanism and a Single Resolution Fund and amending Regulation (EU) No 1093/2010.

the bank's solvency. Moreover, it crucially claims to eliminate the bailout expectations from the government.

The chapter is structured as follows: Section 2 analyses the unique features of bank governance and discusses the different approaches to bank governance before and after the Global Financial Crisis. Section 3 proposes the central contribution of the analysis, framing the relation between bank governance and regulation, where governance regulation should act as a medium between bank governance and substantive regulation. Section 4 critically reviews governance regulation for European banks according to such a framework. Finally, Section 5 discusses the potential for regulating debt governance and fine-tune it with the recovery and resolution framework. Section 6 concludes.

2. Is bank Governance Special?

2.1 Corporate Governance and its Basic Features

The governance of modern corporations represents one of the most widely studied topics in social sciences, from many different perspectives: company law, corporate finance, business management, business organisation, just to name the ones of utmost relevance.

As corporate governance undoubtedly deals with corporate decision-making, its legal and economic implications generated a gigantic load of academic models and debate.⁷ In this regard, the seminal contribution by Jensen and Meckling⁸ represents a cornerstone of the discussion on corporate governance. It is going to be central in the proceeding of the analysis. The agency theory of the corporation highlights the costs stemming from the separation of ownership and control and its implications for governance decisions. It represents to this day the leading model to approach corporate governance research. Given the existence of agency problems between different corporate constituencies, governance arrangements should design corporate relationships capable of solving or

⁷ For excellent surveys, see Andrei Shleifer and Robert W Vishny, 'A Survey of Corporate Governance' (1997) 52 The journal of finance 737; Marco Becht, Patrick Bolton and Ailsa Röell, 'Corporate Law and Governance', Handbook of law and economics, vol 2 (Elsevier 2007).

⁸ Michael C Jensen and William H Meckling, 'Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure' (1976) 3 Journal of financial economics 305.

minimising the existing agency costs, yielding a second-best outcome.⁹

Given this agency framework, different approaches to social science tend to have a different definition of what Corporate Governance is and its constitutive mechanisms. Therefore, it is informative to briefly go through those approaches that will prove insightful in the proceeding of the analysis.

First, from a legal perspective, it is possible to rely on the definition provided by the Cadbury Code:¹⁰ "Corporate governance is the system by which companies are directed and controlled. Boards of directors are responsible for the governance of their companies. The shareholders' role in governance is to appoint the directors and the auditors and to satisfy themselves that an appropriate governance structure is in place".¹¹ This approach focuses on rights and duties of corporate constituencies and takes for granted the existence of a given financial structure of the corporation. Moreover, it only focuses on managing rights directly stemming from ownership rights of shareholders while neglects the underlying cash flow rights intrinsically linked to the ownership ones.

A different and complementary approach is proposed by Corporate Finance literature, that can be summarised with Shleifer and Vishny's words: *"Corporate Governance deals with the ways in which suppliers of finance to corporations assure themselves of getting a return on their investment. How do the suppliers of finance get managers to return some of the profits to them? How do they make sure that managers do not steal the capital they supply or invest it in bad projects? How do suppliers of finance control managers?"*.¹² Therefore, governance mechanisms are linked to the financial structure of the corporation

⁹ Frank H Easterbrook, 'Derivative Securities and Corporate Governance' [2002] The University of Chicago Law Review 733, 740.

¹⁰ The Cadbury Report was drafted in 1992 for the London Stock Exchange by a committee chaired by Sir. Adrian Cadbury. It represents the first example of Corporate Governance code of best practices and played a pivotal role in the development of this kind of instruments that are now well spread in most of the developed countries.

¹¹ Adrian Cadbury, *The Financial Aspects of Corporate Governance - Report with Code of Best [Cadbury Report]* (Gee Publishing 1992).

¹² Shleifer and Vishny (n 8).

and consist of a bundle of income and control rights stemming therein¹³, defining the property rights related to the firms.¹⁴

Traditionally, the Corporate Governance literature relying on agency theory in its different specification focused on three main agency conflicts.

First, the conflict between shareholders and managers stemming from the separation of ownership and control. This has been acknowledged since the early 30s thanks to the seminal work by Berle and Means.¹⁵ Dispersed shareholders have little incentives in monitoring because of the little individual stake they invested in the company. This results in a risk of expropriation of dispersed shareholders by managers, who become the real "owners" of the company.

Second, the conflict between majority and minority shareholders. This second stream of literature insists on situations where a controlling block-holder owns the necessary legal entitlements to pursue his private interests while running the company. This conflict arises when there is a majority shareholder that might extract private benefit from its control, expropriating minority shareholders.¹⁶ While the former flow of literature born and developed in the Anglo-Saxon world of dispersed ownership, this latter one is more peculiar to the European world of concentrated ownership.¹⁷

Third, the conflict between insiders (shareholders, managers, etc.) and creditors: equity and debt holders have intrinsically different claims towards the corporation.¹⁸ The

¹³ Johan Devriese and others, 'Corporate Governance, Regulation and Supervision of Banks' (2004) 2 Financial Stability Review 95.

¹⁴ On the proprietary approach to corporations see John Armour and Michael J Whincop, 'The Proprietary Foundations of Corporate Law' (2007) 27 Oxford Journal of Legal Studies 429. Property as a bundle of rights is the standard representation for defining Property Rights in Law & Economics literature. See Harold Demsetz, 'Toward a Theory of Property Rights' (1974) 57 The American Economic Review 347.

¹⁵ Adolf Augustus Berle and Gardiner Coit Means, *Modern Corporation and Private Property* (Transaction Publishers 1932).

¹⁶ Henry Hansmann, 'Ownership of the Firm' (1988) 4 Journal of Law, Economics, & Organization 267; Rafael La Porta and others, 'Investor Protection and Corporate Governance' (2000) 58 Journal of financial economics 3.

¹⁷ Fabrizio Barca and Marco Becht, *The Control of Corporate Europe* (Oxford University Press 2001). See also Alessio Pacces, *Rethinking Corporate Governance: The Law and Economics of Control Powers* (Routledge 2013).

¹⁸ This specific agency problem has been analysed in particular by the corporate finance literature, see Jean Tirole, *The Theory of Corporate Finance* (Princeton University Press 2006) 213–220. Legal consequences of this conflict have been tackled, up to a certain extent, by the LLSV literature that sees the legal protection of creditors as a substitute for the lack of shareholder's protection in civil law countries. See La Porta and others

equity holders earn the residual income and bear part of the losses due to limited liability. On the other hand, debt holders enjoy fixed contractual payments and face the risk to bear losses exceeding the share capital of the corporation they financed. Therefore, interests of equity and debt holders might differ significantly, especially in the verge of distress.¹⁹

This third agency relation assumes an entirely peculiar shape in the banking industry and represents a crucial aspect of the interplay between financial regulation and governance. Therefore, a considerable part of the arguments put forward in the thesis will refer to this agency relationship and debt governance will represent the cornerstone of the analysis.

However, the agency theory of the firm is not immune to criticisms and gaps. It is not here possible to account for all the competing theories of the firms²⁰ and all the refinements to agency theory. It is important to discuss the incomplete contract theory²¹ since it represents an essential complement and extension to the agency theory of the firm. In a world of complete contracts, agency conflicts should not be a problem since every future course of action is contractible ex-ante and verifiable in courts ex-post. Yet, we live in a world of incomplete contracts which makes impossible or, to the very least, excessively costly to contract over all the possible future courses of actions.

Thus, a crucial feature of corporate contracting is the allocation of residual control rights, i.e.: the right to decide over the non-contracted contingencies. This goes at the core of what equity contracts are about: shareholders retain the residual control rights over corporate decisions even though such allocation is not absolute. Debt contracting, as modelled by Aghion and Bolton,²² represents a mechanism for allocating control contingent

⁽n 17).

¹⁹ For an introduction to the agency costs of debt, see John Armour and others, *The Anatomy of Corporate Law: A Comparative and Functional Approach* (2017) ch 5.

²⁰ Among them, it is worth mentioning the transaction costs theory and the stakeholder's theory. See, respectively, Oliver E Williamson, 'Transaction-Cost Economics: The Governance of Contractual Relations' (1979) 22 The journal of Law and Economics 233; R Edward Freeman, 'A Stakeholder Theory of the Modern Corporation' (2001) 3 Perspectives in Business Ethics 144.

²¹ For its original formulation see Sanford J Grossman and Oliver D Hart, 'The Costs and Benefits of Ownership: A Theory of Vertical and Lateral Integration' (1986) 94 Journal of political economy 691.

²² Philippe Aghion and Patrick Bolton, 'An Incomplete Contracts Approach to Financial Contracting' (1992) 59 The review of economic Studies 473.

on future and uncertain events²³. The interplay between equity control rights and debt intrusions (contingent on default or other contracted contingencies)²⁴ goes at the core of corporate governance. Indeed, it portrays the available mechanisms through which the main suppliers of finance, equity and debt holders, assure themselves of getting a return on their investments.²⁵

To sum up, the legal and the corporate finance approaches to agency governance complementarily highlight the functioning mechanisms according to which the corporation operates as well as the close link between governance rights and the financial position of the claim holder *vis-'a-vis* the corporation. Moreover, the incomplete contract approach highlights the importance of the allocation of residual control rights in shaping the relation between corporate constituencies.

On top of that, the underlying "institutional matrix" is also crucial to understand corporate governance, especially in financial institutions. Indeed, in defining governance, the Basel Committee on Banking Supervision (BCBS)²⁶ incorporates the regulatory environment, stating that: "*Effective implementation of sound Corporate Governance requires relevant legal, regulatory and institutional foundations. A variety of factors, including the system of business laws, stock exchange rules and accounting standards, can affect market integrity and systemic stability*".²⁷

The proceeding of this chapter discusses the roots and consequences of the specialty of bank governance, highlighting its relations with the regulatory framework.

2.2 The Special Features of Bank Governance

The idea that the mechanisms underpinning bank governance are special is not new²⁸. However, the roots of such specialty were more attentively scrutinized only in the

²³ For a review of the possible contractual devices available to creditors, see Patrick Bolton, 'Corporate Finance, Incomplete Contracts, and Corporate Control' (2013) 30 The Journal of Law, Economics, & Organization i64.

²⁴ Think for instance of covenants or security interests.

²⁵ Shleifer and Vishny (n 8).

²⁶ BCBS, 'Corporate Governance Principles for Banks - Guidelines' (2015).

²⁷ ibid 21.

²⁸ See, for instance, Jonathan R Macey and Maureen O'Hara, 'The Corporate Governance of Banks' [2003] Economic Policy Review 91, where the authors acknowledge the specialty of bank governance and propose a different liability regime for directors to tackle such specialties. See at length Chapter 8.

aftermath of the Global Financial Crisis.²⁹ Banks possess specific features that differentiate them from any other non-financial firm. Crucially, any of such features entails a negative externality to other players of the financial system and, more broadly, to the financial system itself.³⁰

First, banks are highly leveraged institutions,³¹ i.e.: the amount of equity held against banks' assets is particularly low. In terms of corporate governance, and the conflict between the bank and its creditors, this raises two main issues: risk-shifting and debtoverhang. In good times, equity holders are willing to take on much more risk than socially optimal. Thanks to limited liability, they shift most of the downside risk of their investment to debt holders.³² On the other hand, in bad times, when the bank approaches insolvency, equity holders are still and even more willing to take on value-destroying bets, but they are likely to pass on positive net present value projects since these would mainly benefit debt holders.³³

Second, the core business of commercial banks is to perform transformation activities; namely, liquidity, maturity and risk transformation.³⁴ Indeed, banks transform short-term and liquid (deposits and wholesale funds) into long-term and illiquid assets, by way of granting credit (retail, corporate, mortgages, etc.). This provides an essential service to the economy but, at the same time, it makes banks particularly prone to liquidity shocks.³⁵

²⁹ With some notable exceptions. See, for instance, Renée B Adams and Hamid Mehran, 'Is Corporate Governance Different for Bank Holding Companies?' (2003) 9 Economic Policy Review 123; Macey and O'Hara (n 29).

³⁰ Steven L Schwarcz, 'Systemic Risk' (2008) 97 Geo. LJ 193.

³¹ Capital regulation is meant to limit excessive leverage. See articles 22 and ff of the Capital Requirement Regulation (CRR). Professors Hellwig and Admati argued in favour of a sharp increase of regulatory capital to limit leverage-related distortions. See Anat Admati and Martin Hellwig, *The Bankers' New Clothes: What's Wrong with Banking and What to Do about It* (Princeton University Press 2014).

³² Marco Becht, Patrick Bolton and Ailsa Röell, 'Why Bank Governance Is Different' (2011) 27 Oxford Review of Economic Policy 437, 445.

³³ Linus Wilson, 'Debt Overhang and Bank Bailouts' (2012) 5 International Journal of Monetary Economics and Finance 395.

³⁴ John Armour and others, *Principles of Financial Regulation* (Oxford University Press 2016), 277.

³⁵ In the literature liquidity has been defined in a number of ways. Brunnermeier and Pedersen define liquidity negatively, focusing on the definition of market illiquidity as the "difference between the transaction price and the fundamental value". See Markus K Brunnermeier and Lasse Heje Pedersen, 'Market Liquidity and Funding Liquidity' (2009) 22 Review of Financial studies 2202. On the contrary, Pistor defines it positively and more generally as the "ability to sell any asset for the other assets or cash at will". See Katharina Pistor, 'A Legal Theory of Finance' (2013) 41 Journal of Comparative Economics 315, 316. The latter definition, although more general and somehow vague, has the advantage that there is no need to determine the fundamental value of the asset.

Thus, the funding decisions of banks tend to generate liquidity externalities.³⁶ The common characteristic of those short-term funds is that they are runnable, meaning that their holders can freely decide to withdraw or not roll-over their exposure toward the bank.³⁷

Third, bank assets are opaque, i.e.: banks have an important sizeable advantage in assessing the value of its asset. Therefore, the ability of outside investors and supervisors to monitor the quality of banks' assets limited. The bank acts as an intermediary and performing a (costly) "delegated monitoring" activity over its assets. Thus, the bank has more information than the general public.³⁸ Again, such informational advantage incentivises the incumbent management to take excessive risk. The magnitude of this kind of problem skyrocketed in the last years as financial assets became more and more complex.³⁹

Tightly related to assets opacity, it is worth noting the fiduciary nature of banking services: banking services can be label as "experience good" and perhaps even as "credence goods".⁴⁰ This is the standard argument for special consumer protection in banking, but it also has governance spillovers. Indeed, the difficulty to correctly price the assets and make consistent inter-temporal choices creates incentives for bank management to behave opportunistically, take on too much risk and extract a rent from unsophisticated investors.

In case of either an idiosyncratic or systemic shock draining liquidity out of the market, those transformation activities (and the entailed mismatch in liquidity and maturity) jeopardise the cash flow solvency of the bank, which may be forced to fire-sale its illiquid

³⁶ Liquidity regulation aims at minimizing the creation of such externalities requiring the bank to hold some stable funding against illiquid assets. See Article 415 and ff. of the Capital Requirement Regulation.

³⁷ Perhaps the most famous run of the history is the Northern Rock one, when not-fully-insured depositors physically formed gigantic queues to withdraw their money. Nowadays, the possibility of a physical run is rather small because of full protection of deposit insurance, and the focal point is now shifted to the risk of wholesale creditors stopping to roll over credits, even though theoretically more sophisticated investors, as wholesale investors are, should not panic.

³⁸ Douglas W Diamond, 'Financial Intermediation and Delegated Monitoring' (1984) 51 The review of economic studies 393.

³⁹ For instance, think about the repo market, the structured assets, the swap instruments, etc.

⁴⁰ This aspect grasps the very nature of banking activity, as the word "credit" itself derives from latin *credere*", meaning "trust", Alessio M Pacces and Dirk Heremans, 'Regulation of Banking and Financial Markets', *Encyclopedia of Law and Economics - Volume 9* (Edward Elgar 2012) 559.

asset, leading - in turn - to balance sheet insolvency and, thence, triggering the crisis.⁴¹

Fourth, and pre-eminently important in this context, the social costs of failure are larger than private ones: shareholders bear only a fraction of the potential social costs of the bank failure, especially in systematically relevant institutions.⁴² Banks do not internalise the costs of their failure and have suboptimal incentives to take socially efficient prudential measure to avoid bankruptcy. Moreover, there was - and there still is - a reasonable expectation of state bailout in case of failure, increasing the risk of moral hazard by shareholders.⁴³

Finally, each individual bank is part of a wider financial system which brings about at least two issues: the correlation of risk portfolios and the interconnectedness of individual banks⁴⁴. The former issue hints at the fact that individual banks are willing to diversify their portfolio and that is likely to correlate with the portfolio of other banks equally willing to diversify. This can create systemic stability issues in bad times as the asset value of interconnected banks simultaneously decreases.⁴⁵

Interconnectedness is crucial to understand systemic risk and the perverse incentives arising therein since it entails contagion risk.⁴⁶ The contagion spreads though are both "real" and "informational" linkages.⁴⁷ The former refers to domino effects triggered by

⁴¹ There is nowadays a wide consensus on the fact the even the big evil of the financial crisis, Lehman Brothers was not completely insolvent from a balance sheet point of view, but just from a liquidity When wholesale creditors panicked and stopped to roll out Lehmans liabilities, Lehman was forced to fire-sale its illiquid assets and, eventually, became balance sheet insolvent as well. For greater detail on Lehamn failure see Jeffrey N Gordon and Wolf-Georg Ringe, 'Bank Resolution in Europe: The Unfinished Agenda of Structural Reform' in Guido Ferrarini and Danny Busch (eds), *European Banking Union* (Oxford University Press Oxford, UK 2015) 16.

⁴² Matej Marinč and Razvan Vlahu, 'The Economic Perspective of Bank Bankruptcy Law' (Springer Science & Business Media 2011) 310.

⁴³ Chris Bates and Simon Gleeson, 'Legal Aspects of Bank Bail-Ins' (2011) 5 Law and Financial Markets Review 264; Charles Goodhart and Emilios Avgouleas, 'A Critical Evaluation of Bail-in as a Bank Recapitalisation Mechanism' in Franklin Allen, Elena Carletti and Joanna E Gray (eds), *Bearing the Losses from Bank and Sovereign Default in the Eurozone* (FIC Press 2014).

⁴⁴ Peter O Mülbert and Ryan D Citlau, 'The Uncertain Role of Banks? Corporate Governance in Systemic Risk Regulation' (2011) 179 16.

⁴⁵ Viral V Acharya, 'A Theory of Systemic Risk and Design of Prudential Bank Regulation' (2009) 5 Journal of financial stability 224.

⁴⁶ Anne-Caroline Hüser, 'Too Interconnected to Fail: A Survey of the Interbank Networks Literature' (SAFE 2016) 91.

⁴⁷ Olivier De Bandt and Philipp Hartmann, 'Systemic Risk: A Survey' (ECB working paper 2000) 35.

mutual exposure on financial instruments⁴⁸ or through inter-bank deposits. The latter relates to trust as a quintessential feature in the financial system: as trust declines because of the bad news coming from one or few financial institutions, mistrust spread quickly harming the rest of the system.⁴⁹

Undoubtedly, overlaps among these special of banking exists and perhaps the list is not exhaustive. Nonetheless, it is clear how these impact on the decision-making process of banks, i.e.: their corporate governance.

2.3 Assimilation v. Specialty of Bank Governance

The idea that bank corporate governance is special has been overlooked for decades. The acknowledgment that the mechanisms underpinning the decision-making in banking were different did not lead to acknowledge that bank governance is special. The dominant idea, building on the fundamental models of banking,⁵⁰ was that the rigorous regulation and supervision was enough to handle the limitation of decision-making mechanisms in banking.⁵¹

The policy and academic debate focused mainly on the inability of creditors, and especially depositors, to efficiently discipline their borrowers, the banks. The primary cause behind such an inability consists of the implicit or explicit state guarantee on bank solvency. In this setting, Dewatripont and Tirole⁵² expressed their "representation hypothesis" according to which banking supervisor acts as a substitute of standard corporate governance mechanisms. The supervisor should mimic what market players would do in the absence of the state guarantee.

The model behind the representation hypothesis postulates that the most efficient way to carry out banking activities is to empower managers, align their incentives with

⁴⁸ For what mainly pertain cross-holding of bank debt see Wolf-Georg Ringe and Jatine Patel, 'The Dark Side of Bank Resolution: Counterparty Risk through Bail-In' (2019) 31; Benjamin Bernard, Agostino Capponi and Joseph E Stiglitz, 'Bail-Ins and Bailouts: Incentives, Connectivity, and Systemic Stability' (2017) wp23747.

 ⁴⁹ For the standard case of "bank run", see the seminal contribution by Douglas W Diamond and Philip H Dybvig, 'Bank Runs, Deposit Insurance, and Liquidity' (1983) 91 Journal of political economy 401.
 ⁵⁰ ibid.

⁵¹ What professor Armour and co-authors calls "Assimilation Theory of Bank Governance". See John Armour and others, 'Bank Governance' (2016) ECGI Law Working Paper 316/2016.

⁵² Dewatripont Mathias and Jean Tirole, *The Prudential Regulation of Banks*, vol 1 (MIT Press 1994).

shareholder maximisation benchmark, and make them accountable *vis-'a-vis* the supervisor. In the post-crisis literature, this approach took the label "assimilation theory" of bank governance.⁵³

After the global financial crisis, the "assimilation theory" had been heavily criticised. Poor decision-making, especially in terms of risk-profile, was considered one of the boosters that led the financial system to blow up during 2007.⁵⁴ Hence, many proposed to consider the specialties of bank governance and surge governance as a complement of regulation and supervision.⁵⁵ The key difference is that according to the assimilation theory regulation and supervision act as a strict substitute to governance. Whereas, the specialty of bank governance postulates a complementary relation between governance and regulation.

The special nature of banks governance does not represent just a theoretical speculation. To operationalise the argument proposed so far, a brief review of the empirical literature is of use.

The study by Beltratti and Stulz is the most famous and widely cited.⁵⁶ The authors studied the determinants of bank performance during the crisis, measured by stock return, in a sample of 98 banks across the world. Even though they did not found governance to be the main determinants of the financial crisis, they detect a systematic negative effect of what is commonly labelled as "good governance" in banks' performance during the crisis. This result is consistent with the findings of many other empirical pieces of research on these issues. Erkens and co-authors⁵⁷ found that financial institutions with more independent boards and higher institutional ownership experienced worst stock returns during the crisis. Fahlenbrach and Stulz⁵⁸ found that better alignment between shareholders' interest and CEO compensation yielded worse performance during the crisis.

⁵³ Armour and others, *Principles of Financial Regulation* (n 35).

⁵⁴ See, in particular, Luigi Zingales, 'The Future of Securities Regulation' (2009) 47 Journal of Accounting Research 391; Jean-Michel Sahut and Sandrine Boulerne, 'Flaws in Banking Governance' (2010) 15 International Journal of business 319.

⁵⁵ Just to name some prominent study, see Becht, Bolton and Röell (n 33); Guido Ferrarini, 'Understanding the Role of Corporate Governance in Financial Institutions: A Research Agenda' (2017) 347/2017; Armour and others, 'Bank Governance' (n 52).

⁵⁶ Beltratti and Stulz (n 5).

⁵⁷ Erkens, Hung and Matos (n 5).

⁵⁸ Fahlenbrach and Stulz (n 5).

In a similar vein, Anginer and co-authors⁵⁹ found that shareholder-friendly corporate governance is positively associated with bank risk of insolvency.

The picture emerging from these findings has not straightforward explanations. The fact that what is commonly known to be "good governance" yields bad performance is, to say the very least, counterintuitive. A possible explanation is that factors other than governance better explain the performance during the financial crisis.⁶⁰ An alternative interpretation is that what is good governance for non-financial and financial firms may not coincide.⁶¹ The two interpretation are not mutually exclusive, and it is reasonable to argue that both are true.

2.4 How to Deal with Bank Specialty?

Nowadays, there is a certain consensus about the mistakes that occurred in the past: above all, poor risk management and poor remuneration.⁶² Financial regulation and supervision did not mitigate those problems. On the contrary, those provided perverse incentives to bankers, worsening their decision-making.⁶³

Beyond such a consensus, there is the domain of a vast number of ideas proposed to address the determinants of the financial crisis, especially the systemic risk issue.⁶⁴ It appears clear that the standard approach to governance (i.e.: maximising shareholders value) in banking fails to incentivise an efficient risk and crisis management.⁶⁵ This claim is linked to the shape of agency conflicts in banking as well as the systemic implications of bad decision-making. Hence, this should represent the starting point for framing corporate governance as a complement of financial regulation and supervision.

⁵⁹ Deniz Anginer and others, 'Corporate Governance and Bank Insolvency Risk' (2014) 7017.

⁶⁰ Beltratti and Stulz (n 5) 16.

⁶¹ Renée Birgit Adams, 'Governance and the Financial Crisis' (2012) 12 International Review of Finance 7.

⁶² Lucian Bebchuk and Jesse Fried, *Pay without Performance*, vol 29 (Cambridge, MA: Harvard University Press 2004).

⁶³ Russ Roberts, Gambling with Other People's Money: How Perverse Incentives Caused the Financial Crisis (Hoover Press 2019).

⁶⁴ Nonetheless, some authors radically refused the idea that banks governance could play a decisive role in enhancing the overall financial stability, preferring a pure macro-founded supervision approach. See Markus Konrad Brunnermeier and others, *The Fundamental Principles of Financial Regulation*, vol 11 (ICMB, Internat Center for Monetary and Banking Studies 2009).

⁶⁵ On this mechanisms see, widely, John Armour and Jeffrey N Gordon, 'Systemic Harms and Shareholder Value' (2014) 6 Journal of Legal Analysis 35.

Some scholars emphasised the role of banks governance for financial stability,⁶⁶ focusing in particular on risk management and remuneration policies as a complement of financial regulation and supervision. ⁶⁷ These contributions mainly deal with the internal Corporate Governance mechanisms, with primary emphasis on executive remuneration, board committees, and risk management functions. These proposals aim at marginally improve the governance of financial institutions, but they are not suited to fully internalise the specialty of bank governance.

More interestingly, some others have proposed a broader approach,⁶⁸ focusing on a wider range of agency problems stemming from banking activities⁶⁹ in particular, the conflicts between shareholders and creditors.⁷⁰

All the peculiar features of bank governance relate to two deficiencies: the inability of financial regulation and supervision to be effective and the inability of creditors to discipline the decision-making of banks and their managers. And, crucially, the interaction between these two.

In non-financial firms, creditors are usually able to assure themselves a return on their investment⁷¹ through contractually agreed control rights and monitoring activities.⁷² On the contrary, the special features of bank governance generally prevent them from efficiently doing so.⁷³ According to the representation hypothesis, regulation and supervision are in place to cope with such deficiency. Therefore, if one wants to move away from the representation hypothesis of bank governance, and embrace the complementarity

⁶⁶ Mülbert and Citlau (n 45).

⁶⁷ Ferrarini (n 56); Becht, Bolton and Röell (n 33).

⁶⁸ Jens-Hinrich Binder, 'The Banking Union and the Governance of Credit Institutions: A Legal Perspective' (2015) 16 European Business Organization Law Review 467; Iris HY Chiu, 'Corporate Governance: The Missing Paradigm in the Mandatory Bail-in Regime for Creditors of Banks and Financial Institutions' [2014] Journal of business law 611.

⁶⁹ As categorised by Dirk Heremans and Katrien Bosquet, 'The Future of Law and Finance after the Financial Crisis: New Perspectives on Regulation and Corporate Governance for Banks' [2011] U. Ill. L. Rev. 1551.

 $^{^{70}}$ Those insights are going to be developed thoroughly in Section 5.1.

⁷¹ Shleifer and Vishny (n 8).

 ⁷² Clifford W Smith Jr and Jerold B Warner, 'On Financial Contracting: An Analysis of Bond Covenants' (1979)
 7 Journal of financial economics 117.

⁷³ There is an everlasting debate on the market discipline ability of bank creditors. For a survey see Mark J Flannery and Robert R Bliss, 'Market Discipline in Regulation: Pre-and Post-Crisis' in Allen N Berger, Philip Molyneux and John OS Wilson (eds), *Oxford Handbook of Banking* (3rd edn, Oxford Handbook of Banking (3rd edition), Oxford University Press, forthcoming 2018).

between governance and regulation, the role of creditors is the place to start with.⁷⁴

Coming to regulation, several doubts arise about its ability to yield efficient outcomes. First of all, the dynamic and ever-evolving nature of financial markets⁷⁵ makes the financial world inherently difficult to regulate. A further element, probably more relevant for the subject matter, is the well-documented tendency of supervisors to forebear and delay any intervention fearing the public reaction.⁷⁶ Additionally, there is a more subtle but relevant element of such inefficiency: regulation usually addresses individual institutions, whereas it fails to account for the systemic environment each institution is part of.⁷⁷

Therefore, a closer scrutiny of the relationship between governance and regulation is crucial. Stating that governance should complement regulation and supervision sounds appealing;⁷⁸ yet, understanding how such a complementary role should operate is all but straightforward.

3. Governance and Regulation

Financial regulation influences the decision-making of banks and their managers. For instance, regulating minimum capital requirements⁷⁹ influences the decision on the structure of both the asset and liability side of the bank's balance sheet. It mandates to hold a minimum amount of capital against risk-weighted assets.⁸⁰ Being absent such piece of regulation, some or all banks would opt for a different level of equity or a different mix of risky assets.⁸¹

⁷⁴ This line of argumentation is developed in Section 5.2.

 ⁷⁵ Charles W Calomiris, 'Financial Innovation, Regulation, and Reform' in Michael Spence and Danny M Leipziger (eds), *Globalization and Growth: Implications for a Post-Crisis World* (World Bank Publications 2011).
 ⁷⁶ Charles M Kahn and Joao AC Santos, 'Allocating Bank Regulatory Powers: Lender of Last Resort, Deposit Insurance and Supervision' (2005) 49 European Economic Review 2107.

⁷⁷ Luca Enriques, Alessandro Romano and Thom Wetzer, 'Network-Sensitive Financial Regulation' [2019] The Journal of Corporation Law (forthcoming).

⁷⁸ Katarzyna Sum, 'Bank Governance in the EU: A Substitute or Complement of Banking Regulation?', *Post-Crisis Banking Regulation in the European Union* (Springer 2016).

⁷⁹ Article 92 CRR.

⁸⁰ See, for instance, Patricia Jackson and others, 'Capital Requirements and Bank Behaviour: The Impact of the Basel Accord' (1999) 1.

⁸¹ Following professors Pacces and Heremans: "all aspects of the behaviour of financial firms can be ultimately understood as corporate governance issues". See Pacces and Heremans (n 41) 597.

In terms of impact on decision-making, not all the pieces of regulation come equal. It is possible to draw a broad distinction between regulation of substance and regulation of governance.⁸² Examples of substantive regulation are capital and liquidity requirements, the resolution framework, the mandatory deposit guarantee schemes, etc. Examples of governance regulation are mandatory board structure, regulation of executive compensations, special rules on managerial responsibility, etc.

In general terms, substantive regulation consists of restrictions on the possible courses of action available to the bank. As a result, the control powers of shareholders and managers over the corporation is limited not only by the undertaken contractual obligations but also by regulatory constraints. Governance regulation consists of restrictions on how to take decisions (e.g.: mandatory nomination committee) or in the tools for incentivising managerial decisions (e.g.: regulation on remuneration). Therefore, governance regulation does not limit control power but limits the modules through which corporate constituencies exercise control. These regulatory restrictions aim at preserving banks' solvency and financial stability, pursuing – *latu sensu* – the public interest.

The relevance of such differentiation is limited in non-financial corporations, whereas it is pivotal in framing bank governance. First of all, financial institutions are by far more regulated than virtually any other industry. Moreover, outside of financial institutions, it is hard to make a solid case for regulating governance. Substantive regulation is usually employed to address market failures, such as externalities and information asymmetries.⁸³ In this framework, regulation limits the control powers over future and uncertain courses of action, protecting the counterparties that are unable to contractually protect themselves.⁸⁴ Thereafter, the corporation will seek for maximisation of shareholders' value given the regulatory constraints. According to the standard neoliberal approach to the

⁸² Such distinction has already been drawn, with a slightly different approach, by professor Schwarcz. See, Steven L Schwarcz, 'Misalignment: Corporate Risk-Taking and Public Duty' (2016) 91 Notre Dame L. Rev. 1, 19. On the differences between the two approaches see note 90.

⁸³ Ian B Lee, 'The Role of the Public Interest in Corporate Law' in Claire A Hill and Brett H McDonnell (eds), *Research Handbook on the Economics of Corporate Law* (Edward Elgar Publishing 2012) 124.

⁸⁴ Think for instance of environmental regulation limiting emissions or prohibiting environmentally hazardous activities.

corporation, this is supposed to yield socially optimal results.⁸⁵ Therefore, the room for regulating governance is rather limited in such framework,⁸⁶ as it is thought to yield suboptimal results limiting entrepreneurship.⁸⁷

Banking regulation has proved to be flawed and unable to keep the pace of financial innovation. Moreover, for what is of prominent interest here, the ability of regulation to account for systemic externalities⁸⁸ and to adjust for the other special features of banking is limited. In particular, the role of creditors in external governance is impaired as compared with non-financial firms. Their protection is, therefore, delegated to substantive regulation such as deposit guarantee. However, the positive impact of creditors' oversight and discipline is not replaced.⁸⁹

Therefore, the argument according to which, given regulatory constraints, the decisionmaking of the corporation will yield efficient outcome seems not to hold at least in banking.

⁸⁵ Milton Friedman, 'The Social Responsibility of Business Is to Increase Its Profits' *N.Y. Times* (13 September 1970). See also Eugene F Fama, 'Efficient Capital Markets: A Review of Theory and Empirical Work' (1970) 25 The journal of Finance 383.

⁸⁶ Among several examples, one can think of the Italian case. To address the specific, highly concentrated, ownership structure of the vast majority of the Italian corporations and protect minority investors, the Italian policymaker decided to introduce the so-called "slate-voting" procedure for both the board of director and the board of auditor. See, respectively, articles 147-ter and 148. Such provisions allow a qualified minority of shareholders to appoint at least on director and internal auditor. On the point, see Armour and others, *The Anatomy of Corporate Law: A Comparative and Functional Approach* (n 20) 80.

⁸⁷ See David F Larcker, Gaizka Ormazabal and Daniel J Taylor, 'The Market Reaction to Corporate Governance Regulation' (2011) 101 Journal of Financial Economics 431. The authors studied, following standard methodologies for event studies, the impact of the announcements of governance-related regulatory interventions in the U.S. on shareholder's value, measured through movements on stock prices. These reforms, from the classical agency-theory perspective, are supposed to be value-enhancing for shareholders as they reduce the possibility for managers to extract a rent out of their office. Nevertheless, the authors found an insignificant impact for *executive pay* announcements in general and even a negative impact for companies with higher compensation packages, conditioned on industry and size. A negative, though weak, relationship was found for reform announcements concerning *proxy access*. Finally, the authors found a significant negative impact of reforms announcing the *ban of staggered boards or CEO-Chairman duality*. Those results are striking, and their interpretation is nothing but clear-cut. Regardless the specific policy conclusions drew by the authors; those findings clearly indicate that governance-related reforms are a sensible issue that has to be handle carefully.

⁸⁸ Macro-prudential regulation so far has not been a success and, in general, suffers of the same problem of micro-based regulation and supervision: regulatory and supervisory forbearance and delay. See Luca Amorello, 'Europe Goes "Countercyclical": A Legal Assessment of the New Countercyclical Dimension of the CRR/CRD IV Package' (2016) 17 European Business Organization Law Review 137.

⁸⁹ There is nowadays ample evidence on the fact that creditor's governance is value increasing for the corporation itself at least in some states of the world. See, for instance, Greg Nini, David C Smith and Amir Sufi, 'Creditor Control Rights, Corporate Governance, and Firm Value' (2012) 25 The Review of Financial Studies 1713; Sudheer Chava and Michael R Roberts, 'How Does Financing Impact Investment? The Role of Debt Covenants' (2008) 63 The Journal of Finance 2085.

This last observation opens up the case for special governance regulation for banking institutions. Nonetheless, the case for regulating governance does not stem directly from the fact that bank governance is special.⁹⁰ On the contrary, restricting decision-making modules is only advisable so long as restricting courses of action is not sufficient to induce socially optimal decision-making. Hence, regulatory interventions in bank governance must be strictly functional to aligning banks' incentives with regulatory goals.

Looking at governance regulation as a medium between bank governance and substantive regulation represents a step further to the representation hypothesis. It acknowledges that normal governance mechanisms cannot work smoothly in banking, but also account for the fact that regulation and supervision cannot, themselves, mimic the market.

Thus, governance regulation should aim to reduce, and hopefully fill, the wedge between regulatory goals and banks' incentives. Accordingly, regulating substance and regulating governance are not alternatives to achieve the same result. Rather, these are in a circular relation: substantive regulation set the goal and the scope of the regulatory intervention, whereas governance regulation provides incentives to the banks and bankers to achieve such a goal.

Good bank governance does not arise endogenously, simply allocating control to whom value it the most,⁹¹ rather it needs to be stimulated and shaped by a coherent mix of substantive and governance regulation.

Remuneration can act as a paradigmatic example and make this theoretical construct more tangible. Regulating remuneration packages of bankers' means limiting the ways of incentivising senior management.⁹² This limitation is desirable so long as it is functional to achieving regulatory goals that, despite substantive regulation, would not be achieved

⁹⁰ The correspondence between bank governance specialty and bank governance regulation represents the approach taken by prof. Schwarcz, which makes his argument not compelling. His claim to introduce a "public duty" to bankers stems from the fact that regulation is not able to handle all externalities of bank governance. Yet, he fails to explain how governance regulation, i.e.: the restriction of the available decision-making modules, would incentivise the banks and their managers to engage in efficient decision-making given the current regulatory constraints. See Schwarcz (n 83) 20.

⁹¹ Ronald H Coase, 'The Problem of Social Cost' (1960) 3 ournal of Law and Economics 1.

⁹² Anna Zalewska, 'A New Look at Regulating Bankers' Remuneration' (2016) 24 Corporate Governance: An International Review 322.

otherwise.⁹³ In other words, governance regulation should fine-tune substantive regulation and bank governance.⁹⁴

Therefore, governance regulation is a complement to substantive regulation, and the added value of regulating governance in banks rests in the interweaving with substantive financial regulation. Therefore, governance and substantive regulation should not merely co-exist in watertight compartments but needs to be adaptive to one another. At the same time, governance regulation should be calibrated on the specific features of bank governance⁹⁵ that impede the market from working in the first place,⁹⁶ i.e.: the reasons incentivising banks to take poor decisions.

The position of bank creditors represents one of the major sources of specialty so that the natural way to proceed is to scrutinize debt governance and the related substantive regulation. Before moving to debt governance, it is informative to briefly review the "special" governance rules for European banks⁹⁷.

4. Regulation of Bank Governance: a Critical Assessment

During and in the immediate aftermath of the Global Financial Crisis, corporate governance of banking institutions was blamed as one of its main drivers⁹⁸ in the policy debate.⁹⁹ For instance, analysing the causes of the financial crisis, the OECD stated that: "the financial crisis can be to an important extent attributed to failures and weaknesses in corporate

⁹³ See at length Chapter 7.

⁹⁴ In this regard, the EU regulation on remuneration can be and has been harshly criticised. See, for instance, Kevin J Murphy, 'Regulating Banking Bonuses in the European Union: A Case Study in Unintended Consequences' (2013) 19 European Financial Management 631; Ferrarini (n 3).

⁹⁵ Rather than on generic claims about bank risk-taking that are mainly meant to gain political consensus than to actually solve problems. In this regard, see Enriques and Zetzsche (n 3); Ferrarini (n 3).

⁹⁶ In this regard see again Pacces and Heremans (n 33) 597, where the authors states: ". Hence, within the present corporate governance debate, more attention should be given to specific agency problems for financial institutions. In particular, the corporate governance of banks should also be viewed from a financial stability perspective. This approach implies corporate governance recommendations for financial firms which may differ from corporate governance for non-financial firms".

⁹⁷ The analysis will mainly refer to the provisions embedded in the Capital Requirement Directive, Articles 88-94.

⁹⁸ No scientific evidence of bad governance causing the crisis has been established so far; yet, as discussed in Section 2 there are several evidences that bad governance boosted the crisis.

⁹⁹ See Jacques De Larosière and others, 'Report of the High-Level Group on Financial Supervision in the EU' [2009] European Commission. Brussels para 23 and 24; Kirkpatrick (n 2).

governance arrangements".100

Such a harsh stance lead to considerable political activism in regulating bank governance in the area of remuneration, risk management and board composition. The European Legislator granted a great deal of attention to governance-related issues also before the financial crisis broke out. The Directives 2000/12/EC¹⁰¹ and the 2006/49/EC¹⁰² regulated board composition, requiring for sufficient expertise,¹⁰³ and governance arrangements requiring to define the organisational structure, a transparent line of responsibility and accountability for risk-taking, and a system of internal controls.¹⁰⁴

In the aftermath of the financial crisis, the regulatory effort of the European Legislator increased significantly. In 2010, the CRD III¹⁰⁵ additionally mandated to include in the governance arrangements both remuneration policies and practices consistent with effective risk management.¹⁰⁶ Member States were required to issue guidelines for implementing those arrangements.

CRD IV,¹⁰⁷ implementing in Europe the Basel III accords, tackled massively Corporate Governance arrangements. In particular, CRD IV dedicates several and intrusive provisions to the governance of banking institutions, making a long list of compulsory requirements on the composition of the board of directors and remuneration policies. This nonexhaustive list summarises the salient provisions:¹⁰⁸

(1) the chairman of the management body in its supervisory function of an institution

capital adequacy of investment firms and credit institutions.

¹⁰⁰ Kirkpatrick (n 2) 61.

 $^{^{101}}$ Directive 2000/12/EC of the European Parliament and of the Council of 20 March 2000 relating to the taking up and pursuit of the business of credit institutions

 $^{^{102}}$ Directive 2006/49/EC of the European Parliament and of the Council of 14 June 2006 on the

 $^{^{103}}$ See, Article 6 of Directive 2000/12/EC

¹⁰⁴ See Article 22 of Directive 2006/49/EC

¹⁰⁵ Implementing Basel II accords, Directive 2010/76/EU of the European Parliament and of the Council of 24 November 2010 amending Directives 2006/48/EC and 2006/49/EC as regards capital requirements for the trading book and for re-securitizations, and the supervisory review of remuneration policies.

 $^{^{106}}$ See Article 1 3.a of Directive 2010/76/EU.

¹⁰⁷ Directive 2013/36/EU of the European Parliament and of the Council of 26 June 2013 on access to the activity of credit institutions and the prudential supervision of credit institutions and investment firms, amending Directive 2002/87/EC and repealing Directives 2006/48/EC and 2006/49/EC

¹⁰⁸ For and excellent and detailed review of the governance regulation in CRDIV, see Klaus J Hopt, 'Corporate Governance of Banks and Other Financial Institutions after the Financial Crisis' (2013) 13 Journal of Corporate Law Studies 219.

must not, in principle, exercise simultaneously the functions of a chief executive officer;¹⁰⁹

- (2) systemically relevant institutions must establish a nomination committee composed only of non-executive directors;¹¹⁰
- (3) management must possess sufficient knowledge, skills, and experience; it must be adequately differentiated in order to possess a broad range of experiences and must be of sufficiently good reputation;¹¹¹
- (4) board members must devote to their office a sufficient amount of time;¹¹²
- (5) the remuneration policy should incentivise an optimal level of risk-taking, the resulting remuneration package must consist of both a fixed and variable part. The variable component shall not exceed 100 percent of the fixed remuneration, sufficiently deferred, and provide for malus and claw-back arrangements;¹¹³
- (6) systemic institutions must establish both a remuneration and risk committee.¹¹⁴

On top of the regulatory requirements set down by the European legislator, Bank Governance Codes issued around the world provide guidelines and instruction for the governance of financial institutions. Van der Elst carried out a thorough analysis of the provisions embedded in such codes.¹¹⁵ He did not find any bank-specific governance tools in the 11 Bank Governance Codes analysed, included the guidelines issued by the Basel Committee in 1999.¹¹⁶ The author did not find any specific tool or guidelines to tackle bank specialty, apart from some rare and rather vague references to the importance of taking into account financial stability in determining the risk profile and the executive remuneration package.¹¹⁷

After this brief review, one may wonder: is the current governance regulation for European banks consistent with the framework depicted in Section 2 and 3? In other

¹⁰⁹ Article 88(1)(e) CRDIV

¹¹⁰ Article 88(2) CRDIV

¹¹¹ Article 91 (1) CRDIV

¹¹² Article 91 (2) and (3) CRDIV

¹¹³ Article 94 CRDIV

¹¹⁴ Articles 95 and 76(3) CRDIV

¹¹⁵ Christoph van der Elst, 'Corporate Governance and Banks: How Justified Is the Match?' (2015) 284/2015.

¹¹⁶ And then updated in 2006, 2010 and 2015.

¹¹⁷ Those references appear, for instance, in the Italian and in the Dutch governance codes.

words, is the EU bank governance regulation tailored to the specific features of bank governance, acting as a medium between substantive regulation and banks incentives?

The answer is unsurprisingly and markedly negative. Existing governance provisions are an end in themselves and not a medium between bank governance and substantive regulation. Most importantly, these provisions largely ignore the features of bank governance, especially when it comes to debt governance.

Some of the rules, such as the ones related to board composition, represent a crystallisation of best practices in and out the financial industry.¹¹⁸ Others, as in the case of remuneration regulation, consist in little more than political stance against bankers.¹¹⁹ In a nutshell, the existing bank governance regulation fails to fine-tune governance and substantive regulation.

As Van der Elst¹²⁰ noticed: "The 'stakeholders' gap, left by bank governance codes, provides legislative room for improvements". This will, therefore, represent the next step of the analysis, arguing that regulating debt governance has the potential to improve bank governance.

5. A Quest for Good Governance

5.1 Bank Governance and Debt

In banking, the standard channels for debt governance are, to a considerable extent, impaired.

Monitoring banks' activities is inherently difficult because of the opaqueness of its balance sheet.¹²¹ Additionally, for a sizeable part of banks' creditors, i.e.: depositors, the willingness to monitor is undermined by the deposit insurance, making them insensitive to the financial developments of their borrower.¹²²

¹¹⁸ Enriques and Zetzsche (n 3).

¹¹⁹ Murphy (n 95).

¹²⁰ van der Elst (n 116).

¹²¹ Macey and O'Hara (n 29) 93.

¹²² In Europe deposits are insured up to 100.000 euro, see the Deposit Guarantee Schemes Directive - Directive 2014/49/EU of the European Parliament and of the Council of 16 April 2014 on deposit guarantee schemes. A long-lasting theoretical debate focuses on the desirability of leaving some skin in the game to

A similar argument goes for the contractual protection of creditors. Designing statecontingent contracts granting creditors control rights over future happening turns out to be more complicated and costly in banking than in non-financial firms.¹²³ This is both due to the opacity of banks activities and the dispersed composition of bank creditors. Moreover, granting creditors the right to speed-up repayments contingently on a contracted situation would endanger the stability of the bank. Those would face funding difficulties precisely in the moment of distress. For this reason, covenants on junior unsecured debt are statutorily restricted.¹²⁴

The impossibility of efficiently designing state-contingent contracts to protect creditors' entitlements represents one of the foundations of the representation hypothesis, with regulation and supervision substituting for creditors contractual rights.

Bank's funding models markedly adjusted accordingly and moved toward short-term and securitised funding. Both assure bank creditors a return. Through a quick and cheap exit for overnight debt or through property entitlements for secured debt. However, both models entail considerable systemic risks¹²⁵ and their disciplining mechanism yield valuedecreasing outcomes during the latest financial crisis. Those were unable to signal the build-up of risk in good times, with artificially low haircuts on repos.¹²⁶ On the contrary, once the crisis broke-out such mechanisms worked even too much, pushing out of the

depositors to increase their willingness to monitor and discipline their bank. Such debate is now closed once and for all after the depositors run during the Northern Rock crisis. U.K. bank deposits were fully insured only up to 2,000 pounds, and then only 90 % of their deposits up to an upper limit of 35,000 pounds. Hyun Song Shin, 'Reflections on Northern Rock: The Bank Run That Heralded the Global Financial Crisis' (2009) 23 Journal of economic perspectives 101.

¹²³ As discussed by prof. Flannery: "Because bank assets do not have contractible, easily described risk properties, covenants governing firm risk changes are unusually ineffective for banking firm". See Mark J Flannery, 'Debt Maturity and the Deadweight Cost of Leverage: Optimally Financing Banking Firms' (1994) 84 The American Economic Review 320, 321.

¹²⁴ A throughout analysis of the relationship between contractual mechanisms and regulatory foreclosures is developed in Chapter 5, Section 3.2.

¹²⁵ Short-term funding has been described as an inefficient equilibrium in Douglas W Diamond and Raghuram G Rajan, 'A Theory of Bank Capital' (2000) 55 The Journal of Finance 2431. As for secured debt and its implication for financial stability, see Reimo Juks, 'Asset Encumbrance and Its Relevance for Financial Stability' (2012) 3 Sveriges Riksbank Economic Review 67.

¹²⁶ Gary Gorton and Andrew Metrick, 'Securitized Banking and the Run on Repo' (2012) 104 Journal of Financial economics 425.

market weaker banks.¹²⁷ According to the framework depicted above, neither short-term nor secured creditors have the potential to improve the decision-making process of banks.

On the contrary, junior unsecured and uninsured debt have the potential to improve debt governance and, thence, bank governance. So far, they exerted no noteworthy governance role as they could quietly rely on the implicit government guarantee to bailout failing banks.¹²⁸

In the aftermath of the financial crisis, the policymakers worldwide rebelled against bailouts and set down resolution frameworks that, allegedly, ruled them out.¹²⁹ So long as such policy stance is credible,¹³⁰ junior unsecured debtholders are in the position to improve bank governance as they are prone to bear losses should the bank get in distress. At the same time, junior creditors are not subject to perverse incentives generating systemic externalities and, if any, they are prone to be victim of those through, for instance, debt overhang and asset substitution.

Good bank governance intrinsically links to debt governance which has, in turn, been massively overlooked so far. Debt governance should focus on the role of junior unsecured and uninsured creditors, as these represent a category of creditors having the potential to improve the decision-making of the bank and coping with its specialty.

In so doing, debt governance needs to be fine-tuned with the newly established framework for recovery and resolution of failing banks. This framework allocates losses on bank creditors in case of distress in the form of principal write-down or conversion into equity. A major issue is the credibility of the resolution framework and, in particular, of the no-bailout commitment. In this view, governance regulation ought to handle the wedge

¹²⁷ Constantinos Stephanou, 'Rethinking Market Discipline in Banking: Lessons from the Financial Crisis' (2010) 5227 3.

¹²⁸ Decreasing the cost of finance and the willingness to engage in monitoring accordingly. See Kenichi Ueda and B Weder Di Mauro, 'Quantifying Structural Subsidy Values for Systemically Important Financial Institutions' (2013) 37 Journal of Banking & Finance 3830.

¹²⁹ Todd A Gormley, Simon Johnson and Changyong Rhee, 'Ending "Too Big to Fail": Government Promises versus Investor Perceptions' (2014) 19 Review of Finance 491.

¹³⁰ John Armour, 'Making Bank Resolution Credible', *The Oxford Handbook of Financial Regulation* (Oxford University Press Oxford, UK 2015). Crucially, the bank resolution triggers the possibility for junior creditors to be positive actors in bank governance as long as the no-bailout commitment is credible. Conversely, the ability of bank creditors to play a positive governance role, i.e.: taking concrete actions to secure the return on their investment, is crucial for the credibility of the resolution framework. On this point, see more at length Chapter 6 and Chiu (n 68).

between investors' expectations and the regulatory goal set down by the resolution regulation.

5.2 EU Regulation of Bank Failure and Debt Governance

The Bank Recovery and Resolution Directive harmonised the framework for handling bank distressed throughout the EU. For the Euro Area Countries, the Single Resolution Mechanism Regulation supplements the Directive.¹³¹ The recovery and resolution framework provides rules and procedures for smooth management of a banking crisis, with provisions ranging from the preparation¹³² to a future crisis to the resolution of the crisis once it materialises.¹³³ The pivotal tool set down by the BRRD is the so-called "bail-in" tool,¹³⁴ the power of the Resolution Authority to impose losses on the "bail-inable creditors", i.e.: unsecured and insured creditors whose claim fulfils specific qualitative requirements.¹³⁵ The Resolution authority can reduce the principal amount of the debt claim to set-off losses and/or convert debt into equity to restore regulatory capital.¹³⁶

Such rules not only govern the resolution of failing banks but also provide incentives to market players in good times. By backward induction, bail-inable creditors should anticipate future losses and be willing to take every action maximising the expected value of their claim. This is true only as long as the regulatory goals set down by the BRRD and bank (debt) governance are fine-tuned.

Building on the previous analysis, two wedges between the regulatory goals of the resolution framework and bank debt governance are noteworthy.

- (1) First, investors might not play backwards in the first place since they do not see the no-bailout commitment as credible;
- (2) Second, due to bank governance special features, bail-inable creditors might be short of suitable tools to influence (improve) the decision-making of the borrowing

¹³¹ The BRRD applies to all the Member States, whereas the Single Resolution Mechanisms is in charge of enforcing it in cooperation with national authorities within the Euro Area.

 ¹³² Jens-Hinrich Binder, 'Resolution Planning and Structural Bank Reform within the Banking Union' in Juan Castaneda and others (eds), *European Banking Union. Prospects and challenges* (Routledge 2015).
 ¹³³ Bates and Gleeson (n 44).

¹³⁴ Karl-Philipp Wojcik, 'Bail-in in the Banking Union' (2016) 53 Common Market Law Review 91.

¹³⁵ See Article 44 and 45 of the BRRD.

¹³⁶ Article 46 BRRD.

bank. Should this be the case, direct regulation of debt governance might provide a valuable option for the European legislator.

6. Conclusion

The analysis highlights why and how bank governance is different from the corporate governance of non-financial firms. In particular, it pinpoints the crucial role of debt governance and the impact of systemic externalities preventing banks from pursuing socially optimal strategies.

Based on the distinctive features of bank governance, the chapter puts forward a framework for analysing the relationship between financial regulation and bank governance, where governance regulation acts as a medium between the special features of bank governance and the regulatory goals.

Following that framework, the analysis re-considers the regulation on bank governance, arguing that it does not capture the essence of bank governance, nor it promotes better decision-making. Against the unsatisfactory state of the art, the chapter proposes to focus on debt governance and to fine-tune it with the newly established resolution framework for ailing bank as a way to improve banks' decision-making in good time and, hence, promote good bank governance.

The proceeding of the dissertation will assess this set of issues. First, the legal design of the Bank Recovery and Resolution Directive will be analysed, focusing on the aspects (aiming at) impacting on the ex-ante behaviour of banking institutions (Chapter 3). Subsequently, a thorough positive analysis of the impact of the BRRD on the incentives of bail-inable creditors, assessing whether and to what extent resolution is credible and the tools available to creditors are sufficient (Chapters 4-6). Finally, the last part of the dissertation will draw policy implications and discuss two specific proposals on how to regulate bank governance under the present framework. Namely, remunerating bankers through bail-inable debt (Chapter 7) and granting bail-inable creditors ex-ante governance rights (Chapter 8). This would, on the one hand, provide corporate constituencies with effective tools to improve the decision-making process of the bank. On the other hand,

such regulatory intervention on bank governance would help to increase the credibility of the resolution framework, providing a valid alternative to bailouts.

Chapter 2 – Bank Governance

Part I – Bank Governance and the Resolution Framework

Chapter 3 – The Ex-Ante Potential of the EU Bank Resolution Framework

Abstract

The chapter applies the theoretical construct on debt governance and regulation to the new EU recovery and resolution framework for ailing banks. Both the legal and economic literature has overlooked the relationship between bank resolution and bank governance.

The existing studies mainly focus on the potential of long-term creditors to correctly price bank debt and the impediments to such possibility, highlighting the lack of credibility of the resolution framework. This chapter widens the scope of the analysis, linking debt governance to the resolution framework, discussing the incentives stemming from such a framework and proposing governance regulation as a tool to enable debt governance in banks.

The first part of the chapter focuses on the new regulatory framework, positioning it in the path toward the edification of the European Banking Union. Afterwards, the chapter proceeds to the discussion of the economic rationale and the legal design of the recovery and resolution framework, focusing on the bail-in tool.

The analysis shows that on top of it several shortcomings, the BRR framework can, almost inadvertently, represent an effective medium between substantive regulation and governance incentives.

Thereafter, the analysis it zooms in the incentives stemming from the resolution tools, discussing the expectation it is supposed to ingenerate ex-ante on corporate actors. This allows to establish a clear link between the ex-ante potential of the BRRD and debt governance.

Keywords: Bank Recovery and Resolution Directive, Bail-in; Debt Governance; Credibility of Resolution.

1. Introduction

The latest Global Financial Crisis spectacularly demonstrated that the social cost of bank failures outweighs private ones.¹ The failure of one significant bank carries several negative systemic spillovers: it imposes losses on interconnected counterparties possibly triggering a contagion and endangers the trust of the rest of the market on the solvency of other banks. Moreover, it usually entails complex cross-border issues that are particularly difficult to handle given the short time window available for resolving banking crises and, therefore, usually lead to further value destruction.²

During the global financial meltdown, European countries experienced both these downsides, due to several failures of cross-border banks.³ It leads to an overall lack of trust in the entire EU banking system, perceived as in the verge of the collapse. To prevent such collapse from happening, the European Commission approved 4.5 trillion € of state aid measures for banks between 2008 and 2011, amounting to 37% of the EU GDP.⁴

In the aftermath of the crisis, the need for a deep reform of banking regulation appeared clear. In particular, the need for a common framework for resolving troubled entities arose as one of the main gaps in the regulatory framework. The European Legislator filled the gap passing the Bank Recovery and Resolution Directive (BRRD).⁵ The main aim of the new framework is effectively summarised in its first recital: "to prevent

¹ Ex pluribus, see Matej Marinč and Razvan Vlahu, 'The Economic Perspective of Bank Bankruptcy Law' (Springer Science & Business Media 2011) 310.

² Dirk Schoenmaker and Sander Oosterloo, 'Financial Supervision in an Integrating Europe: Measuring Cross-Border Externalities' (2005) 8 International Finance 1.

³ In this respect, there are several paradigmatic cases happened during the latest financial crisis. Think for instance of Fortis that entered in distress in 2008 after the acquisition of part of ABN AMRO together with Royal Bank of Scotland and Banco Santander. In that situation, the necessity to resolving the crisis in a cross-border context worsened the crisis, delaying the necessary interventions. On this point, see Rosalind Wiggins, Natalia Tente and Andrew Metrick, 'European Banking Union D: Cross-Border Resolution—Dexia Group' [2014] Yale Program on Financial Stability Case Study. Landsbanki, the biggest Icelandic Bank, provides another clear example: the bank operated in the UK through a branch and refused to repay depositors after a run. In response the UK government froze the assets of Landsbanki in the UK making use of an anti-terrorism piece of legislation. On this case, see Arwin G Zeissler, Thomas Piontek and Andrew Metrick, 'Ireland and Iceland in Crisis C: Iceland's Landsbanki Icesave' [2015] Yale Program on Financial Stability Case Study.

⁴ European Commission, New crisis management measures to avoid future bank bailouts, MEMO/12/416. Available at <u>https://ec.europa.eu/commission/presscorner/detail/en/IP_12_570</u> (accessed 04-04-2020).

⁵ The Bank Recovery and Resolution Directive (BRRD) - Directive 2014/59/EU of the European Parliament and of the Council of 15 May 2014 establishing a framework for the recovery and resolution of credit institutions and investment firms. OJ L 173, 12.6.2014

insolvency or, when insolvency occurs, to minimise negative repercussions by preserving the systemically important functions of the institution concerned. During the crisis, those challenges were a major factor that forced Member States to save institutions using taxpayers' money. The objective of a credible recovery and resolution framework is to obviate the need for such action to the greatest extent possible."⁶

The BRRD harmonises at the European Union level several substantive rules for bank insolvency,⁷ from preparation to resolution.⁸ The quintessential idea behind the new resolution framework is, as highlighted by the recital, to minimise the need for bailing-out banks in the future and therefore protect taxpayer money. However, saving taxpayers money ex-post is not the only advantage of eliminating bailout, and arguably is not the most important either. Banks and their financiers ex-ante expect to be rescued should anything go wrong, providing them with perverse incentives.⁹

In achieving its overarching goal, the Directive operates a shift from the bailout paradigm, to a new "bail-in" paradigm, in which shareholders, junior and senior bondholders bear, to the largest extent possible, costs of the crises. To this end, a public agency specifically designated by national and EU provisions, the so-called "Resolution Authority" can write down the claim of eligible creditors or convert these into ordinary shares.

Such an approach to bank insolvency should, in theory, enhance the decision-making process of banks ex-ante; since creditors risking to bear losses in resolution are supposed

⁶ Recital n. 1 BRRD

⁷ National insolvency laws remain of crucial relevance and, potentially, represent an obstacle to resolution. On the relation between insolvency law and resolution, see Lynette Janssen, 'Bail-In from an Insolvency Law Perspective' (2017) 26 Norton Journal of Bankruptcy Law and Practice.

⁸ In the Eurozone, the SRMR establish a central agency, the Single Resolution Board, to handle the resolution of banking institutions. The SRMR establish mainly procedural rules, the power of the SRB and the relation between the SRB and the national resolution authorities. REGULATION (EU) No 806/2014 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 15 July 2014 establishing uniform rules and a uniform procedure for the resolution of credit institutions and certain investment firms in the framework of a Single Resolution Mechanism and a Single Resolution Fund and amending Regulation (EU) No 1093/2010. OJ L 225, 30.7.2014, p. 1.

⁹ Reint Gropp, Christian Gruendl and Andre Guettler, 'The Impact of Public Guarantees on Bank Risk-Taking: Evidence from a Natural Experiment' (2014) 18 Review of Finance 457.

to impose higher and better discipline on the risk-taking appetite of the borrowing bank.¹⁰ The alleged elimination of any bailout expectation increases the skin in the game of junior creditors that, threatened by a future bail-in should be incentivised to preserve the solvency of the bank.¹¹

These theoretical expectations are reasonable so long as the commitment of governments not to bail out banks is fully credible. Yet, the first years of application of the new regime cast severe doubts on the credibility of the resolution framework.¹²

The existing studies mainly focus on how this lack of credibility and the excessive complexity of the resolution framework prevents creditors from disciplining banks. This represents a sensible approach; yet, it fails to position the problem in the broader debate on bank corporate governance: can better debt governance enhance the resilience of financial institutions? And of the financial system as a whole? To incorporate these questions in the analysis of the EU resolution framework, this chapter widens the scope of the analysis, linking debt governance to the resolution framework, discussing the incentives stemming from such framework and proposing governance regulation as a tool to enable debt governance in banks.

Specifically, this chapter critically analyses the resolution framework designed by the BRRD. It assesses whether it can enhance ex-ante the resilience of individual institutions and/or system stability, with specific regard to the role of bail-inable debtholders in corporate governance. In particular, the chapter discusses the problematic relation between the ex-ante potential of the resolution framework and its lack of credibility and questions the standard approach of the literature in this regard.

In so doing, the chapter proceeds as follows. Section 2 puts the BRRD into context,

¹⁰ Decision-making and risk-taking incentives have been blamed to be a major driver and booster of the financial crisis. In the European context, see Jacques De Larosière and others, 'Report of the High-Level Group on Financial Supervision in the EU' [2009] European Commission. Brussels 29.

¹¹ For fist attempts to empirically investigate the credibility of such threat, see Edoardo Martino, 'Subordinated Debt under Bail-in Threat' (2017) 2 University of Bologna Law Review 252; Fabrizio Crespi, Emanuela Giacomini and Danilo V Mascia, 'Bail-in Rules and the Pricing of Italian Bank Bonds' (2018) 25 European Financial Management 1321.

¹² Various doubts have been cast about the credibility of the bail-in. See Tobias H Tröger, 'Too Complex to Work: A Critical Assessment of the Bail-in Tool under the European Bank Recovery and Resolution Regime' (2018) 4 Journal of Financial Regulation 35; John Armour, 'Making Bank Resolution Credible', *The Oxford Handbook of Financial Regulation* (Oxford University Press Oxford, UK 2015).

briefly describing the main post-crisis reforms on banking regulation and the path toward a European Banking Union. Section 3 presents the main features of the Directive, shortly analysing its main tools and hinting at the vulnerabilities of the resolution framework highlighted by the previous literature, in particular the issue of the credibility of resolution. Section 4 discusses the relationship between the credibility of the resolution framework. Section 5 makes the case for the ex-ante potential of the resolution framework, focusing on the specific case of the role of debt-holders in corporate governance. This section explains why bail-inable debtholders should play a positive role in governance and the legal and material obstacles impeding them to play such a role taking the law as it is. Section 6 concludes.

2. The Road Toward a European Banking Union

In the aftermath of the financial crisis, the necessity for substantial and procedural harmonisation of several areas of financial regulation became clear. The crisis hit harshly the whole European Union and in particular the Eurozone. The reason behind the financial and Eurozone crises are complex and entangled.¹³ Nonetheless, it is safe to argue that two of the key elements at play where the lack of cross-border coordination,¹⁴ as revealed for instance in the Dexia case,¹⁵ and the vicious circle between Member States and their national banking systems, where the former guarantees the solvency of national champions and the latter heavily engage in the market for sovereign bonds issued by the home country.¹⁶

In this respect, the interventions were numerous and profound, ranging from market infrastructures to a completely new institutional design for supervision and resolution. As this is not the appropriate occasion for an overall assessment of all of these reforms,¹⁷ here

¹³ For an excellent and comprehensive review, see Andreas Nölke, 'Economic Causes of the Eurozone Crisis: The Analytical Contribution of Comparative Capitalism' (2016) 14 Socio-Economic Review 141.

¹⁴ Jens-Hinrich Binder, 'Cross-Border Coordination of Bank Resolution in the EU: All Problems Resolved?', *Research Handbook on Cross-Border Bank Resolution* (Edward Elgar Publishing 2019).

¹⁵ Wiggins, Tente and Metrick (n 3).

¹⁶ Valerie De Bruyckere and others, 'Bank/Sovereign Risk Spillovers in the European Debt Crisis' (2013) 37 Journal of Banking & Finance 4793.

¹⁷ For a comprehensive survey of the economic and functional significance of the EU reforms, see Darrell Duffie and others, 'Financial Regulatory Reform after the Crisis: An Assessment' (2018) 64 Management Science 4835.

we only briefly discuss the salient element of the so-called European Banking Union for what is strictly necessary to assess the ex-ante potential of the new resolution framework.¹⁸

The Banking Union has been, perhaps, the major innovation in European financial system after the crisis. Commissioner Barnier, responsible for the internal market and financial services in the period that led to the approval of Banking Union's pieces of regulation, described it as a revolution and the "most ambitious project since the creation of Euro".¹⁹ It has, primarily, the macroeconomic goal to supplement the Monetary Union. Indeed, many commentators argued that another key factor particularly harsh crisis in the Eurozone was the incompleteness of economic and monetary integration, of which common rules on banking should have been a crucial component.²⁰

The Banking Union consists of three main pillars: common European rules on banking supervision,²¹ crisis management and resolution²² and deposit insurance.²³ More specifically, given the substantive nature of this analysis, the Banking Union is here defined in a broad sense, including both substantive and procedural rules.²⁴

On top of these three fundamental pillars, the European Banking Union is

¹⁸ For a deeper legal scrutiny of the Institutional setting and substantive aspects of the Banking Union, see D Busch and G Ferrarini, *The European Banking Union* (Oxford: Oxford University Press 2020).

¹⁹ Commissioner Barnier Speech at the Peterson Institute for international Economics, Washington DC, June 13, 2014. Available at <u>http://europa.eu/rapid/press-release SPEECH-14-465 en.htm</u>

²⁰ Jean Pisani-Ferry and others, 'What Kind of European Banking Union?' [2012] Brugel Policy Contribution. For the policy-maker perspective, see Herman Van Rompuy and others, 'Towards a Genuine Economic and Monetary Union' (2012) 5 European Council. Brussel.

²¹ COUNCIL REGULATION (EU) No 1024/2013 of 15 October 2013 conferring specific tasks on the European Central Bank concerning policies relating to the prudential supervision of credit institutions.

²² DIRECTIVE 2014/59/EU OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 15 May 2014 establishing a framework for the recovery and resolution of credit institutions and in- vestment firms; the BRRD had been supplemented, for the Eurozone, by a regulation establishing a centralised Single Resolution Mechanism, REGULATION (EU) No 806/2014 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 15 July 2014 establishing uniform rules and a uniform procedure for the resolution of credit institutions and certain investment firms in the framework of a Single Resolution Mechanism and a Single Resolution Fund and amending Regulation (EU) No 1093/2010.

²³ DIRECTIVE 2014/49/EU OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 April 2014 on deposit guarantee schemes.

²⁴ On the contrary, many studies that focused mainly on the institutional arrangement governing the Banking Union defined it narrowly, including only the procedural rules that specifically apply to Eurozone countries and define the powers and mandate of the relevant central agency and institution. See, for instance, Stefan Grundmann, 'The Banking Union Translated into (Private Law) Duties: Infrastructure and Rulebook' (2015) 16 European Business Organization Law Review 357.

complemented by the so-called Single Rulebook,²⁵ developed by the European Banking Authority, that aims at harmonising the interpretation of substantive norms as well as the supervisory practices across Europe.²⁶ This represents the core of the Single Rulebook; however, the EBA mandate in terms of regulatory and implementing standards, guidelines and recommendations are particularly comprehensive.²⁷ Therefore, many technical rules set down by the EBA belong to the "penumbra" of the Single Rulebook,²⁸ dealing with the quality of banks relationships with client and counterparties and on banking activities.²⁹

The proceeding of the section pinpoints the crucial elements of the new supervisory framework (2.1) and the Deposit Guarantee Schemes (2.2). The rationale and key elements of the resolution framework are addressed more at length in Section 3.

2.1 Single Supervision

The first pillar of the Banking Union consists of the new Regulation establishing the Single Supervisory Mechanism (SSMR).³⁰ The new Single Supervisory System represents a decisive innovation towards a "genuine economic and monetary union".³¹ The Single Supervisory Board (SSB), composed of a dedicated unit of the ECB and the National Competent Authorities (NCAs), is in charge of the supervision over Eurozone banks. The SSM directly supervises all "systemically relevant" institutions as defined by Article 6 of the SSMR,

²⁵ Regulation (Eu) 1093/2010 Of The European Parliament And Of The Council of 24 November 2010 establishing a European Supervisory Authority (European Banking Authority), amending Decision No 716/2009/EC and repealing Commission Decision 2009/78/EC. Article 8 of the regulation Article 8(1)(a) provides the EBA with the mandate to develop the Single Rulebook: "The Authority shall have the following tasks: (a) to contribute to the establishment of high-quality common regulatory and supervisory standards and practices [...]".

²⁶ The importance of the Single Rulebook for the completion of a genuine and effective European Banking Union let commentators to label it as the fourth centrepiece of the Banking Union. See Grundmann (n 24).

²⁷ See, respectively, Articles 10, 15 and 16 of the Regulation (Eu) 1093/2010. On the role of EBA within the Banking Union, see Christos V Gortsos, 'The Role of the European Banking Authority (EBA) after the Establishment of the Single Supervisory Mechanism (SSM)', *Regulating and Supervising European Financial Markets* (Springer 2016).

²⁸ Following the terminology used in Christos Hadjiemmanuil, 'The Banking Union and Its Implications for Private Law: A Comment' (2015) 16 European Business Organization Law Review 383.

²⁹ Such the Payment Services Directive (Directive 2015/236/EU, OJ 2015 L 337/35); the Consumer Credit Directive (Directive 2008/48/EC, OJ 2008 L 133/66.), the Mortgage Credit Directive the Distance Marketing of Consumer Financial Services Directive (Directive 2014/17/EU, OJ 2014 L 60/34), the Anti Money Laundering Directive (Directive 2015/849/EU, OJ 2015 L 141/73), or the provisions in MiFID II(Directive 2014/65/EU, OJ 2014 L 173/349).

³⁰ Council Regulation (EU) No 1024/2013 of 15 October 2013 conferring specific tasks on the European Central Bank concerning policies relating to the prudential supervision of credit institutions. OJ L 287/2013.
³¹ Van Rompuy and others (n 20).

representing around the 80% of the market. Whereas, for the less significant, the NCAs retain primary responsibility for direct supervision, in close cooperation with the SSM.³²

The main goal of this new institutional design is to break the vicious circle between domestic banks and their sovereign since it is considered one of the main determinants of the Sovereign Debt crisis of 2010-2011.³³ The primary criticism moved against the SSM is the high level of complexity of the institutional design for what concerns the interplay between the ECB and the NCAs, and between ECB and EBA, which retains regulatory power.³⁴

From a substantive perspective, mainly of the Capital Requirement Regulation (CRR)³⁵ and the Capital Requirement Directive (CRD),³⁶ disciplining the substantive elements of the supervisory mandate. These mainly entail rules on bank licensing; fit and proper requirements for directors and shareholders; capital and liquidity requirements and governance arrangements.

The supervisory powers are assigned , within the SSM, to the ECB and the NCAs.³⁷ In particular, the Supervisory Review and Evaluation Process (SREP)³⁸ complemented by the Supervisory Examination Program³⁹ and yearly Stress Tests.⁴⁰ To carry out, implement and enforce the Supervisory activities, the article 104 of the CRD grants the competent authority with intrusive powers, such as requiring to hold own fund above of the minimum requirements, imposing specific liquidity requirements, requiring additional disclosure, etc.

³² Article 6 SSMR.

³³ As explicitly stated in the recital n. 6 of the Single Supervisory Regulation: "The stability of credit institutions is in many instances still closely linked to the Member State in which they are established. Doubts about the sustainability of public debt, economic growth prospects, and the viability of credit institutions have been creating negative, mutually reinforcing market trends. This may lead to risks to the viability of some credit institutions and to the stability of the financial system in the euro area and the Union as a whole and may impose a heavy burden for already strained public finances of the Member States concerned".

³⁴ On those issues see, widely Guido Ferrarini, 'Single Supervision and the Governance of Banking Markets: Will the SSM Deliver the Expected Benefits?' (2015) 16 European Business Organization Law Review 513.

³⁵ Regulation (Eu) No 575/2013 Of the European Parliament and Of the Council of 26 June 2013 on prudential requirements for credit institutions and investment firms and amending Regulation (EU) No 648/2012. OJ L 176/2013.

³⁶ Directive 2013/36/EU of the European Parliament and of the Council of 26 June 2013 on access to the activity of credit institutions and the prudential supervision of credit institutions and investment firms, amending Directive 2002/87/EC and repealing Directives 2006/48/EC and 2006/49/EC. OJ L 176/2013.

³⁷ See Article 6 SRMR.

³⁸ Article 97 CRD.

³⁹ Article 99 CRD, where the results of stress tests and evaluation process are condensed in an action program to handle all possible risks and flaws detected.

⁴⁰ Article 100 CRD.

2.2 Deposit Guarantee

The new Deposit Guarantee Schemes Directive does not represent a revolution, as the first European Directive in the field dates back to 1994⁴¹ and the consensus around the salience of a full guarantee on retail deposits consolidates since the Northern Rock run.⁴² Particularly so for deposits up to 100.000 euro.⁴³

On the other hand, there seems not to be political accord on a single deposit insurance scheme nor for the European Union at large, neither Eurozone countries. Therefore, the 2014 Directive represents an attempt to make more efficient and trustworthy the deposit insurance mechanism, speeding up the procedure for the reimbursement and the settlement mechanisms between national deposit insurances. Such marginal improvements enhance the protection of depositors, especially if cross-border issues are at play.

Many commentators highlighted that the lack of a single deposit insurer makes the European Banking Union inherently incomplete.⁴⁴ Therefore, in November 2015 the Commission put forward a proposal to set up a European Deposit Guarantee Scheme (EDIS) in the Euro Area.⁴⁵ To this day, no political convergence on EDIS has arisen. Setting up a single deposit insurer would require Member States to accept a mutualisation of risk within the Eurozone.⁴⁶ This quest for risk-sharing lost political traction in recent years, so that an agreement on EDIS seems, nowadays, far from being reached.⁴⁷

⁴¹ Directive 94/19/EC of the European Parliament and of the Council of 30 May 1994 on deposit-guarantee schemes. OJ L 135/1994.

⁴² Hyun Song Shin, 'Reflections on Northern Rock: The Bank Run That Heralded the Global Financial Crisis' (2009) 23 Journal of economic perspectives 101. The authors points out that the physical run on retail deposits was only the consequence of the previous run on wholesale ones; yet, the limited insurance (up to 90%) of such deposits contributed to worsening the situation of Norther Rock.

⁴³ For a deeper analysis of DGS Directive, especially in its interconnections with resolution, see Daniel Gros and Dirk Schoenmaker, 'European Deposit Insurance and Resolution in the Banking Union' (2014) 52 JCMS: Journal of Common Market Studies 529.

⁴⁴ Jacopo Carmassi and others, 'Completing the Banking Union with a European Deposit Insurance Scheme: Who Is Afraid of Cross-Subsidisation?' (2018) 208; Daniel Gros, 'Completing the Banking Union: Deposit Insurance' (2015) 335.

⁴⁵ Proposal for a REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL amending Regulation (EU) 806/2014 in order to establish a European Deposit Insurance Scheme. COM/2015/0586 final - 2015/0270 (COD).

⁴⁶ On the road toward EDIS, see Christos V Gortsos, 'The European Deposit Insurance Scheme', *Research Handbook on EU Economic Law* (Edward Elgar Publishing 2019).

⁴⁷ See, nonetheless, Agnès Bénassy-Quéré and others, 'Reconciling Risk Sharing with Market Discipline: A Constructive Approach to Euro Area Reform' 8, where EDIS is one of the key points of a proposal put forward by French and German economist to reconcile market discipline and risk-sharing in the Euro Area.

In the new regulatory landscape, DGSs tightly relates to the resolution framework for ailing banks, discussed in the next section. Indeed, DGSs provide protection to depositors when a financial institution loses its banking licence without qualifying for resolution, the so-called "paybox function".⁴⁸ Furthermore, DGSs can come to play to safeguard insured depositor within a resolution procedure.⁴⁹

3. The EU Framework for Failing Banks

3.1 From Bailout to Bail-in: the Rationale

Financial reforms were profound and innovative, especially in the field of insolvency and restructuring of ailing banks. Specifically, the European Legislator finally approved in 2014 the Bank Recovery and Resolution Directive (BRRD), and – for the Eurozone - the Single Resolution Mechanism Regulation (SRM). This reform package represents the second Pillar of the EBU and deals with the crisis management of distressed banks. It changes the institutional design for Eurozone resolution procedure, allocating many of the responsibilities to the Single Resolution Board. Moreover, and most importantly for the purpose of this analysis, it harmonises and innovates the substantive rules to deal with banking crises, widening the set of available tools to resolution authorities.

The failure of banking institutions displays many peculiarities and complexities, making insolvency proceeding unfit.⁵⁰ In banking, the goal itself of bankruptcy seems to differ sharply from standard corporate insolvency law.

For corporate insolvencies, the legal framework provides bankruptcy and reorganisation procedures to cope with creditors' collective action problems⁵¹ and reduce agency costs in distressed corporations.⁵² This should lead to the maximisation of return

⁴⁸ See Recital n. 14 of DIRECTIVE 2014/49/EU OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 April 2014 on deposit guarantee schemes. OJ L 173, 12.6.2014, p. 149.

⁴⁹ Article 109 BRRD>

⁵⁰ For a comprehensive explanation of the economic underpinnings of the specialty of bank failure, see Matej Marinč and Razvan Vlahu, *The Economics of Bank Bankruptcy Law* (Springer Science & Business Media 2011).
⁵¹ Robert Gertner and David Scharfstein, 'A Theory of Workouts and the Effects of Reorganization Law' (1991) 46 The Journal of Finance 1189.

 $^{^{\}rm 52}$ David D Li and Shan Li, 'An Agency Theory of the Bankruptcy Law' (1999) 8 International Review of Economics & Finance 1.

for creditors⁵³ and, from an ex-ante perspective, should minimise the cost of debt finance.⁵⁴ In a nutshell, the private interests of creditors and companies outweigh public interest considerations, at least in the mainstream literature and in policy-making.⁵⁵

On the other hand, in bank insolvencies, given the role of banks for the real economy, the primary objective is to preserve the continuity of their essential functions and avoid systemic contagion,⁵⁶ i.e.: public interest considerations are by far predominant. This should be a sufficient argument for implementing an *ad hoc* normative framework. Nevertheless, until BRRD entered into force, many European jurisdictions heavily relied on corporate bankruptcy procedures, supplemented by some specific rules.⁵⁷

The necessity for "special" bankruptcy regime⁵⁸ to cope with banks failure springs from the externalities generated by banks failures. These fall beyond the scope of corporate insolvency rules. Specifically, four sets of externalities linked to bank distress are worth analysing.

First, informational linkages⁵⁹ among banks and the role of trust. In non-financial industries, the failure of a firm represents an advantage for the other firms in the market that can try to capture the market share of the failing competitor. This is not true in the banking industry, since the failure (or even severe distress) of one institution may have

⁵³ Douglas G Baird and Thomas H Jackson, 'Corporate Reorganizations and the Treatment of Diverse Ownership Interests: A Comment on Adequate Protection of Secured Creditors in Bankruptcy' (1984) 51 The University of Chicago Law Review 97.

⁵⁴ See Alan Schwartz, 'A Contract Theory Approach to Business Bankruptcy' (1998) 107 The Yale Law Journal 1807. For a comprehensive even though outdated survey of the Law & Economics literature on insolvency see John Armour, 'The Law and Economics of Corporate Insolvency: A Review' (2001) wp197.for a more up to date review see also Nadine Levratto, 'From Failure to Corporate Bankruptcy: A Review' (2013) 2 Journal of Innovation and Entrepreneurship 20.

⁵⁵ Armour (n 52).

⁵⁶ Article 31(2)(b) BRRD: "When applying the resolution tools and exercising the resolution powers, resolution authorities shall have regard to the resolution objectives [...]. The resolution objectives referred to in paragraph 1 are: [...] (b) to avoid a significant adverse effect on the financial system, in particular by preventing contagion, including to market infrastructures, and by maintaining market discipline".

⁵⁷ The level of specialty of bank bankruptcy in different European jurisdictions had huge variability and it is not possible neither useful now to report them. For a survey on the pre-crisis insolvency regimes in several European countries see Eva HG Hüpkes, 'Insolvency - Why a Special Regime for Banks?', *Current developments in monetary and financial law, Vol. 3* (International Monetary Fund 2002)..

⁵⁸ In recital 4 of BRRD, the European Legislator acknowledges both the need for harmonization at European level of bank insolvency regimes and the necessity for a special regime: "[...] the financial crisis has exposed the fact that general corporate insolvency procedures may not always be appropriate for institutions as they may not always ensure sufficient speed of intervention, the continuation of the critical functions of institutions and the preservation of financial stability".

⁵⁹ Peter O Mülbert and Ryan D Citlau, 'The Uncertain Role of Banks? Corporate Governance in Systemic Risk Regulation' (2011) 179 17.

negative spillovers on all the relevant market, decreasing the level of trust of retail and wholesale customers.⁶⁰ Standard bankruptcy procedures, aiming at solving a collective action problem among creditors, are unable to make creditors and insiders internalise those negative spillovers on the whole banking market.

Second, the risk of contagion. The negative spillovers deriving from the failure of a bank do not end in increasing mistrust in investors. Financial institutions are more and more interconnected, and banking market is systemic,⁶¹ meaning that the insolvency of even a single systemically significant institution⁶² might trigger a domino effect because of the counterparty exposures as well as the correlation of the risk profiles of financial institutions.⁶³

Third, the social costs of failure larger than private ones. Shareholders bear only a fraction of the risk of failure and management is, therefore, incentivised to take on excessive risk. In non-financial corporations, the *ex-ante* threat of future bankruptcy represents a disciplining mechanism for incumbent management, incentivising it to take on optimal risk.⁶⁴ However, this is not the case in banks, where the highly levered nature of the balance sheet impedes to internalise the adverse effects of excessive risk-taking. Most of the risk is shifted to creditors.

Fourth, the implicit State guarantee on banks solvency (i.e.: bailout expectation). The debate over the desirability of saving banks with taxpayers' money is still nowadays open.⁶⁵ Two sets of cost of bailouts are unquestionable. On the one hand, there are raw costs borne

⁶⁰ On the role of trust in financial market and regulation see, among many others, Carin van der Cruijsen, Jakob de Haan and David-Jan Jansen, 'Trust and Financial Crisis Experiences' (2016) 127 Social Indicators Research 577.

⁶¹ On systemic risk, see the formal model by Viral V Acharya, 'A Theory of Systemic Risk and Design of Prudential Bank Regulation' (2009) 5 Journal of financial stability 224; and its empirical application in Viral V Acharya and others, 'Measuring Systemic Risk' (2017) 30 Review of Financial Studies 2.

⁶² A list of Global Systemically Important Banks (G-SIBs) is produced by the Financial Stability Board and updated annually. An up to date list can be found in the FSB website at <u>https://www.fsb.org/work-of-the-fsb/policy-development/addressing-sifis/global-systemically-important-financial-institutions-g-sifis/</u>

⁽accessed 05-02-2020). For a critical evaluation of the designation procedure see Katarzyna Parchimowicz, 'Three Hidden Issues in the List of Global Systemically Important Banks' (2020) Oxford Business Law Blog https://www.law.ox.ac.uk/business-law-blog/blog/2020/01/three-hidden-issues-list-global-systemically-important-banks. (accessed 05-02-2020).

⁶³ Mülbert and Citlau (n 57) 20.

⁶⁴ Timothy D Lane, 'Market Discipline' (1993) 40 IMF Staff Papers 53.

⁶⁵ Especially in Europe, where this debate is linked to the State Aid regulation as a measure to preserve competition.

by the State (i.e.: taxpayers) for bailing banks out.⁶⁶ Moreover, and arguably more importantly, the *ex-ante* incentives had been perversely shaped due to the expectation of a future bailout, inducing moral hazard in carrying out banking activities.⁶⁷

Finally, but of utmost importance, the distress of financial institutions needs a quick solution⁶⁸ to be effective, so that judicial-based bankruptcy procedures are inherently inappropriate to match this requirement. Therefore, it appears reasonable and proportionate⁶⁹ to design a quick administrative procedure that minimises the time necessary to enforce and implement the resolution.

In the aftermath of the crisis, the general public and many politicians emphasised the raw and direct costs of bailing-out banks, strongly proposing a shift in paradigm from bailout to bail-in to safeguard taxpayers' money.⁷⁰ Such proposals gained political momentum and led the Financial Stability Board to draft the "Key Attributes of Effective Resolution Regimes for Financial Institutions"⁷¹ and subsequently in the EU to the BRRD.

3.2 The Bank Recovery and Resolution Directive (BRRD)

The first draft of BRRD was published in June 2012. Afterwards, in August 2013, the European Commission issued a Banking Communication establishing⁷² a mandatory burden-sharing of losses among shareholder and subordinated debt holders. Accordingly, the Burden Sharing Communication stated that the contribution of inside investors (namely, stockholders, hybrid capital holders and subordinated debt holders) should represent the condition for any public intervention (State Aid) in banking crises.⁷³ That

⁶⁶ During the 2007-08, crisis almost 37% of aggregate EU Member State GDP was spent to avoid banks failure. See ECB, EU Banking Structure, September 2010.

⁶⁷ Emmanuel Farhi and Jean Tirole, 'Collective Moral Hazard, Maturity Mismatch, and Systemic Bailouts' (2012) 102 American Economic Review 60.

⁶⁸ The resolution of distressed institutions needs to begin after the closing of Wall-Street on Friday and before the opening of Japan and China stock exchanges on Monday, in a time-window of about 38 hours. See Thomas Huertas, 'European Bank Resolution: Making It Work!' (2016) 9.

⁶⁹ See Recital 92 BRRD.

⁷⁰ Jianping Zhou and others, 'From Bailout to Bail-in: Mandatory Debt Restructuring of Systemic Financial Institutions' [2012] Journal Issue 3; Paul Calello and Wilson Ervin, 'From Bailout to Bail-In' 30 *The Economist* (2010).

⁷¹ Financial Stability Board, 'Key Attributes of Effective Resolution Regimes for Financial Institutions' (2011).

⁷² ⁷² Communication from the Commission on the application, from 1 August 2013, of State aid rules to support measures in favour of banks in the context of the financial crisis ('Banking Communication'). 2013/C 216/01.

⁷³ Banking Communication, paragraph 3.12.

document informed the approach of the European Legislator in addressing bail-in, seen at first as a mechanism to redistribute losses, in response to the widespread perceived unfairness of bailouts.⁷⁴

In May 2014, the European Parliament approved the Bank Recovery and Resolution Directive, which entered into force the 31st December of the same year.⁷⁵ The redistributive approach appears crystal-clear already in the recital n. 1: "During the crisis, those challenges [lack of tools for addressing banking crises] were a major factor that forced Member States to save institutions using taxpayers' money. The objective of a credible recovery and resolution framework is to obviate the need for such action to the greatest extent possible".⁷⁶

The resolution framework consists of mainly three parts: Preparation (Title II), Early intervention (Title III) and Resolution (Title IV). The Directive provides four main resolution tools: the sale of business tool, the bridge-bank tool,⁷⁷ the bridge institution tool,⁷⁸ the asset separation tool⁷⁹ and the bail-in tool.⁸⁰ Among these tools, the bail-in represents the most innovative and intrusive one. Hence, it entered into force one year after the rest of the Directive, the 1st January 2016.⁸¹

The introduction of the bail-in tool brought up the attention of several scholars and practitioners so that an extensive literature about its general features has developed.⁸² A bail-in of a distressed bank consists of the power of resolution authorities to write down⁸³

⁷⁴ Wolf-Georg Ringe, 'Bank Bail-In between Liquidity and Solvency' (2016) 92 Am. Bankr. LJ 299.

⁷⁵ As mentioned before in fn (n 8), the SRMR complements the BRRD for the Euro Area Counties. Given the general nature of the analysis, that can applies to all European Member States, the rest of this chapter as well as the proceeding of the book only refers to the BRRD provision, since the SRMR provision are almost always identical and the slight differences never impact on the general validity of the arguments proposed here.

⁷⁶ Emphases added.

⁷⁷ Article 38 BRRD.

⁷⁸ Article 40 BRRD.

⁷⁹ Article 42 BRRD.

⁸⁰ Article 43 BRRD.

 $^{^{\}rm 81}$ Articles 130 and 131 BRRD.

⁸² See in particular Chris Bates and Simon Gleeson, 'Legal Aspects of Bank Bail-Ins' (2011) 5 Law and Financial Markets Review 264; Thomas Conlon and John Cotter, 'Anatomy of a Bail-In' (2014) 15 Journal of Financial Stability 257; Emilios Avgouleas and Charles Goodhart, 'Critical Reflections on Bank Bail-Ins' (2015) 1 Journal of Financial Regulation 3; Bart PM Joosen, 'Bail in Mechanisms in the Bank Recovery and Resolution Directive', *Annual Conference of the Netherlands Association for Comparative and International Law* (2014); Armour (n 12).

⁸³ Article 63(1)(e) BRRD.

or convert into ordinary shares⁸⁴ eligible liabilities issued by the resolved bank. Therefore, bail-in materialises in a balance sheet operation to recapitalise and restore the viability of the distressed bank.⁸⁵

As a first approximation, the bail-in is a mechanism that preserves a "likely to fail" institution as a going concern without any government intervention.⁸⁶ Shareholders and creditors mandatorily bear the losses, according to the seniority order of their claims. Therefore, bank failures no longer threaten taxpayer money.⁸⁷

The idea of bail-in is particularly attractive since it promises to offer the regulator an alternative to State intervention for the resolution of too big, too complex or too international to fail institutions.⁸⁸ Indeed, both Financial Stability Board and Basel Committee stressed the importance of implementing the bail-in reform specifically for SIFIs,⁸⁹ while the EU adopted the one-size-fits-all approach to establish a level played field within European banking market.⁹⁰ In the policy-making desiderata, the bail-in should avoid resorting to taxpayers' money and wipe out, once and for all, the too-big-too-fail policy by eliminating the government implicit guarantee on domestic bank solvency.⁹¹

Nonetheless, tremendous uncertainties and worries remain about bail-in effectiveness and efficiency. Many commentators argue that an open-bank bail-in will never happen because of the reluctance of resolution authorities to affect non-shareholders investors.⁹² That is the result of both the perceived unfairness of involving creditors in the resolution procedure⁹³ and the persistence of bailout expectations.⁹⁴

Such persistence of bailout expectations and, conversely, the lack of credibility of bail-

⁸⁴ Article 63(1)(f) BRRD.

⁸⁵ John Armour and others, *Principles of Financial Regulation* (Oxford University Press 2016).

⁸⁶ Bates and Gleeson (n 79) 4.

⁸⁷ Zhou and others (n 68) 5.

⁸⁸ Bates and Gleeson (n 79) 2.

⁸⁹ Systemically Important Financial Institutions.

⁹⁰ João AC Santos, 'Evidence from the Bond Market on Banks''Too-Big-To-Fail'Subsidy' [2014] Economic Policy Review 29; Charles Goodhart and Emilios Avgouleas, 'A Critical Evaluation of Bail-in as a Bank Recapitalisation Mechanism' in Franklin Allen, Elena Carletti and Joanna E Gray (eds), *Bearing the Losses from Bank and Sovereign Default in the Eurozone* (FIC Press 2014) 30.

⁹¹ See, among many others, John C Coffee Jr, 'Systemic Risk after Dodd-Frank: Contingent Capital and the Need for Regulatory Strategies beyond Oversight' (2011) 111 Colum. L. Rev. 795.

⁹² Ringe (n 72) 29. There, some preliminary anecdotal evidence is provided.

⁹³ Iris HY Chiu, 'Corporate Governance: The Missing Paradigm in the Mandatory Bail-in Regime for Creditors of Banks and Financial Institutions' [2014] Journal of business law 611.

⁹⁴ Armour (n 12).

in is due to several ambiguities inherent to the resolution framework. First, important legacy issues are preventing a full-fledge application of the new rules. For instance, a substantial fraction of eligible liabilities currently outstanding were issued before the FSB Key Attributes, the first draft of BRRD and the 2013 Banking Communication. Therefore, holders could not price bail-in possibility when purchasing those financial instruments. Moreover, especially in some countries as Italy (see, Figure 1) unsophisticated investors (mostly households) holds a considerable amount of those instruments without having a sufficient understanding of the entailed risk.⁹⁵ That is one of the reasons why Italian Resolution Authority (Resolution Unit of the Bank of Italy) is resistant to make use of bail-in powers.⁹⁶

Holders - Italian Banks - Italian Households - Italian Institutions of which other financial intermediaries investment funds companies - Foreign investors	Amount 3 31 8,1 3,1 2,2 2,2 13,2	Share 5,11% 52,81% 13,80% 5,28% 3,75% 3,75% 22,49%			
			- Not classified	3,4	5,79%
			Total	58,7	100,00%

Holders of banks subordinated debt (Data in billion €)

Figure 1 - Banks Subordinated Debt Market in Italy⁹⁷

Second, there is no clear consensus about the amount of bail-in eligible liabilities

⁹⁵ Martin R Götz and Tobias Tröger, 'Should the Marketing of Subordinated Debt Be Restricted/Different in One Way or the Other? What to Do in the Case of Mis-Selling?' (2016).. For a deeper and wider analysis, see Chapter 6.

⁹⁶ Ringe (n 72) 29. On the Monte Paschi Siena case, see Christos Hadjiemmanuil, 'Monte Dei Paschi: A Test for the European Policy Against Bank Bailouts' (2017) Oxford Business Law Blog https://www.law.ox.ac.uk/business-law-blog/blog/2017/05/monte-dei-paschi-test-european-policy-against-bank-bailouts>. (Accessed 05-02/2-2-).

⁹⁷ Bank of Italy, 'Informazione Sui Detentori Di Obbligazioni Subordinate [Information about Subordinated Bond Holders]' (2015) https://www.bancaditalia.it/media/approfondimenti/2016/obbligazioni-subordinate/index.html.

needed.⁹⁸ BRRD ask for bank-specific Minimum Requirements of Eligible Liabilities (MREL).⁹⁹ At the international level, the Financial Stability Board issued guidelines for SIFIs requiring, in a not yet wholly define timespan, to comply with a "Total Loss Absorbency Capacity" (TLAC) requirement¹⁰⁰ that should amount to 18 % of RWA by 2022.¹⁰¹ The revised version of the BRRD¹⁰² tried to handle such shortcoming disciplining in greater detail the rules and procedure for MREL calibration. The future implementation strategy of the resolution authorities will reveal whether such attempt will suffice.

Third, beyond the ambiguities due to the lengthy implementation and adjustment period, many commentators cast doubts about the very ability of bail-in to cope with systemic crises. While there is a widespread consensus that bail-in is a superior mechanism to address idiosyncratic crises of non-systemic institutions, many scholars argued that bail-in might even increase systemic risk¹⁰³ and facilitate contagion in case of a systemic crisis.¹⁰⁴

Fourth, another problematic issue pertains the moment and the condition in which the resolution have to be triggered. The normative framework sets two general and nonquantitative criteria for triggering a resolution procedure: the institution has to be failing or likely to fail,¹⁰⁵ with no prospect that any other measure will solve the distress. Moreover, the resolution has to be "necessary for the achievement of and is proportionate to one or more of the resolution objectives referred to in Article 31" (public interest test).¹⁰⁶ These criteria stated by the Directive leave considerable discretion to the resolution authority.

⁹⁸ Christos Hadjiemmanuil, 'Bank Stakeholders' Mandatory Contribution to Resolution Financing: Principle and Ambiguities of Bail-In', *ECB Legal Conference 2015 - From Monetary Union to Banking Union, on the way to Capital Markets Union* (2015); Armour and others (n 82).

⁹⁹ Article 45 BRRD.

¹⁰⁰ Financial Stability Board, 'Principles on Loss-Absorbing and Recapitalisation Capacity of G-SIBs in Resolution - Total Loss Absorbency Capacity' (2011).

¹⁰¹ According to some authors setting capital requirements and TLAC requirement high enough represents a necessary and sufficient means to avoid any future banking crisis. See Jeffrey N Gordon and Wolf-Georg Ringe, 'Bank Resolution in the European Banking Union: A Transatlantic Perspective on What It Would Take' (2015) 115 Colum. L. Rev. 1297; Anat R Admati and others, 'Fallacies, Irrelevant Facts, and Myths in the Discussion of Capital Regulation: Why Bank Equity Is Not Socially Expensive' (2013) 23.

¹⁰² Directive (EU) 2019/879 of the European Parliament and of the Council of 20 May 2019 amending Directive 2014/59/EU as regards the loss-absorbing and recapitalisation capacity of credit institutions and investment firms and Directive 98/26/EC. OJ L 150, 7.6.2019.

¹⁰³ As defined in Steven L Schwarcz, 'Systemic Risk' (2008) 97 Geo. LJ 193.

¹⁰⁴ Neel Kashkari, 'Lessons from the Crisis: Ending Too Big to Fail', vol 16 (2016); Steven L Schwarcz, 'Misalignment: Corporate Risk-Taking and Public Duty' (2016) 91 Notre Dame L. Rev. 1, 26.

¹⁰⁵ Such determination is taken by the competent and not by the resolution authority. Hence, for significant Eurozone banks the SSM is entitled to determine whether a bank is failing or likely to fail.

¹⁰⁶ Article 32 (1) and (5) BRRD.

Therefore the concrete implementation of them will depend on a choice of resolution policy.¹⁰⁷ Recently, Ringe¹⁰⁸ argued in favour of an early resolution trigger, treating the distressed institution in a going concern.¹⁰⁹ That approach follows how the understanding of the bail-in nature has developed: from a "redistribution" towards a "stabilisation" focus.

The last noteworthy issue still closely relates to the development of bail-in toward a stabilisation mechanism. A bank bail-in consists in a mandatory recapitalisation of a distressed institution operated by an administrative authority. From a stability perspective, a mere recapitalisation of a bank is a necessary but not sufficient step to assure its viability. The bailed-in bank will need extensive liquidity assistance. The inability to credibly provide sufficient liquidity in resolution currently represents one of the most debated and fundamental shortcomings of the entire framework, sensibly decreasing the credibility of resolution.¹¹⁰

4. Ex-ante Tools and the Credibility of Resolution

As discussed in the previous section, there are several theoretical and practical issues undermining the credibility of the EU resolution framework. The first attempts to resolve ailing banks encountered more obstacles than expected while drafting the BRRD.

So far, the only real case of a full-fledged resolution is the case of Banco Popular Español¹¹¹. The bank entered in resolution on 7 June 2017, after the decision of the Single Resolution Board.¹¹² The resolution happened through a "sale of business" tool, transferring of all the shares to Banco Santander.¹¹³ Apart from this sole case, the other cases of distressed banks happened after the BRRD entered into force were handled out of

¹⁰⁷ The public interest test was crucial in the resolution decision of the so-called Veneto Banks in 2017. The SSM certified that the banks were "failing or likely to fail" but the SRB decided that a fully-fledged resolution was not in the "public interests" so that the banks were liquidated according to Italian Law on bank insolvency (Articles 80 and ff. of the Consolidated Banking Law). See Ioannis G Asimakopoulos, 'The Veneto Banks Resolution: It Shall Be Called "Liquidation" (2018) 15 European Company Law 156.

¹⁰⁸ Ringe (n 72).

¹⁰⁹ See also Goodhart and Avgouleas (n 87) 10.

¹¹⁰ See Ringe (n 72). See also the policy report by the European Parliament. Willem Pieter de Groen, 'Financing Bank Resolution: An Alternative Solution for Arranging the Liquidity Required' (2018) PE 624.423.

¹¹¹ Currently many claims are pending in from of the Board of Appeal of the Single Resolution Board.

¹¹² The ECB, in its supervisory capacity, declared the Banco Popular failing or likely to fail on 6 June.

¹¹³ On the resolution of Banco Popular, see more generally Isabel Fernández Acín, 'Caso Banco Popular (Banco Popular Case)' (2018) https://papers.srn.com/sol3/papers.cfm?abstract_id=3132293>.

resolution.114

Given such a lack of credibility and the high level of uncertainty in its application, one might question the relevance and importance of having a resolution framework in place. While this chapter does not aim to provide arguments in favour or against the efficiency and efficacy of the EU resolution framework; it aims to highlight that it embeds several features having the potential to improve ex-ante the resilience of the individual institutions and, to a more limited extent, of the financial system as a whole.¹¹⁵

Section 5 widely discusses these features; yet, it is worth to preliminarily scrutinise few arguments generally supporting my claim. There are two main channels through which the resolution framework hinges upon the behaviour of financial institutions out of distress.

First, regulating the "end game" changes the incentives of the bank and its risk-takers also ex-ante, though backward induction. In more rigorous terms, financial institutions discount the ex-ante probability of incurring losses ex-post in resolution, adjusting their risk appetite accordingly.¹¹⁶ For this kind of mechanism to work, the credibility of ex-post application is crucial: the bank is going to discount losses in resolution as long as they believe that losses will materialise in case of distress. However, the level of credibility that is needed is not the certainty about the full application of the resolution framework, but some degree of probability to bear at least a fraction of losses should the bank enter in distress. In this respect, the post-crisis state of affairs sharply improved and burden sharing exercises,¹¹⁷ even without fully applied resolution, are now relatively common.¹¹⁸

¹¹⁴ It is not here possible to provide a detailed description of all the case. For an excellent survey, see Karel Lannoo, 'Uneven Progress in Implementing Cross-Border Bank Resolution in the EU' (2017) No 2017-26.

¹¹⁵ Luca Enriques, Alessandro Romano and Thom Wetzer, 'Network-Sensitive Financial Regulation' [2019] The Journal of Corporation Law (forthcoming).

¹¹⁶ The argument is the same for bankruptcy law in non-financial corporation. See widely Robert K Rasmussen, 'The Ex Ante Effects of Bankruptcy Reform on Investment Incentives' (1994) 72 Wash. ULQ 1159; Douglas G Baird and Robert K Rasmussen, 'Private Debt and the Missing Lever of Corporate Governance' [2006] University of Pennsylvania Law Review 1209. For a formal model explaining why different "end game" rules affect behaviours in good time, see Francesca Cornelli and Leonardo Felli, 'Ex-Ante Efficiency of Bankruptcy Procedures' (1997) 41 European Economic Review 475.

¹¹⁷ Banking Communication 2013.

¹¹⁸ In this sense, the decision to allow the precautionary recapitalization of the Monte dei Paschi Bank is paradigmatic. Commissioner Vestager declared: "Commissioner Margrethe Vestager, in charge of competition policy, said: "We have approved Italy's capital injection into MPS in line with EU rules, which will help MPS meet capital needs in case economic conditions were to worsen unexpectedly. [...]. This capital injection could only be approved after junior bondholders and shareholders have contributed to the costs of restructuring, in line with "burden-sharing" requirements under EU state aid rules". See EU Commission Press-release (4 July 2017), available at https://ec.europa.eu/commission/presscorner/detail/en/IP 17 1905 (accessed 05-02-2020).

Second, to make the resolution process feasible from both a theoretical and practical perspective, granting the resolution authority with ample and discretionary powers once a resolution is triggered is not enough: both the resolution authority and the bank need to be ready for the resolution.¹¹⁹ For this reason, the BRRD encompasses many tools that ease the task of the resolution authority in resolution and, at the same time, have the potential to change the behaviour and the incentives of financial institutions in good time. For the time being, it is sufficient to generally refer to resolution planning as the quintessential tool in this respect.¹²⁰ As mentioned in Chapter 1, resolution planning will not be discussed any further as it falls out of the scope of the analysis. The understudied links between resolution planning and governance incentives are left to future research.

The fact that the resolution framework has an impact on behaviours and incentives in good time raises the question of whether, how and to what extent, such impact is desirable. The answer to such question crucially depends on the type of crisis one has in mind. The case of an idiosyncratic crisis, where only one institution enters in distress with little or no spillovers on the rest of the financial system, sharply differs from a systemic crisis.

In the case of idiosyncratic events, the credibility of the bail-in is going to be comparatively higher once, if ever, the legacy issues discussed in the previous section will be solved. Therefore, it is reasonable to argue that efficiently exploit the ex-ante potential of the BRRD tools would reduce the probability of an idiosyncratic crisis, as bankers would have incentives to discount ex-ante the probability of a bail-in. Or, in other words, internalise at least some of the costs of future bankruptcy. Moreover, the ex-ante effect of the resolution framework, especially for the part related to bail-inable creditors and debt governance (Section 5), can increase themselves the credibility of the ex-post resolution, triggering a virtuous circle between ex-ante effect and ex-post credibility. Increasing the role of junior creditors in the decision-making of the bank makes, from a political perspective, the use of a bail-in more viable.¹²¹

On the contrary, in case of a systemic event, the threat of a plain open bank bail-in is likely never to become credible. In the financial system "trust" plays a quintessential role,

¹¹⁹ Armour (n 12) 14.

 ¹²⁰ Emilios Avgouleas, Charles Goodhart and Dirk Schoenmaker, 'Bank Resolution Plans as a Catalyst for Global Financial Reform' (2013) 9 Journal of Financial Stability 210.
 ¹²¹ Chiu (n 91) 617.

and the existence of a public back-up reassuring the market players is of utmost importance:¹²² governments are likely always back up systemic banks in a systemic crisis.

In this context, optimal ex-ante discipline minimises the necessity for a back-stop intervention much more efficiently than the losses ex-post "redistribution" performed by a bank bail-in could do. In this perspective, debt governance through bail-inable creditors can play a positive role in limiting the build-up of systemic risk in good time.

5. The Ex-ante Potential of the Resolution Regulation and Debt Governance

The legal and financial literature have discussed the limited ability of bank creditors to impose discipline on the borrowing banks over the last decades.¹²³ Such inability was usually attributed only to the implicit or explicit bailout expectation.¹²⁴ Therefore, the enactment of a comprehensive resolution framework aiming at ending the bailout policy promised to bring about also a functioning market-based discipline capable of complementing financial regulation and supervisory oversight.¹²⁵

Such promise of positive spillovers of the resolution framework to this day has remained mostly undelivered. This has several reasons. First and foremost, the resolution framework and its no-bailout commitment are not fully credible. However, this cannot fully explain the failure of debt governance. As argued earlier in Section 4, even though plain open-bank bail-ins have not yet being used, burden sharing exercises with severe losses allocated to junior bondholders have become somehow common.¹²⁶ In other words, even if the bail-in threat were fully credible, market discipline would likely remain suboptimal.

¹²² On the role of trust in banking and the disruptive effects of mistrust during the Global Financial Crisis, see David-Jan Jansen, Robert HJ Mosch and Carin AB van der Cruijsen, 'When Does the General Public Lose Trust in Banks?' (2015) 48 Journal of Financial Services Research 127. For the role of the public backstop with specific reference to the European financial system, see Gros and Schoenmaker (n 43).

¹²³ For a comprehensive and up to date survey, see Mark J Flannery and Robert R Bliss, 'Market Discipline in Regulation: Pre-and Post-Crisis' in Allen N Berger, Philip Molyneux and John OS Wilson (eds), *Oxford Handbook of Banking* (3rd edn, Oxford Handbook of Banking (3rd edition), Oxford University Press, forthcoming 2018).

¹²⁴ Following the seminal model by Douglas W Diamond and Philip H Dybvig, 'Bank Runs, Deposit Insurance, and Liquidity' (1983) 91 Journal of political economy 401.

¹²⁵ Financial Stability Board (n 69); Zhou and others (n 68) 23.

¹²⁶ See, for instance, the discussion on the precautionary recapitalization of Monte dei Paschi Bank, back in note 118

There are, indeed, other elements preventing market discipline to fully function and forbidding junior creditors to positively impact bank governance ex-ante. On the one hand, some elements tightly relate to the legal design of the resolution framework; on the other hand, other elements are grounded, more generally, on the theory of banking and corporate governance.

Among the elements related to the legal design of the resolution framework, the literature focused particularly on the excessive complication of the resolution framework, especially when it comes to the requirements and procedure to set MREL.¹²⁷ Moreover, the competing policy objectives set down in Article 31 of the BRRD, among which the "maintenance of market discipline" generated a legal framework not completely apt to correctly incentivise bail-inable creditors to exert adequate discipline.¹²⁸

As mentioned above, on top of the elements related to the design of the resolution framework, there are further, more general impediment to market discipline. To understand this key element of the entire analysis, it is worth taking a step back and discussing how debt governance functions in non-financial firms. Usually, creditors can impose discipline¹²⁹ on the borrowing firm by monitoring its activities and correctly pricing the issued debt as well as through contractual entitlements embedded in debt contracts, granting the creditor with specific control rights. These rights, such as a right to speed up principal amount repayments, can be activated if the situation of the borrowing firm deteriorates over a certain threshold defined in the contract.

Having said that, once the bailout expectations will disappear, debt governance will function as well as in non-financial firms, and creditors will impose discipline on the borrowing banks sounds appealing. This implies un underlying and often unspoken assumption: the traditional channels for debt governance are going to function smoothly. Yet, this is unlikely to be the case. Bank governance is, nowadays, known to be special as compared with corporate governance of other non-financial firms.¹³⁰ Many elements make bank governance "special"; for what is here of interests, two elements are quintessential:

¹²⁷ Tobias Tröger, 'Why MREL Won't Help Much' (2019) 20 Journal of Banking Regulation.

¹²⁸ See at length Chapter 4. On the specific case of NCWO principle, see Chiu (n 91) 627.

¹²⁹ "Market discipline means that financial markets provide signals that lead borrowers to behave in a manner consistent with their solvency". See Lane (n 62) 55.

¹³⁰ Marco Becht, Patrick Bolton and Ailsa Röell, 'Why Bank Governance Is Different' (2011) 27 Oxford Review of Economic Policy 437.

the opaqueness of bank assets and the relationship between governance and regulation.

The ability to monitor and price the debt issued by the banks crucially rely on the ability to convey and compute all the relevant information on the value of banks' assets. However, bank's assets are inherently opaque, making the task of effective and efficient monitoring particularly burdensome for bank creditors.

Second, and perhaps most importantly, the ability of creditors to contingently allocate some control rights through contracts, as they do in non-financial firms, is severely limited by regulation. There is a tension between market discipline imposed by creditors ex-ante and financial stability considerations. Coming back to the previous example of financial covenants, the right to ask for early repayment of the debt conferred upon creditors contingent on the deterioration of banks performance represent a disciplining mechanism, as it provides the borrowing firm with incentives compatible to avoid such deterioration (i.e.: avoid to take gambles that increase the risk of breaching the covenant). Yet, if that happened in banking, it is likely to create stability concerns. Indeed, a bank whose stability and resilience are decreasing would need to repay part of its creditors in a moment when attracting fresh funds in the market is particularly challenging. Therefore, the rules on both capital instruments and the minimum requirement for eligible liabilities (MREL) disqualify instruments embedding this type of clauses in their contracts.¹³¹

This represents a paradigmatic example of how the relationship between financial regulation and bank governance might be entangled. However, what regulation took away from creditors, regulation can give back. If one wants debt governance to work, resorting to specific regulatory arrangements represents the only possible way to proceed. Therefore, in the proceeding of the dissertation, after an in-depth positive analysis of the impact of the BRRD on bank governance, two main regulatory proposals are put forward. Both these proposals aim at fine-tuning the specificities of bank governance with the substantive financial regulation and, especially, the resolution framework.

In conclusion, it is worth noting that having a resolution framework for ailing banks in place is strictly necessary, though not sufficient, to improve debt governance and make it a valuable complement to current regulation and supervisory oversight. Possible policy

¹³¹ This point is widely developed in Chapter 5. See also Fiona Mann and others, 'Market Discipline and UK Bank Bondholders' (2017) 57 Bank of England Quarterly Bulletin 26.

strategies to make debt governance work will be discussed later on in the dissertation.¹³²

6. Conclusion

This chapter reviewed the rationale of the European Resolution framework and briefly discussed the context in which it is embedded, the European Banking Union, as well as its main features. In so doing, the chapter highlighted the main shortcomings of the new resolution framework according to the legal and economic literature. Particular attention was devoted to those shortcomings that undermine the credibility of the application of the resolution framework.

The link between the ex-ante credibility of resolution and the ability of bail-inable debt holders to discipline the borrowing bank is crucial to understand whether having the resolution framework in place helps to improve the resilience of banking institutions.

The analysis reveals that the existence of a resolution framework is a necessary yet not sufficient element to exploit the full potential of debt governance in financial firms. Moreover, the chapter argues that the credibility of the resolution framework is not the only element at play. On the one hand, the full and consistent credibility of resolution and predictability of its outcome is not strictly necessary. The expectation of suffering non-trivial losses, also in the form of burden-sharing exercises, can provide bail-inable creditors with incentives to discipline the borrowing institution toward risk-taking appetite that is consistent with bank solvency. On the other hand, there are legal, and material obstacles for bail-inable creditors to exert efficient discipline and such obstacles go beyond the credibility of the resolution framework.

The proceeding of the dissertation discusses at length the obstacles to effective and efficient market discipline by bail-inable debtholders. In particular, Chapter 4 discusses the ability and willingness of bail-inable creditors to monitor the activities and risk profile of the borrowing banks given the legal design of the BRRD. Chapter 5 discusses the legal and material availability of contractual devices embedded in debt contracts. Chapter 6 tackles

¹³² See Chapters 7 and 8.

directly the main material obstacle to debt governance, i.e.: the composition and identity of bail-inable debtholders.

PART II

The impact of the new resolution framework on Bank Governance: a positive analysis Part II – Positive Analysis

Chapter 4 - The Bail-In Beyond Unpredictability

Creditors Incentives and Market Discipline

Abstract

Market Discipline of creditors on risk-taking behaviours of borrowing banks represents a long-lasting debate. Such a debate gained new attention after the post-crisis stream of reforms concerning resolution policy: creditors should have incentives to engage in optimal in monitoring their borrowers. Many commentators criticised such an expectation, especially in the European context, arguing that the lack of credibility and excessive complexity of the resolution mechanism impairs the ability and willingness of creditors to exert a disciplining role.

This chapter aims at taking a step forward in this scientific debate. The analysis finds that the design of the Directive inherently impairs the disciplining activity of bail-inable creditors. To do so, the chapter reviews the literature on Market Discipline, then carries out a legal analysis of the Bank Recovery and Resolution Directive (BRRD), focusing on those norms shaping the market for bail-inable securities. According to the existing literature, in an ideal environment where resolution is fully credible, creditors should have optimal incentives to monitor banks' behaviours. The chapter discussed the rules shaping the incentives of bail-inable creditors and shows that the legal design of the BRRD prevents, itself, an efficient level of market discipline from bail-inable creditors.

The analysis highlights that the BRRD legal design inherently dilutes the incentives of creditors toward market discipline because of competing policy objectives pursued by the Directive. The direct normative consequence of such a finding is that enhancing information and predictability, through desirable in principle, will never lead to optimal monitoring effort, leaving the floor to alternative rule-based strategies.

Keywords: Bank Resolution, Bail-inable Creditors, Market Discipline, No-Creditors-Worse-Off; State Aids.

1. Introduction

This chapter aims at assessing the role of creditors in imposing market discipline on the risk-taking behaviour of banking institutions. Regulators and academics have long since discussed the ability of junior creditors to correctly and continuously assess the risk profile of their borrower, promptly react to that information and, thus, impact managers' behaviour.¹ Nevertheless, the creation of the Banking Union and, more specifically, the implementation of the Bank Recovery and Resolution Directive (BRRD)² have bestowed a new fashion to the market discipline debate in the banking sector.

An extensive amount of literature highlighted the peculiar mechanisms of corporate governance in banks.³ In particular, the conventional wisdom in Corporate Governance, according to which maximising shareholders' value leads to a socially optimal outcome, was questioned. The very nature of banking activity shifts this paradigm and generates incentives toward excessive risk-taking.⁴

In contrast, bondholders are, broadly speaking, interested in limiting the risk-taking policies of their borrower, so that the expected return on their investment increases. Therefore, in the banking sector, their incentives have been considered more aligned with the socially optimal outcome than the shareholders' one. The BRRD has reinforced this contingency has been reinforced, at least according to the policymaker.⁵

The policy goal of ending the too-big-to-fail problem led, among many other things, to the creation of a category of creditors whose claims can be written down to recapitalise distressed institutions, the so-called bail-inable creditors. The resulting incentives of bail-

¹ BCBS, 'A New Capital Adequacy Framework' (1999); Timothy D Lane, 'Market Discipline' (1993) 40 IMF Staff Papers 53.

² DIRECTIVE 2014/59/EU OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 15 May 2014, establishing a framework for the recovery and resolution of credit institutions and investment firms. Hereinafter, "BRRD" or "the Directive".

³ See, among many others, Marco Becht, Patrick Bolton and Ailsa Röell, 'Why Bank Governance Is Different' (2011) 27 Oxford Review of Economic Policy 437.

⁴ John Armour and others, 'Bank Governance' (2016) ECGI Law Working Paper 316/2016.

⁵ Within the Euro Area, the Single Resolution Mechanisms Regulation (SRMR) discipline the powers of Resolution Authorities. Nonetheless, since the resolution tools, the resolution objectives and the condition for resolution are identical in the BRRD and the SRMR, there is no need for differentiation. This approach has been widely applied, see for instance Alex Kunde, 'Legal Constraints on Resolution Measures and the Application of the Bail-in Tool under BRRD and SRMR', *ECB Legal Conference 2015 - From Monetary Union to Banking Union, on the way to Capital Markets Union* (2015).

inable creditors should match the social objective. i.e: avoiding, or at least preventing and mitigating, bank distresses.⁶ The BRRD itself makes clear that a renewed push toward market discipline represents a cornerstone of the regulatory architecture: "The bail-in tool will therefore give shareholders and creditors of institutions a stronger incentive to monitor the health of an institution during normal circumstance".⁷

Beyond these intuitive arguments, the ability of bail-inable creditors to influence managers' risk-taking attitude represents an open and heavily discussed issue. Specifically, this chapter aims at tackling a narrower question: within the BRRD framework, are bailinable creditors provided with appropriate incentives to engage in efficient monitoring? How do they differ from the previous regime?

This represents more than a theoretical exercise, as the answer to this question has relevant consequences for extent to which the new resolution framework can enhance, exante, the resilience of the banking system, decreasing the risk-taking appetite of financial institutions.

Many commentators cast doubts on the ability of bail-inable creditors to discipline bankers. So far, the literature has only focused on impediments exogenous to creditors preventing them from exerting Market Discipline. These impediments mainly stem from two factors: the lack of credibility of the bail-in tool,⁸ and the high level of unpredictability of the bail-in process, due to the high complexity of the legal design and the considerable discretion granted to supervisory and resolution authorities.⁹

This chapter goes beyond the standard critiques posed by the literature, arguing that, even assuming a world of certainty and full predictability, the outcome in terms of creditors' monitoring would not be efficient because of the legal design of bail-in. This, in turn, is ultimately rooted in the competing policy objective pursued by the Directive.¹⁰ The

⁶ Jianping Zhou and others, 'From Bailout to Bail-in: Mandatory Debt Restructuring of Systemic Financial Institutions' [2012] Journal Issue 3.

⁷ Recital 67 BRRD.

⁸ Charles Goodhart and Emilios Avgouleas, 'A Critical Evaluation of Bail-in as a Bank Recapitalisation Mechanism' in Franklin Allen, Elena Carletti and Joanna E Gray (eds), *Bearing the Losses from Bank and Sovereign Default in the Eurozone* (FIC Press 2014).

⁹ Tobias Tröger, 'Why MREL Won't Help Much' (2019) 20 Journal of Banking Regulation.

¹⁰ See article 31(2) BRRD. For further explanation on resolution objectives see Section 3.

chapter aims at testing the following hypothesis: the legal design of the BRRD inherently dilutes the incentives for creditors to engage in monitoring activity.

This represents a valuable contribution that complements and enrich the present state of the literature since it signals that the capacity of market discipline is inherently impaired. This holds even if, in the medium- or long-term, the resolution regimes will become fully credible, and legal reforms or consistent praxis will solve the elements of unpredictability.

In so doing, the chapter discusses the theoretical expectations on the disciplining role of bail-inable creditors and discusses the relevant legal rules shaping the status of bailinable creditors, highlighting how they should impact on creditors incentives ex-ante. Then, the smooth functioning of both bail-in and market for bail-inable securities is assumed, so that the legal design of the BRRD remains the only element affecting the incentives of creditors. Afterwards, the rules on creditor's treatment are conceptualised in terms of exante incentives toward monitoring, highlighting that the legal design itself dilutes monitoring incentives for bail-inable creditors.

The contribution to the current state of the literature is threefold. First, a detailed and comprehensive legal analysis of the rules shaping the market for bail-inable securities addressed through the eyes of the investors is missing. Second, it builds a conceptual framework that allows to analyse and partly explain the ex-ante decisions of creditors in term of monitoring. Finally, the analysis highlights that the interplay of multiple policy objectives carried out by the new recovery and resolution framework entails unintended negative consequences.

The chapter is structured as follows: Section 2 defines market discipline in the context of bank relying on the relevant economic theories and their regulatory implications. Section 0 discusses the post-crisis regulatory environment for recovery and resolution of distressed banks in Europe, highlighting its expected impact on Market Discipline. Section 3 analyses the norms shaping the legal status of bail-inable creditors; pinpointing the different policy objectives such rules stem from. Section 4 sets the necessary assumptions for the incentive analysis of the BRRD legal design and conceptualises the rules on creditors treatment in term of ex-ante monitoring incentives. After the definition of the baseline incentive structure (5.1), the analysis focusses on the impact of the No Creditors Worse Off Rule (5.2.1) and the rule on the possibility of granting public aids after the bail-in (5.2.2), showing how they dilute the incentives toward monitoring of the investors. Section 5.3 provides anecdotal evidence supporting the findings of the research. Section 6 concludes.

2. Market Discipline in Banking: a Review of Theories and Regulation

Market Discipline is a complex and multifaceted concept. Hence, a preliminary and comprehensive definition may be of use, since such a concept might be obscure, especially in the legal domain.¹¹ Lane¹² defined market discipline as the ability of financial markets to provide signals leading borrowers to engage in projects consistent with their solvency.

Market discipline is not a bank-specific concept.¹³ Market discipline means the ability of the investors to influence the decision-making of the companies they invest in by adjusting the price to the risk profile of the company. Price adjustment is not the only disciplining mechanism in banking, although it is the most prominent one. For instance, contractual clauses can have disciplining effects¹⁴ as well as debt governance through voice.¹⁵ Price adjustment, contracts and voice can be seen as complementary mechanisms; nonetheless, only the other mechanisms fall out of the scope of this chapter. Discipline through price adjustment has been seen as the dominant channel, especially in the policy discourse, as the proceeding of this section will show. Moreover, since these channels are complementary, focusing only on price adjustment and leaving aside the other channels does not hamper the overall argument.¹⁶

¹¹ There are many channels for disciplining behaviours, this analysis solely focuses on the price adjustment according to the risk profile of bank activities.

¹² Lane (n 1) 55.

¹³ ibid 54. The clearest example is the disciplining effect of bankruptcy that imposes a budget constraint on the entrepreneur shifting the control rights of the corporation to creditors contingent on the event of default. See János Kornai, 'Hardening the Budget Constraint: The Experience of the Post-Socialist Countries' (2001) 45 European Economic Review 1573; Philippe Aghion and Patrick Bolton, 'An Incomplete Contracts Approach to Financial Contracting' (1992) 59 The review of economic Studies 473. This optimises, at least theoretically, the ex-ante cost of finance. See, Alan Schwartz, 'A Contract Theory Approach to Business Bankruptcy' (1998) 107 The Yale Law Journal 1807.

¹⁴On the ability of financial contracting over bail-inable securities to discipline banks behaviours see Chapter 5.

¹⁵ This represents a heavily understudied aspect, especially in the European legal domain. For a general framework on that matter see John Armour and Jeffrey N Gordon, 'Systemic Harms and Shareholder Value' (2014) 6 Journal of Legal Analysis 35; Steven L Schwarcz, 'Misalignment: Corporate Risk-Taking and Public Duty' (2016) 91 Notre Dame L. Rev. 1.

¹⁶ The complementarity between exit and voice in influencing decision-making is well established in the literature, stemming from the seminal work by Hirschman. See Albert O Hirschman, *Exit, Voice, and Loyalty: Responses to Decline in Firms, Organizations, and States*, vol 25 (Harvard University Press 1970).

In its financial connotation, the underlying mechanisms on which the disciplining power of the market rely are the Efficient Capital Market Hypothesis (ECMH)¹⁷ and the ability of prices to convey information.¹⁸

Nonetheless, in the context of financial institutions, market discipline is something different as well as something more than the stock market monitoring for non-financial firms,¹⁹ even though these mechanisms share the same fundamentals. Market discipline in financial institutions does not only cope with the efficiency of prices given the available information. It also interplays with regulatory discipline for minimising the threats to financial stability.²⁰ Thus, it is not by chance that the literature, especially in the last three decades, focused prominently on banking since the information produced can be used for supervisory purposes, potentially acting as a complement of prudential regulation.

Accordingly, Sironi²¹ defines market discipline as the ability of financial markets to discipline banks' behaviour by pricing their borrowings according to their risk profile. Such a definition relies on two underlying assumptions, as pointed out and critically discussed by Bliss.²² First, bond yields spread reflects the risk of individual banks; second, the payoff matrices of debtholders and regulator closely resemble one another. The latter assumption highly depends on both the institutional set-up and the type of debt instrument held by the investor as it involves the shape of principal-agent conflicts at stake. Thence, when discussing the new regulatory framework, the arguments about its impact on market discipline are going to question whether such an assumption holds true.

¹⁷ Eugene F Fama, 'Efficient Capital Markets: A Review of Theory and Empirical Work' (1970) 25 The journal of Finance 383.

¹⁸ Sanford Grossman, 'On the Efficiency of Competitive Stock Markets Where Trades Have Diverse Information' (1976) 31 The Journal of finance 573. This view has been heavily challenged, for instance, by Hellwig. See Martin F Hellwig, 'On the Aggregation of Information in Competitive Markets' (1980) 22 Journal of economic theory 477, where the author incorporates "noise" in the analysis of financial information and Robert E Verrecchia, 'Information Acquisition in a Noisy Rational Expectations Economy' [1982] Econometrica: Journal of the Econometric Society 1415, where the author considers the case in which information costs are positive. In both those scenarios, the ability of market prices to reflect firm's information efficiently is impaired.

¹⁹ Bengt Holmstrom, 'Understanding the Role of Debt in the Financial System' (2015) No. 479.

²⁰ Mark J Flannery and Robert R Bliss, 'Market Discipline in Regulation: Pre-and Post-Crisis' in Allen N Berger, Philip Molyneux and John OS Wilson (eds), *Oxford Handbook of Banking* (3rd edn, Oxford Handbook of Banking (3rd edition), Oxford University Press, forthcoming 2018).

²¹ Andrea Sironi, 'Testing for Market Discipline in the European Banking Industry: Evidence from Subordinated Debt Issues' (2003) 35 Journal of Money, Credit, and Banking 443.

²² Robert R Bliss, 'Market Discipline and Subordinated Debt: A Review of Some Salient Issues' (2001) 25 Economic Perspectives 24.

Before closely discussing its relevant aspects of market discipline, it is worth noting how, in the realm of banking, market discipline must be considered as a governance device, as it represents the mean through which creditors impact managers' behaviour.²³ Indeed, as Pacces and Heremans pointed out: "all aspects of behaviour of financial firms can be ultimately understood as Corporate Governance issue".²⁴

Building on our working definition, the proceeding of the section discusses the channels through which market discipline impacts on bankers' behaviours, the conditions for making market discipline effective and, finally, the different regulatory approaches toward market discipline and their evolution over time.

The economic literature disentangled various aspects of market discipline and identified several conditions under which debt holders can effectively impinge upon bank governance. In particular, Kwast et al.²⁵ disentangled a direct and indirect channel of influence. On the one hand, investors can directly push managers toward activities with lower risk profile increasing the cost of funds for riskier banks. At the same time, the movement of market prices may indirectly attract the attention of the supervisor, feeding them with new relevant information. Consistently with the motivation and the goal of this research, the direct channel is going to be the most considered; nonetheless, it essential to bear in mind that also the indirect disciplining channel works in the background.

Four key conditions ought to hold for both the direct and indirect channels of discipline to effectively work.²⁶ First, the relevant market has to be open and freely accessible to make interest rates sensitive to borrower's risk profile.²⁷ Second, lenders need to have access to all relevant information about borrower's debt.²⁸ Third, crucially, markets participants

²³ On the agency conflict between shareholders and creditors and the peculiar shape it assumes in banking, where high leverage magnifies the incentives to shift the risk to unsecured creditors, see extensively Becht, Bolton and Röell (n 32) 459.

²⁴ Alessio M Pacces and Dirk Heremans, 'Regulation of Banking and Financial Markets', *Encyclopedia of Law and Economics - Volume 9* (Edward Elgar 2012) 33. Corporate governance has been defined as: "the ways in which supplies of finance assure themselves of getting a return on their investment". See Andrei Shleifer and Robert W Vishny, 'A Survey of Corporate Governance' (1997) 52 The journal of finance 737, 3.

²⁵ Myron L Kwast and others, 'Using Subordinated Debt as an Instrument of Market Discipline' (1999) 172 Report of a Study Group on Subordinated Notes and Debentures, M. Kwast, Chair. Board of Governors of the Federal Reserve System, Staff Study.

²⁶ On those conditions, see extensively Lane (n 1).

²⁷ See also Hal S Scott, 'Market Discipline for Financial Institutions and Sovereigns' in Claudio Borio (ed), *Market Discipline across Countries and Industries* (MIT Press 2004).

²⁸ Andrew Crockett, 'Market Discipline and Financial Stability' (2002) 26 Journal of Banking & Finance 977.

should have no bailout expectations. This condition consists of two distinct aspects: the commitment of the government not to bail out a failing firm and the credibility that such a commitment generates toward the market. Finally, the borrower needs to be able and willing to respond to the market signal and adjust its risk profile accordingly.²⁹ Increasing the interest rate represents an efficient answer to risk-taking only up to a certain level of risk, beyond such a level, the borrower runs out of funding opportunities and is out of the market. This latter prospect is, by no means, in line with safeguarding the solvency of the firm.³⁰

Regarding the openness of the market, despite some specific and minor foreclosures, the market has to be considered open so that no impediments to market discipline arise from this perspective.³¹ On the contrary, the other three conditions raise delicate problems. The full availability of information is, by the very design of commercial bank business model, impaired given the maturity and liquidity mismatched of bank assets and liabilities.³² As for the second condition, the bank is better positioned than any other investors in monitoring and screening the quality of its own assets because of their inherent opacity.³³ This impairs the ability of bank creditors to impose efficient discipline on bank management; therefore, to alleviate such problem, regulators imposed massive disclosure obligations on banks.

Also, the third condition (i.e.: lack of bailout expectations) has proven to be problematic in banking³⁴ where the State, historically, has implicitly guaranteed bank

²⁹ David T Llewellyn, 'Inside the 'Black Box' of Market Discipline' (2005) 25 Economic Affairs 41.

³⁰ In the context of banking, and especially in the context of the latest financial crisis, this point proved to be highly problematic and crucially linked with the (lack of) liquidity available in the market. On this specific aspect see Brunnermeier and Pedersen (n 35); whereas the specific case of perverse effect of market discipline through the latest financial crisis is detailed at the end of this section.

³¹ An instance in which market foreclosure can impair market discipline is the geographical segregation of banking activities that were common before the liberalization wave of the 90s both in Europe and in the U.S. After the crisis, some new foreclosures have been proposed and debated, as, for instance, a ban on retail sale of subordinated debt. See Martin R Götz and Tobias Tröger, 'Should the Marketing of Subordinated Debt Be Restricted/Different in One Way or the Other? What to Do in the Case of Mis-Selling?' (2016). Nevertheless, this kind of foreclosure seems to be socially desirable and, at the same time, preserve market discipline from more severe impairments.

³² John Armour and others, *Principles of Financial Regulation* (Oxford University Press 2016).

³³ Douglas W Diamond, 'Financial Intermediation and Delegated Monitoring' (1984) 51 The review of economic studies 393.

³⁴ Between 2008 and 2017, the European Commission approved over 5 trillion euro of State Aid toward the banking sector to cope with the latest financial crisis. Data is retrievable at <u>http://ec.europa.eu/competition/state_aid/scoreboard/index_en.html</u> (accessed on 27 March 2019).

solvency to avoid massive systemic externalities stemming from bank failures.³⁵ Therefore, investors expect not to suffer losses in case of bank distress; accordingly, their sensitivity to the risk profile of the borrowing bank decreases. This impairs their ability to price debt according to the risk profile of the borrowing bank.³⁶ Crucially, the new resolution framework is supposed to smoothen market discipline by eliminating, or at least minimising, bailout expectation.³⁷

Finally, banks have a limited ability to promptly adjust the risk profile in response to market signals, mainly because of the inherent maturity mismatch between assets and liabilities. Arguably this can be a merely theoretical problem in times of economic expansions when the markets are liquid³⁸ and the bank can adjust the composition of its assets and liabilities at low cost. On the other hand, in times of economic and financial turmoil, when liquidity dries up, adjusting the balance sheet to react to market signals might be disruptive. Fire sales may be needed, and funding opportunity might not be available for any reasonable price. This proved to be a decisive element in spreading and worsening the latest financial crisis.³⁹

The extent to which the assumptions stated earlier hold has been lively and is still far from being settled. The same goes for the debate on fulfilment of the conditions for market discipline to work. Three main approaches to the debt-discipline narrative are worth mentioning, as they entail radically different approaches from a regulatory perspective.

The first can be labelled as the "substitutability approach" according to which, the market is in a better position than the supervisor to discipline managers' behaviours

³⁵ Marco Bodellini, 'Corporate Governance of Banks and Financial Stability: Critical Issues and Challenges Ahead' (2018) 39 Business Law Review 160. On top of those arguments, Avguleas and Cullen introduced into the analysis also behavioural features, arguing that - in line with the behavioural economics stream of literature - shareholder and stakeholders are not able to exactly convey and process the complex amount of information they are provided with. See Emilios Avgouleas and Jay Cullen, 'Market Discipline and EU Corporate Governance Reform in the Banking Sector: Merits, Fallacies, and Cognitive Boundaries' (2014) 41 Journal of Law and Society 28.

³⁶ João AC Santos, 'Evidence from the Bond Market on Banks''Too-Big-To-Fail'Subsidy' [2014] Economic Policy Review 29.

³⁷ Zhou and others (n 6). More details, especially for the European resolution framework, are provided in Section 3.

 ³⁸ Pistor defines liquidity as "the ability to sell any asset for the other assets or cash at will". Katharina Pistor,
 'A Legal Theory of Finance' (2013) 41 Journal of Comparative Economics 315, 316.

³⁹ Markus K Brunnermeier, 'Deciphering the Liquidity and Credit Crunch 2007-2008' (2009) 23 Journal of Economic perspectives 77.

because of the higher quantity and quality of available information.⁴⁰ Thus, the direct disciplining channel is by far and large the most relevant one. The normative consequence of such an approach is financial deregulation and less stringent capital requirements⁴¹ complemented by pervasive regulation on disclosure and transparency to overcome the inherent information asymmetry problem.⁴²

A different, moderate, approach looks at market discipline mostly as a complement to supervisory activities. In such a complementary approach, the literature commonly differentiates two channels through which market discipline operates. Thus, market discipline can be defined as the combination of "mere" market monitoring and market influence,⁴³ the first being the ability of investors to screen, detect changes in firm's condition and incorporate them into the price of the security. On the other hand, "market influence" defines the investors' impact on banks behaviours,⁴⁴ pushing them toward "sustainable policies".⁴⁵ Following this approach, direct and indirect disciplining channels are equally relevant.

A third, more radical, approach denies the aptness of financial markets to discipline banks managers. Particularly, Admati and Hellwig⁴⁶ argue that the discipline of short-term debt in banking is "little more than a myth". Following their claim for high equity-capital requirements as the only credible method to enhance systemic resilience,⁴⁷ these authors contrast the narrative according to which debt holders can discipline the behaviour of bank management. On the contrary, they explain the reliance on short-term debt as an equity avoidance strategy, seeking a government subsidy on debt.

⁴⁰ See, theoretically, Charles W Calomiris and Charles M Kahn, 'The Role of Demandable Debt in Structuring Optimal Banking Arrangements' [1991] The American Economic Review 497.

⁴¹ Charles W Calomiris, 'Blueprints for a New Global Financial Architecture' in Leonardo Auernheimer (ed), International Financial Markets: The Challenge of Globalization (The University of Chicago Press 1998).

⁴² Erlend Nier and Ursel Baumann, 'Market Discipline, Disclosure and Moral Hazard in Banking' (2006) 15 Journal of Financial Intermediation 332.

⁴³ Bliss (n 22).

 ⁴⁴ Mark J Flannery, 'The Faces of "Market Discipline" (2001) 20 Journal of Financial Services Research 107.
 ⁴⁵ Lane (n 1) 56.

⁴⁶ Anat R Admati and others, 'Fallacies, Irrelevant Facts, and Myths in the Discussion of Capital Regulation: Why Bank Equity Is Not Socially Expensive' (2013) 23.

⁴⁷ Anat Admati and Martin Hellwig, *The Bankers' New Clothes: What's Wrong with Banking and What to Do about It* (Princeton University Press 2014).

The prevalence of any of these approaches in the policy debate has shaped the regulatory approach to market discipline. Since the effectiveness of the market discipline, as well as its efficiency, highly depends on the incumbent regulatory framework; it is useful to briefly examine the regulatory context where market discipline operated in the last decades. The deregulatory wave of the 80s and 90s and the increasing academic attention to market discipline in the banking sector marked its first cornerstone in the regulatory landscape with the Basel II Accords. Following Calomiris⁴⁸ and Meyer,⁴⁹ the Basel Committee for Banking Supervision issued a consultative paper on capital adequacy⁵⁰ stating that: "supervisors have a strong interest in facilitating effective market discipline as a lever to strengthen the safety and soundness of the banking system". Afterwards, market discipline became a Pillar, together with minimum capital requirements and supervisory review of capital adequacy, of the prudential regulation in the final version of Basel 2 Accords.⁵¹ In the end, despite different policy proposals, the channel through which the Pillar III rules aimed at strengthening market discipline was through regulation about transparency and disclosure of information. This testifies that, especially in the early 2000s, the substitutability approach won over the others.

In the aftermath of the financial crisis, the new version of the Basel accords has maintained the overall regulatory framework. However, the role of the supervisor has increased, and the regulation is stricter, leaning toward the complementary approach. Indeed, despite the academic and regulatory desiderata, market discipline mechanisms massively failed both in the period leading up to and during the financial crisis. In particular, it failed to detect and prevent the build-up of systemic risk during good times, relying too much on the information provided by Credit Rating Agencies (CRAs) and Credit Default Swaps (CDSs).⁵² On the contrary, during the crisis, disciplining mechanisms functioned even too much, tightening the credit sources for risky institutions, with adverse repercussion in

⁴⁸ Calomiris (n 41).

 ⁴⁹ Laurence H Meyer, 'Market Discipline as a Complement to Bank Supervision and Regulation', Speech before the Conference on Reforming Bank Capital Standards, Council on Foreign Relations, New York, June (1999).
 ⁵⁰ BCBS (n 1).

⁵¹ Jose A Lopez, 'Disclosure as a Supervisory Tool: Pillar 3 of Basel II' (Federal Reserve Bank of San Francisco 2003) 22.

⁵² Constantinos Stephanou, 'Rethinking Market Discipline in Banking: Lessons from the Financial Crisis' (2010) 5227 11.

the overall market confidence.⁵³ The required haircut for short-term secured funding, such as repos, represents a paradigmatic case in this regard. Haircuts remained negligible until the beginning of the financial crisis and skyrocketed as it began, failing to constrain the excessive risk-taking in good times and impeding market participants to access funding at reasonable conditions once liquidity dried up.⁵⁴ In other words, markets played an ex-post role which was nor informative neither disciplining. The effects were not in line with the ultimate goal of preserving banks' solvency ex-ante, and the market did not act as a gatekeeper of financial stability.

In the aftermath of the financial crisis, the framework in which market discipline operates has changed. The Green Paper on Corporate Governance in financial institutions and remuneration policies, issued by the EU Commission⁵⁵ focuses on a market-based approach to corporate governance, highlighting the role of monitoring both from shareholders and debt holders. Moreover, the reforms focused not only on providing the (allegedly) efficient quantity and quality of information, as it is under Pillar III rules but also in incentivising creditors to exert market influence.

In this same vein, the Financial Stability Board, in its Key Attributes for Effective Resolution,⁵⁶ states that an effective resolution regime should "be credible, and thereby enhance Market Discipline and provide incentives for market-based solutions". The EU legal implementation of the Key Attributes and the legal rules affecting market discipline represent, therefore, the next building block of the analysis.

⁵³ ibid 9.

⁵⁴ Gary Gorton and Andrew Metrick, 'Securitized Banking and the Run on Repo' (2012) 104 Journal of Financial economics 425. For a more sophisticated setting where the perverse incentives provided by bankruptcy remoteness to short term secured creditors is taken into account, see Rafael Matta and Enrico C Perotti, 'Insecure Debt' (Centre for Economic Policy Research 2015) No.1050.

⁵⁵ European Commission, 'Corporate Governance in Financial Institutions and Remuneration Policies'.

⁵⁶ Financial Stability Board, 'Principles on Loss-Absorbing and Recapitalisation Capacity of G-SIBs in Resolution - Total Loss Absorbency Capacity' (2011).

Market Discipline and the Banking Union: Economic Rationale and Legal Framework

Since the first draft of the BRRD⁵⁷ came out, back in 2012, many authors have criticised it because of its excessive complexity and lack of clarity.⁵⁸ Nevertheless, the European Legislator, even without directly addressing the issue, made a point crystal clear: in the new regulatory environment the channel for creditors to discipline banks' behaviour has to be through bail-inable securities.⁵⁹ This view is opposed to the narrative about short term debt discipline that was mainstream in the early 2000s.⁶⁰

Thus, before analysing the role of bail-inable creditors in disciplining their borrower, it is worth describing the rationale and the main rules on resolution procedures in the BRRD (Section 3.1) and the specific rules governing the position of creditors (Section 3.2).

3.1 A glance at Resolution and Bail-in

The Bank Recovery and Resolution Directive entered into force in its entirety the 1st January 2016. Its main goals are, generally speaking, twofold: protecting taxpayers' money by limiting the too-big-to-fail problem and harmonise bankruptcy procedure for financial institution throughout the European Union.

The first goal is not a European peculiarity:⁶¹ back in January 2010, presenting the Dodd-Frank Act, President Obama affirmed: "Never again will the American taxpayer be held hostage by a bank that is too big to fail".⁶² One year later, the Financial Stability Board

⁵⁷ While writing this chapter a proposal for reforming the BRRD is pending. In this piece, the current version of the BRRD is solely considered insofar as the fact that the proposed modifications do not hamper, and maybe even reinforce, the argument proposed. The text of the proposal for the so-called BRRD2 can be retrieved at https://data.consilium.europa.eu/doc/document/ST-6290-2019-INIT/en/pdf.

⁵⁸ Emilios Avgouleas and Charles Goodhart, 'Critical Reflections on Bank Bail-Ins' (2015) 1 Journal of Financial Regulation 3. For an analysis of the implementation of the first resolution cases in Italy and the relevant decision-making mechanisms, see Lorenzo Stanghellini, 'The Implementation of the BRRD in Italy and Its First Test: Policy Implications' (2016) 2 Journal of Financial Regulation 154.

⁵⁹ Flannery and Bliss (n 20).

⁶⁰ Thomas M Eisenbach, 'Rollover Risk as Market Discipline: A Two-Sided Inefficiency' (2017) 126 Journal of Financial Economics 252.

⁶¹ Peter Sester, 'Towards a Transnational Bank Restructuring Law-The Attempt of G20 to Initiative and Monitor Regulatory Responses to the Too Big To Fail Problem' (2010) 7 ECFR 512.

⁶² On the too-big-to-fail problem and its legal implication in the European context see Rolef de Weijs, 'Too Big to Fail as a Game of Chicken with the State: What Insolvency Law Theory Has to Say about TBTF and Vice Versa' (2013) 14 European Business Organization Law Review 201.

issued the Key Attributes for Effective Resolution,⁶³ stating in its preamble that: "An effective Resolution regime should [...] not rely on public solvency support and not create an expectation that such support will be available".

The BRRD represents, to a certain extent, the European implementation of the Key Attributes.⁶⁴ Indeed, consistently with the Financial Stability Board viewpoint, it immediately states that: "The objective of a credible recovery and resolution framework is to obviate the need for such action [bailouts] to the greatest extent possible".⁶⁵

On the other hand, the goal of harmonising resolution procedure is European-specific and aimed at answering to the severe problem faced in resolving cross-border banks during the financial crisis.⁶⁶ The lack of a common toolkit caused delay and inefficiencies in handling failing cross-border banks, such as the cases of Fortis and Dexia.⁶⁷

The pivotal insight provided by the BRRD is that bank insiders ought to bear losses arising from bank distress, at least at first, shifting the paradigm from bailout to the bailin.⁶⁸ This way, substantive regulation on bank distress complements the Burden Sharing rule imposed by the European Commission in the Banking Communication in 2013, according to which aids to failing banks comply with the EU State Aid framework only if the investors in bank capital bear part of the losses.⁶⁹

 ⁶³ Financial Stability Board, 'Key Attributes of Effective Resolution Regimes for Financial Institutions' (2011).
 ⁶⁴ Peter G Brierley, 'Ending Too-Big-To-Fail: Progress Since the Crisis, the Importance of Loss-Absorbing Capacity and the UK Approach to Resolution' (2017) 18 European Business Organization Law Review 457.
 ⁶⁵ Recital 1 BRRD.

⁶⁶ Jens-Hinrich Binder, 'Cross-Border Coordination of Bank Resolution in the EU: All Problems Resolved?', *Research Handbook on Cross-Border Bank Resolution* (Edward Elgar Publishing 2019).

⁶⁷ M Cihak and Erlend Nier, 'The Need for Special Resolution Regimes for Financial Institutions-The Case of the European Union' [2012] Harv. Bus. L. Rev 395.The necessity to avoid fragmentation and establish a common framework for bank insolvency was highlighted, unsuccessfully, also before the financial crisis. See, in particular, Eva HG Hüpkes, 'Insolvency - Why a Special Regime for Banks?', *Current developments in monetary and financial law, Vol. 3* (International Monetary Fund 2002)..

⁶⁸ Paul Calello and Wilson Ervin, 'From Bailout to Bail-In' 30 *The Economist* (2010); Jeffrey N Gordon and Wolf-Georg Ringe, 'Bank Resolution in the European Banking Union: A Transatlantic Perspective on What It Would Take' (2015) 115 Colum. L. Rev. 1297.

⁶⁹ Communication from the Commission on the application, from 1 August 2013, of State aid rules to support measures in favour of banks in the context of the financial crisis ('Banking Communication'). 2013/C 216/01.

The BRRD provides the resolution authority with four main tools to implement resolution: the sale of business tool,⁷⁰ the bridge bank tool,⁷¹ the asset separation tool⁷² and the bail-in tool.⁷³ The bail-in tool represents the archetype of the new resolution framework⁷⁴ as it provides the resolution authority to write down or convert into equity some part of the banks' liabilities to set off the losses and restore regulatory capital.⁷⁵ To assure that resolution is at any time possible, the Resolution Authority has the power to determine a tailored-made Minimum Requirement for Own Funds and Eligible Liabilities (MREL) to be held by any individual bank at any time.⁷⁶

A resolution procedure begins when the competent authority designates a bank to be failing or likely to fail.⁷⁷ Moreover, there should be no reasonable prospect of alternative private solutions and, crucially, the resolution shall be in the public interest.⁷⁸

The Resolution Authority has no absolute power on the implementation of the resolution procedure. Indeed, it has to pursue the specific resolution objectives set out in Article 31(2). Namely, the Resolution Authority must have regard to ensure the continuity of critical functions; avoid adverse effects on the financial system; preserve market discipline; protect public funds and protect insured depositors. Importantly, the Directive states that the resolution objectives are of equal significance and should be balanced as

⁷⁰ Article 38 BRRD.

⁷¹ Article 40 BRRD.

⁷² Article 42 BRRD.

⁷³ Article 43 BRRD.

⁷⁴ Avgouleas and Goodhart (n 58); Wolf-Georg Ringe, 'Bank Bail-In between Liquidity and Solvency' (2016) 92 Am. Bankr. LJ 299.

⁷⁵ Karl-Philipp Wojcik, 'Bail-in in the Banking Union' (2016) 53 Common Market Law Review 91, 107.ibid 113. For deeper details on eligible liabilities and the application of the bail-in see Section 3. The power to write down and convert capital instrument can be used also outside resolution pursuant to Article 63 BRRD, yet liabilities that are not part of regulatory capital can suffer losses through write down of principal amount and/or conversion only in resolution.

⁷⁶ Wojcik (n 75) 113. On the problems specific to MREL design and calibration see Tröger (n 9). On the differences between MREL and the Total Loss Absorbency Capacity (TLAC) mandated by the FSB to the Globally Systemic Institutions see Ashley Lee, 'TLAC Conundrums' (2015) 34 Int'l Fin. L. Rev. 17; Tom Young, 'Why TLAC and BRRD Discrepancies Will Fade' [2015] Int'l Fin. L. Rev.

⁷⁷ Article 32(1)(a) BRRD. For more details, see the guidelines of European Banking Authority. EBA, 'Guidelines on the Interpretation of the Different Circumstances When an Institution Shall Be Considered as Failing or Likely to Fail under Article 32(6) of Directive 2014/59/EU. EBA/GL/2015/07' (2015).

⁷⁸ Article 32(5) BRRD. See Jens-Hinrich Binder, 'Proportionality at the Resolution Stage: Calibration of Resolution Measures and the Public Interest Test' [2019] European Business Organization Law Review 1. The public interest test proved to be crucial in the recent cases involving Banca Popolare di Vicenza, Veneto Banca and ABLV. The non-confidential material on these cases is available at https://srb.europa.eu/en/content/banca-popolare-di-vicenza-veneto-banca (accessed 04-02-2020).

appropriate.⁷⁹ Intuitively, balancing broad objectives that might be even competing one another can create significant implementation issues.

For the sake of simplicity, let's assume that Resolution Authority decides to apply the bail-in tool.⁸⁰ The Authority has to calculate the amount of liabilities that must bear losses.⁸¹ Such an assessment needs to follow the preliminary valuation of assets and liabilities carried out pursuing Article 36. The amount of bailed-in liabilities should be enough to cover all the losses and restore the level of required capital.⁸²

After such a determination, Articles 47 and 48 disciplined the sequence according to which the bail-in has to be applied: first, the holders of shares bear the losses; subsequently, other creditors can suffer losses if capital instruments have a lower value than the one calculated pursuant to Article 46. The creditors suffer losses in accordance with the seniority of their claim as provided by the national insolvency laws.

The expected outcome of the procedure is to make the institution, which was "failing or likely to fail", viable again⁸³. Furthermore, Articles 73-75 BRRD provide for ex-post safeguards for the claimholders involved in the resolution process.⁸⁴

3.2 A New Channel for Market Discipline (?)

Over time, the increasing awareness of the peculiar nature of banking firms made clear that depositors were unable to monitor and discipline their banks and had to be fully insured.⁸⁵ In the same way, trying to impose market discipline through other types of creditors turned out to be unsatisfactory and, sometimes, disruptive.

⁷⁹ Article 31(3) BRRD.

⁸⁰ The proceeding of the argument would be functionally identical for other resolution tools.

⁸¹ Article 31(2) BRRD.

⁸² Article 46 BRRD. See Wojcik (n 75) 110.

⁸³ It is possible, and likely, that the bail-in tool is used together with other resolution tools (Articles 38-42) so that the resulting bank is not the same legal entity that entered in resolution. Nonetheless, the outcomes are functionally identical.

⁸⁴ Wojcik (n 75) 122.

⁸⁵ A clear and spectacular example of the need for full deposit insurance is the Northern Rock run, back in 2007; the first physical bank run since the collapse of City of Glasgow Bank in 1878. At that point in time, the UK deposit insurance scheme was covering only the 90% of the deposited amount, on the assumption that depositors would have monitored more and better having some skin in the game. On this issue see extensively Dalvinder Singh and John Raymond LaBrosse, 'Northern Rock, Depositors and Deposit Insurance Coverage: Some Critical Reflections' (2010) 2010 Journal of Business Law 55.

What conceptually is closer to bail-inable securities, in terms of loss-absorbency capacity,⁸⁶ are Subordinated Notes and Debentures (i.e.: subordinated debt). Indeed, these kinds of securities were widely employed in studying market discipline in the banking sector after 2000.⁸⁷

Nonetheless, the category of subordinated debt differs from bail-inable securities as for the nature and origin of their markets. Subordinated bonds are an entrepreneurial invention based on legal provisions. Bail-inable securities reverse this paradigm. The regulator, through law, builds on entrepreneurial practices and generates a new class of securities. Therefore, the market for bail-inable securities is primarily meant to serve the interests of the regulator.

The Legal Theory of Finance, and its main building blocks,⁸⁸ provides a suitable theoretical background.⁸⁹ Financial markets are a rule-bound system made up of a network of enforceable contractual obligations linking the market participants. The network is inherently hierarchical, meaning that the distance from the apex, where political power and discretion play a major role, is different. In times of crisis, the closer a contractual obligation is to the apex, the higher the ex-ante probability that stability consideration will lead to a relaxation of those obligations.⁹⁰

Within this framework, the BRRD can be seen as an attempt to move the crisis management of banks towards the periphery of the financial system, thereby decreasing the discretion of governments and central banks in terms of timing and methods to address

⁹⁰ What Pistor calls "elasticity of the law". Pistor (n 38) 320.

⁸⁶ This expression is here used *ante litteram*, as the concept arose in the regulatory arena after the financial crisis, see Financial Stability Board (n 63). Loss-absorbing capacity indicates the ability of capital and debt instruments of a bank to absorb losses. Therefore, that is conceptually correct even for the pre-crisis environment.

⁸⁷ See, for instance, Sironi (n 21). A recent review of the empirical literature on the disciplining effect of debt yields is provided by Flannery and Bliss (n 20) 11. Reading through this review makes clear how a clear-cut empirical answer is far from being reached, since the evidences are mixed and highly depend on the design and assumptions of each model. There are also few preliminary empirical studies on market discipline and bail-inable securities, see, with different designs and slightly different results Fabrizio Crespi, Emanuela Giacomini and Danilo V Mascia, 'Bail-in Rules and the Pricing of Italian Bank Bonds' (2018) 25 European Financial Management 1321; Jannic Alexander Cutura, 'Debt Holder Monitoring and Implicit Guarantees: Did the BRRD Improve Market Discipline?' (SAFE 2018) 232.

⁸⁸ Pistor (n 38) 321.

⁸⁹ The Legal Theory of Finance has been successfully used as a framework to assess the European Banking Union and, specifically, the resolution framework. See, for instance, Biljana Biljanovska, 'Aligning Market Discipline and Financial Stability: A More Gradual Shift from Contingent Convertible Capital to Bail-in Measures' (2016) 17 European Business Organization Law Review 105.

failing institutions. On the contrary, the path of bail-inable securities followed the opposite direction: from a peripheral contractually regulated market;⁹¹ the BRRD has imposed rules governing these kinds of instruments and granted discretionary powers to resolution authorities to "relax" contractual obligation in times of crisis.⁹²

To sum up, the market for bail-inable securities originates from legal provisions and is tailored on regulatory goals (i.e.: making distressed banks resolvable).⁹³ The primary channel, at least chronologically, to address banking crises is the Private Sector Involvement, meaning that when resolution is triggered (some of) the private creditors of the distressed bank bear the losses.⁹⁴ This, in the desiderata of the EU legislator, should allow for sufficient recapitalisation of the bank, avoiding any public intervention.

Therefore, the payoff matrix of the regulator/supervisor should be - theoretically - aligned with the payoff matrix of the bail-inable debt holders, so that the theoretical assumption discussed in Section 2 should hold.⁹⁵

This, in turn, would facilitate the alignment of bank insiders with the public interest, through market discipline channels. Article 32(1)(a) states that a necessary condition to trigger resolution is that the institution is "failing or likely to fail". This means that the holders of bail-inable securities will suffer losses once the institution Crosses this threshold. Thence, this latter instance is what both supervisors/regulators and debtholders will strive, ex-ante, to avoid.

Given these regulatory expectations, one would expect the related rules to be consistently in line with providing bail-inable creditors with suitable incentives to engage

⁹¹ The enforcement of contractual obligation "imposing" MD in distressed banks had been a problematic issue in term of systemic stability during the crisis, as pointed out by Stephanou (n 52) 9.

⁹² Ansgar Walther and Lucy White, 'Rules versus Discretion in Bank Resolution' (2019) CERP Discussion Paper 14048.

⁹³ Bail-inable debt can be seen as a class of securities, which is in turn made up of sub-classes according to the seniority of individual securities. Nonetheless, it is highly doubtful that bail-inable creditors can be treated as a class, i.e.: interests are not homogeneous and therefore behaviours can be highly divergent. For the purpose of this study, as it aims to assess the reliability of regulator's *desiderata*, the homogeneity of creditors is assumed as the regulator does.

⁹⁴ Christos Hadjiemmanuil, 'Bank Stakeholders' Mandatory Contribution to Resolution Financing: Principle and Ambiguities of Bail-In', *ECB Legal Conference 2015 - From Monetary Union to Banking Union, on the way to Capital Markets Union* (2015).

⁹⁵ Bliss (n 22).

in monitoring and allowing long-term investors to appreciate the risk profile of the instruments and behave accordingly.

Nonetheless, the interplay between multiple policy goals pursued hampers the possibility to provide bail-inable creditors with optimal incentives. In particular, the protection of property rights of creditors and the preservation of financial stability quest for norms that deviates from the market discipline objective.

3. Market for Bail-inable Securities: the Rules of the Game

The BRRD shapes the market for bail-inable securities so that the analysis of the relevant norms can provide a good perspective on its functioning mechanisms and the resulting incentives for bail-inable creditors. Two main aspects deserve specific attention. On the one hand, BRRD rules can allocate a high degree of discretion to the supervisor or the resolution authority, generating ex-ante uncertainty for the investor. On the other hand, legal provisions may hinge on investors incentives, even out of any discretionary considerations. The two instances are often concurrent; still, disentangling them is crucial.

The relevant norms can be categorised into three broad groups. The first group of norms defines the borders of the market for bail-inable securities (Section 4.1); the second states the principles on the treatment bail-inable creditors treatment (Section 4.2). These groups set the baseline of the analysis. The third group of norms, instead, squeezes overlapping policy goals into the analysis of the market for bail-inable securities Those overlaps modifying creditors incentives toward monitoring by shielding their claims from losses (Section 4.3). This distinction is useful for explanatory purposes, even though it is somehow arbitrary, and overlaps exist.

4.1 Defining the Borders

Article 44 (1) of the BRRD states that, in principle, all the liabilities of the institution are bailinable, allowing resolution authorities to re-engineer the whole liability-side of the bank's balance sheet.⁹⁶ Nevertheless, the proceeding of the same Article and other norms disseminated in the BRRD reduce the scope of application of the bail-in tool.

⁹⁶ Tröger (n 9) 16.

Article 44 (2) and (3) define the claims that are not to be written down or converted into equity if the resolution is triggered.⁹⁷ Specifically, Article 44 (2) legally exempts from bail-in some classes of liabilities. Differently, Article 44 (3) lists the "exceptional" factual instances in which, once the resolution is triggered, the Resolution Authority can discretionally decide to exclude from the bail-in. The rationale behind the exclusion of certain liabilities is, unsurprisingly, to safeguard financial stability.⁹⁸ Hence, the law exempts the deposits covered by Deposit Guarantee Schemes, the short-term claims by other banks or backstop mechanisms and the secured claims. Additionally, the Resolution Authority retains the power not to bail-in, totally or partially, those liabilities necessary to ensure the continuity of critical functions (e.g.: payment systems, IT infrastructure). The same goes for the liabilities whose bail-in might provoke the risk of contagion or run (e.g.: SMEs deposits larger than the covered amount, as expressly stated in the Directive).

The other cases of legal exemptions follow two additional rationales. On the one hand, the Directive aims to avoid *de facto* bailouts, i.e. using public money to recapitalise the distressed banks even through the bail-in mechanism. Therefore, the BRRD exempts liabilities arising from mandatory contribution to Deposit Guarantee Schemes (DGSs)⁹⁹ and Tax and Social Security Authorities. The Directive also exempts those liabilities whose very nature falls outside the resolution purposes, such as retail and employment-related liabilities.

The BRRD allocates further discretion to the Resolution Authority which is entitled to exempt from bail-in on a case-by-case basis some classes of liabilities. Among them, it is worth mentioning the liabilities that are impossible to be promptly bailed-in or whose bail-

⁹⁷ Anna Gardella, 'Bail-in and the Financing of Resolution within the SRM Framework' in Guido Ferrarini and Danny Busch (eds), *European Banking Union* (Oxford University Press Oxford, UK 2015) para 11; Wojcik (n 75) 109.

⁹⁸ Zhou and others (n 6) 13.

⁹⁹ The public nature of the DGSs contributions have been recently questioned by the General Court of the European Union in the so-called "Tercas Case". In that case, the Commission prevented the Italian DGS, "Fondo Interbancario di Tutela dei Depositi ('the FITD')" from covering Tercas negative equity, claiming that it would result in a State Aid. The General Count annulled that decision, stating that the intervention of the FITD would have not resulted in State Aid; see Judgment of the General Court of 19 March 2019 — Italy and Others v Commission (Joined Cases T-98/16, T 196/16 and T-198/16). Such case does not hamper, per se, the argument proposed above, since the contribution due to the DGSs are still exempted for the same ratio. Moreover, the outcome of the case is still uncertain, as the appeal is now pending in front of the ECJ. Finally, it is worth noting that the Italian case might not be prone to general application throughout all Member States. The FITD is *de jure a* private consortium, whereas the vast majority of other DSGs are public entities.

in would provoke value destruction greater than in the scenario where they are not bailedin.¹⁰⁰

Concerning deposits, in Articles 108 and 109, the Directive further specifies their special status. Indeed, Article 108 mandates that non-covered, hence eligible for bail-in, deposits¹⁰¹ ought to be senior in comparison with unsecured, non-preferred claims.¹⁰² Moreover, Article 109 held the Deposit Guarantee Schemes liable for the amount of covered deposits that would have been written down,¹⁰³ making them an additional player that should, theoretically, exert market discipline.¹⁰⁴

Finally, it is important to address one last question: what is the rationale of Article 44? In other words, are its exemption and exceptions meant to discipline issues that do not directly pertain the resolution objectives and procedure, safeguarding the coherence of the framework? Or, on the contrary, do they serve purposes directly linked to the resolution objectives?

Figure 2 summarises the interplay between the resolution objectives, as stated in Article 31, and the rationales behind the provision of Article 44. The table makes clear that,

¹⁰⁰ Wolf-Georg Ringe and Jatine Patel, 'The Dark Side of Bank Resolution: Counterparty Risk through Bail-In' [2019] European Banking Institute Working Paper Series 2019 – no. 31; Oxford Legal Studies Research Paper; Joseph Stiglitz, Benjamin Bernard and Agostino Capponi, 'Bail-Ins and Bailouts: Incentives, Connectivity, and Systemic Stability'.

¹⁰¹ Those are deposits from natural persons and SMEs greater than 100.000 €, pursuing Article 6 of the Directive 2014/49/EU.

¹⁰² Excluding eligible deposits, those are to be considered the most senior bail-in eligible liabilities.

¹⁰³ Article 108(b)(ii) rank this liability as senior compared to any other eligible liability, including eligible deposits.

¹⁰⁴ Maria Nieto, 'Bank Resolution and Mutualization in the Euro Area' (2016) 2 European Economy, Banks, Regulation, and the Real Sector 138. The role of Deposit Guarantee Schemes in Resolution might sharply changed after the General Court of the European Union recently annulled a decision of the European Commission that forbid the Italian Deposit Guarantee to provide aid to Banca TERCAS, forcing it into liquidation. The decision, in the moment I am writing, has still to be published in the official journal, an unofficial version has been published in the form of press release on 19 March 2019 and can be retrieved at: https://curia.europa.eu/jcms/upload/docs/application/pdf/2019-03/cp190034en.pdf.

in general, the exemptions and exceptions of Article 44 directly serve the resolution objectives, as the match between the two is striking, sometimes even at a wording level.

	Resolution Objectives (Article 31)			
	Continuity of Critical Functions	Avoid adverse consequences	Protect public funds and deposits	Protect client funds and assets
Safeguarding Financial Stability	Ensure the continuity of critical functions Art. 44(3)(b)	Original maturity less than 7 days Art. 44(2)(e)(f)	Covered deposits Art. 44(2)(a)	
		Secured Claims Art. 44(2)(b)		
		Avoid contagion and risk of run Art. 44(3)(c)		
Avoid Public subsidy			Preferred Claims of Tax and Social Securities Authorities Art. 44(2)(g)(iii)	
			Liabilities to DGSs Art. 44(2)(g)(iv)	9.
Out of Resolution purposes				Clients' assets and money Art. 44(2)(c)
				Fiduciary relationships Art. 44(2)(d)
Implementati on Issues		Practical impossibility Art 44(3)(a)		
		Avoid value destruction Art 44(3)(d)	a 	

Figure 2 - Article 44 and resolution objectives

Only the exemptions of the liabilities towards employees and retail creditors¹⁰⁵ can be considered exogenous. On the other hand, all the other cases are to be considered a direct application of the provision of Article 31.¹⁰⁶

4.2 Principals on Creditor's Treatment: the Hierarchy and the Equitable Treatment Principles

Article 34 BRRD lists the general principles governing resolution. First of all, unsurprisingly, the Directive states that shareholders bear first losses. Thereupon, the Directive tackles the status of bail-inable creditors, disciplining their treatment under resolution in three

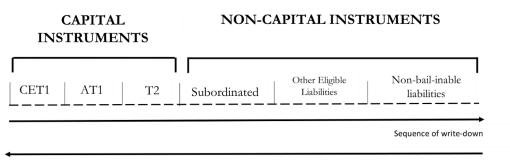
¹⁰⁵ Art. 44(2)(g)(i) and (ii).

¹⁰⁶ For the purpose of the present analysis, i.e.: assessing the impact of the BRRD on the functioning of External Governance mechanisms through market discipline, voting shares fall out of the scope of the analysis as well. Note that, there is no parallel between voting rights and capital class, as even CET1 instruments can be issues without voting rights attached to the capital ones, as expressly state by Article 32(4) Regulation (EU) 575/2013 - CRR.

different directions: the order in which creditors have to bear further losses; the link between creditors belonging to the same class; the relationship between the losses born during resolution and under insolvency proceeding.¹⁰⁷

In resolution, any class of creditors must suffer losses according to the order of priority of their claim under normal insolvency procedures (Hierarchy principle).¹⁰⁸ At the same time, within each class, creditors are treated in an equitable manner (Equitable Treatment principle).¹⁰⁹ Even though the idea behind those two principles appears to be straightforward, their actual functioning is likely to generate more friction than expected because of the complexity of the legal issues tackled by the Directive.¹¹⁰

Article 48 disciplines also the condition for moving from one class of holders to the following one:¹¹¹ the latter can be bailed-in if and only if the bail-in of the previous class was insufficient to smooth out the losses and restore a sufficient level of equity.¹¹²



Loss-absorbency capacity

Figure 3 - Article 48 BRRD: Sequence of write down and conversion

Nonetheless, the bail-in tool cannot be plainly applied only according to the level of loss absorbency. Indeed, for any of the rationales listed in Figure 2, it can happen quite the opposite, as the dashed line in Figure 3 aims at symbolising. For instance, image two

¹⁰⁷ No creditors worse-off, see Section 4.3

¹⁰⁸ Article 34(1)(b) BRRD.

¹⁰⁹ Article 34(1)(f) BRRD.

¹¹⁰ For a detailed analysis of the implementation issues in relation to national insolvency laws, see Lynette Janssen, 'Bail-In from an Insolvency Law Perspective' (2017) 26 Norton Journal of Bankruptcy Law and Practice.

¹¹¹ See Article 47(3) (b) and (c).

¹¹² Pursuant the provisions about capital requirements embedded in the CRR-CRDIV package.

liabilities A and B, belonging to the same class. When bail-in is triggered, the Resolution Authority appraises that is practically infeasible to promptly bail-in Liability A,¹¹³ so the Authority writes-down or converts liability B, while the liability A suffers no losses. The same can happen even if Liability A is junior to Liability B. In the first case, where A and B belong to the same class, Articles 44 relaxes the Equitable Treatment principle. In the second case, where A is junior to B, Article 44 relaxes the Hierarchy principle.

As noted earlier, the exemptions and exceptions contemplated by Article 44 are closely tied to the objectives of resolution themselves, as stated in Article 31.¹¹⁴ Therefore, it is possible to infer that, in the practical implementation of the bail-in tool, unequal treatment may become the rule rather than the exception.¹¹⁵ This, in turn, decreases the predictability of the bail-in outcome, impacting on the incentives of the holders of bail-inable securities to monitor.¹¹⁶

4.3 Market discipline and Competing Policy Objectives: No Creditor Worse-Off (NCWO) Principle

Within any resolution procedure, creditors cannot incur greater losses than those they would have incurred if the institution had been liquidated (NCWO principle).¹¹⁷ Accordingly, creditors who suffer greater losses are entitled to compensation equal to the shortfall they have suffered.¹¹⁸ Intuitively, such a rule impact on the incentives of bail-inable creditors to discipline bankers, as noted by professor Chiu: "no creditor worse off principle could also

¹¹³ Article 44(3)(a).

¹¹⁴ The resolution objectives referred to in paragraph 1 are:

⁽a) to ensure the continuity of critical functions;

⁽b) to avoid a significant adverse effect on the financial system, in particular by preventing contagion, including to market

infrastructures, and by maintaining market discipline;

⁽c) to protect public funds by minimising reliance on extraordinary public financial support;

⁽d) to protect depositors covered by Directive 2014/49/EU and investors covered by Directive 97/9/EC;

⁽e) to protect client funds and client assets.

¹¹⁵ Jens-Hinrich Binder, 'The Position of Creditors Under the BRRD', *Commemorative Volume in memory of Professor Dr. Leonidas Georgakopoulos* (Bank of Greece's Center for Culture, Research and Documentation 2016) 45.

¹¹⁶ Tobias H Tröger, 'Too Complex to Work: A Critical Assessment of the Bail-in Tool under the European Bank Recovery and Resolution Regime' (2018) 4 Journal of Financial Regulation 35, 21.

¹¹⁷ Article 34(1)(g) BRRD.

¹¹⁸ VPG de Serière, 'No Creditor Worse Off in Case of Bank Resolution. Food for Litigation' (2016) 31 Journal of International Banking Law and Regulation 376, 376.

convince bail-inable debt holders that taking a back seat in monitoring would make no difference".¹¹⁹ The proceeding of this section describes the legal concept of NCWO and its impact on the incentives toward monitoring, explaining why the intuitive idea of professor Chiu is likely to materialise.

Functionally, the NCWO principle mandates that investors in bail-inable securities have to be indifferent, between bail-in and liquidation.¹²⁰ Nevertheless, such a welfareenhancing constraint is not through an ex-ante property entitlement, but rather through an ex-post liability rule.¹²¹ The BRRD allocates to the Resolution Authority the power to impact on the claim of bail-inable investors without granting them any procedural or substantive rights during resolution, as opposed to normal insolvency proceedings.¹²² Therefore, the property rights embedded in the bailed-in claims cannot be protected through ex-ante rights preventing the Resolution Authority to cause unjustified harm to bail-inable debtholders. However, the Directive provides some degree of ex-post protection through compensation in case of NCWO violation. Those different approaches in protecting the entitlements of creditors fit the Calabresi and Melamed framework. The first approach, where creditors can prevent the Resolution Authority to impose excessive losses, is a property rule¹²³. On the contrary, the NCWO rule, where creditors are only entitled to an ex-post compensation for the breach of their property entitlements is a liability rule¹²⁴.

The rationale is twofold and reflects the interplay between competing policy objectives. On the one hand, the Directive wanted to avoid obstacles to prompt resolution by waiving all the procedural rights that creditors have in normal bankruptcy procedures,

¹¹⁹ Iris HY Chiu, 'Corporate Governance: The Missing Paradigm in the Mandatory Bail-in Regime for Creditors of Banks and Financial Institutions' [2014] Journal of business law 611, 627.

¹²⁰ This goes under the assumption of perfect compensation in case of detrimental treatment in the implementation of the resolution tool and of absence of judicial costs. See Binder, 'The Position of Creditors Under the BRRD' (n 115) 44.

¹²¹ Pursuing Guido Calabresi and A Douglas Melamed, 'Property Rules, Liability Rules, and Inalienability: One View of the Cathedral' [1972] Harvard law review 1089.

¹²² See, for instance, Articles 38(1), 40(1), 42(1) and 85 BRRD.

¹²³ "An entitlement is protected by a property rule to the extent that someone who wishes to remove the entitlement from its holder must buy it from him in a voluntary transaction in which the value of the entitlement is agreed upon by the seller." Calabresi and Melamed (n 121) 192.

¹²⁴ "Whenever someone may destroy the initial entitlement if he is willing to pay an objectively determined value for it, an entitlement is protected by a liability rule" ibid 192.

so to safeguard financial stability. On the other hand, the NCWO represents a way to protect the creditors' rights through compensation so to respect the right to property.¹²⁵

In a nutshell, NCWO principle should theoretically guarantee the protection of property rights so that creditors have no incentives to engage in disruptive runs in the proximity of resolution.¹²⁶ At the same time, it provides resolution authorities with some degree of flexibility to promptly implement a bail-in.

Indeed, the salient aspect of the NCWO legal design is that the European Legislator has not provided any procedural rights to bailed-in creditors, as opposed to normal insolvency procedures.¹²⁷ This allows to speed up the resolution process, which represents a crucial aspect of the success of any bank resolution.¹²⁸

As previously mentioned, the maximum amount of losses that investors can bear is equal to the amount of losses that they would have born in case of liquidation. This was meant to be a safe harbour for the Resolution Authority,¹²⁹ allowing it to promptly implement any resolution leaving any other order of consideration, as creditors' treatment, to an ex-post valuation. Nevertheless, such a design poses considerable legal challenges, so that many commentators doubt whether this tool can deliver the desired goal.¹³⁰

In applying the bail-in tool, the Resolution Authority has to adhere to the valuation of assets and liabilities carried out ex Article 36.¹³¹ Such a procedure consists of a fair, prudent and realistic valuation carried out by a person independent from any public authority before the Resolution Authority takes any resolution action. The Authority can carry out a

¹²⁵ Wojcik (n 75) 116. On the compatibility of burden sharing exercise in bank distress with the right to property the ECJ delivered a preliminary ruling for a Slovenian Case, in which European Judges deemed that the right to property can be interpreted as not precluding burden sharing of losses (Kotnik and others, Case C-526/14). For a more extensive legal reasoning on the point, see the opinion of Advocate General Wahl, delivered on 18 February 2016 on the same case.

¹²⁶ ibid 120.

¹²⁷ On the ontological difference between bank resolution and insolvency law see Hadjiemmanuil (2015, p. 232).

¹²⁸ Thomas Huertas, 'European Bank Resolution: Making It Work!' (2016).

¹²⁹ Zhou and others (n 6).

¹³⁰ Gardella (n 97); George Jacobs and David Mitchell, 'The No-Creditor-Worse-Off Principle from a Valuation Perspective: Standing in the Shoes of a Hypothetical Liquidator' (2014) 28 Journal of International Banking and Financial Law 233.

¹³¹ Article 46(1) BRRD.

provisional evaluation following a simplified procedure if, as it is likely to be, the urgency of the situation does not allow to perform the independent valuation.¹³²

Article 36(8) mandates the independent expert to include in the valuation an estimate of the treatment that each class of creditors would have been expected to receive under normal insolvency procedure.¹³³ Therefore, in applying the bail-in tool, the Resolution Authority ex-ante complies with the general principle of NCWO by adhering to the preliminary valuation of the counter-factual insolvency scenario.

Nevertheless, given the opaqueness and complexity of banks' assets and liabilities and considering the large array of material impediments that the resolution process can face, it is possible and likely that the ex-ante valuation differs from the real value of bank's assets and liabilities.¹³⁴

After the resolution action has been taken and implemented, an independent expert must carry out an ex-post valuation.¹³⁵ ex-post safeguards counterbalance the lack of exante procedural rights. Article 75 states that, after the ex-post valuation, worse-off creditors have the right to compensation.¹³⁶ The resolution financing arrangements must pay out these compensations.

From a functional perspective, the NCWO represents an (uncertain)¹³⁷ ceiling to expected losses that creditors might have suffered in a hypothetical world where bail-in does not exist. This means that NCWO also impacts on ex-ante incentives toward monitoring: it caps the level of expected losses so that even incentives to monitor are modified.

¹³² Article 36(2) and (9).

¹³³ The same paragraph clarifies that such an estimate "shall not affect the application of the 'no creditor worse off' principle to be carried out under Article 74".

¹³⁴ Martin F Hellwig, 'Valuation Reports in the Context of Banking Resolution: What Are the Challenges?' (2018) 2018/06.

¹³⁵ Article 74 BRRD.

¹³⁶ The same applies to DGSs in the case of Article 109(2).

¹³⁷ To make it certain, one should assume that the preliminary valuation exactly matches the final valuation ex Article 74 BRRD and that investors have ex-ante information about the preliminary valuation. On the assumptions necessary for a smooth functioning of the bail-in mechanisms see Section 4.

The NCWO can become an impediment to resolvability of distressed banks mainly through three categories of legal channels: inherent to resolution, inherent to bankruptcy law; deriving from specific obstacles to resolvability.¹³⁸

Among the channels inherent to the design of the BRRD, the application of exclusions and exemptions provided by Article 44(2) and (3) of the Directive are worth mentioning. By definition, exemptions and exclusion generate a mismatch between the treatment of the other creditors under resolution and under insolvency.¹³⁹

Speaking of the channels inherent to bankruptcy law, clawbacks¹⁴⁰ represent the main and most intuitive feature to discuss. Consider the case, massively discussed in the literature in recent years, for contractual or statutory clawback provisions on executives' remuneration.¹⁴¹ In a nutshell, the competent authority can require the restitution of bonuses and performance-related components of the remuneration packages in case of managerial misconduct. Especially in idiosyncratic crises, the case for managerial misconduct is likely to materialise. In this case, the (potentially non-trivial) amount of money recovered from the clawback would enrich the amount of assets devoted to creditors under normal insolvency procedure.

Regarding the third category, it is worth mentioning the case where theoretically eligible liabilities cannot be bailed-in for cross-jurisdictional issues.¹⁴² Despite Article 55 mandates the issuers of bail-inable liabilities to include a contractual clause for third

¹³⁸ For detailed examples on how each of these channels can result in impediments to resolvability because of the NCWO principle see the Appendix.

¹³⁹ For the interaction of Article 44 and NCWO principle see Hadjiemmanuil (2015, p. 236 and ff.). For a concrete application of the NCWO principle to the exclusion from bail-in of liabilities covered by netting arrangements, see Geoffrey Davies and Marc Dobler, 'Bank Resolution and Safeguarding the Creditors Left Behind' (2011) 51 Bank of England. Quarterly Bulletin 213.

¹⁴⁰ Claw back is a term used in bankruptcy law to indicate any repayment, to receivers of a company in bankruptcy, any preference payments, or monies deemed to have bene ted one party at the expense of others during the period of financial distress. Functionally is a way to attract further assets for distribution to the mass of creditors under the condition that those assets were not meant to be allocated elsewhere in the first place because of bankruptcy norms. In this situation, the party whose assets are clawed back becomes a creditor ranked as it would have been if the unlawful repayment would have never happened. It is worth noting claw backs can be bank specific. See J Hill, 'Regulating Executive Remuneration after the Global Financial Crisis: Common Law Perspectives' [2012] Research Handbook on Executive Pay 219.

¹⁴¹ As the one introduced in Section 304 of the Sarbanes-Oxley act in the U.S., on which see Rachael E Schwartz, 'The Clawback Provision of Sarbanes-Oxley: An Underutilized Incentive to Keep the Corporate House Clean' [2008] The Business Lawyer 1.

¹⁴² Matthias Lehmann, 'Bail-in and Private International Law: How to Make Bank Resolution Measures Effective across Borders' (2017) 66 International & Comparative Law Quarterly 107.

country recognition of the power of Resolution Authorities to bail them in, third-country investors, as well as third-country authorities, are not prone to accept such clauses.¹⁴³

All these cases show, along with many studies,¹⁴⁴ that determining the counterfactual scenario under liquidation is to say the very least, doubtful and will result in long-lasting and costly litigation.¹⁴⁵ It is, nonetheless, unclear how courts are going to decide these cases. Namely, the extent to which courts will, implicitly or explicitly, consider the recovery rates in similar cases. For example, the anecdotal evidence of Lehman Brothers¹⁴⁶ shows that NCWO could become extremely burdensome to the resolution financing arrangements. The senior creditors of Lehman Brothers' German and UK subsidiaries recovered 100% of their exposure.¹⁴⁷

So far, the only application of a resolution procedure at European level, the Banco Popular case,¹⁴⁸ somehow confirmed the fear that the NCWO principle will act as a disincentive toward monitoring ex-ante given the expectation of ex-post safeguards. Several cases are currently pending in front of the European Court of Justice challenging the decision of the Single Resolution Board.¹⁴⁹ Many of those seek for compensation for the breach of the NCWO safeguard.¹⁵⁰

¹⁴³ This obstacle to resolvability has been directly acknowledged by the European Commission Explanatory memorandum to the proposal for amending Article 55 - Proposal for a DIRECTIVE OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL amending Directive 2014/59/EU on loss-absorbing and recapitalization capacity of credit institutions and investment firms, 23 November 2016 – COM (2016) 852 final.

¹⁴⁴ See, for instance, Chris Bates and Simon Gleeson, 'Legal Aspects of Bank Bail-Ins' (2011) 5 Law and Financial Markets Review 264; Hadjiemmanuil (n 94).

¹⁴⁵ de Serière (n 118).

¹⁴⁶ Michael J Fleming, Asani Sarkar and others, 'The Failure Resolution of Lehman Brothers' [2013] Economic Policy Review 175.

¹⁴⁷ Jens-Hinrich Binder, 'The Banking Union and the Governance of Credit Institutions: A Legal Perspective' (2015) 16 European Business Organization Law Review 467.

¹⁴⁸ Isabel Fernández Acín, 'Caso Banco Popular (Banco Popular Case)' (2018) <https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3132293>.

¹⁴⁹ The decision and other relevant disclosed material can be retrieved at <u>https://srb.europa.eu/en/node/315</u>.

¹⁵⁰ See, for instance, the Case T-570/17, Algebris (UK) and Others v Commission, still pending in front of the ECJ where the plaintiff claim: "the valuation of Banco Popular, which formed the basis for the resolution action taken under the Resolution Scheme, was not fair, prudent or reliable, and was inconsistent with the "no creditor worse off principle"; it did not therefore constitute accurate and reliable and consistent evidence on which to base the Resolution Scheme; and it was not capable of supporting the contested decision. Further and for the same reasons, the Resolution Scheme (and so the Decision) was manifestly disproportionate by going beyond the measures necessary to secure the resolution objectives.

4.4 Market Discipline and Competing Policy Objectives: The "8% Contribution" Threshold Rule for Granting Public Funds

In complying with the burden-sharing policy imposed by the Banking Communication in 2013,¹⁵¹ the Directive condition any public support¹⁵² to distressed institutions to a minimum amount of Private Sector Involvement.¹⁵³ Accordingly, Article 37(10)(a), in setting the general principles regarding resolution tools, set the amount of burden-sharing to the 8% of total liabilities (including own funds), measured following the valuation of Article 36.

The rationale for Article 37(10)(a) is to grant the necessary flexibility to the new resolution framework and, at the same time, mitigate the moral hazard problems arising from the implicit government subsidy for banks. Indeed, in case of a systemic crisis, the bail-in tool will not be able to do the whole work on itself. Therefore, the Banking Communication in 2013 and, eventually, the BRRD tried to strike a balance between the instances of financial stability, competition in the banking sector and safeguard of public finances.

Furthermore, Article 44 (4) and (5) refer to the possibility of granting public funds when the losses that should have been born by excluded liabilities cannot be passed fully on other creditors. Again, the Directive conditions this possibility to the 8% burden-sharing requirement.¹⁵⁴ This represents a way to deal with insufficient eligible funds. Under Article 44, the presence of "very extraordinary situation of a systemic crisis" is not required for granting public aid.

From the perspective of bail-inable creditors, assuming a consistent application of the Directive, those norms are saying that creditors can expect some public relief if and only if their claim is senior to at least 8% of bail-inable eligible liabilities.¹⁵⁵ The way this instance

 ¹⁵¹ Communication from the Commission on the application, from 1 August 2013, of State aid rules to support measures in favour of banks in the context of the financial crisis ("Banking Communication") (2013/C 216/01).
 ¹⁵² In the forms provided by Articles 56-58 BRRD.

¹⁵³ Christos Hadjiemmanuil, 'Limits on State-Funded Bailouts in the EU Bank Resolution Regime' [2016] European Economy 91.

¹⁵⁴ Article 44(8) contemplates a situation in which even the 8% contribution is waived, subject to a series of conditions among which the contribution of at least 20% of Risk Weighted assets (RWA) and assets below 900 billion EUR on a consolidated basis. Those requirements mean that this further flexibility in granting public funds is reserved to non-systemically relevant institutions with high quality assets.

 $^{^{155}}$ This outcome consists in the combination of Article 37(10), Article 34(1)(b) about the Hierarchy Principle, and 44(2) and (3) exemptions and exception in applying the bail-in tool.

impacts on investor's incentives is clear: junior claimers have, on paper, full skin in the game so that they should have optimal incentives to monitor banks' behaviours.

Nonetheless, the resolution procedure may move away from the 8% requirement in some cases of public intervention. For instance, in the cases of precautionary recapitalisation and liquidation aid, public funds can directly or indirectly cover the losses that should have been allocated to the private sector according to the bail-in rule.¹⁵⁶

In particular, precautionary recapitalisation¹⁵⁷ allows for direct injection of capital "necessary to address capital shortfall established in the national, Union or SSM-wide stress tests". The measure can be applied only to solvent institutions and is conditional on the approval under EU State Aid framework.¹⁵⁸ In this case, the burden-sharing according to the Banking Communication of 2013 still requires the mandatory involvement of private sector actors, but the involvement can be lower than the 8% threshold to have clearance under State Aid law.

So far, the fourth-largest Italian bank, MontePaschi Spa, in 2017 applied for and obtained a precautionary recapitalisation.¹⁵⁹ The Italian government injected 5.4 billion euro of capital and guaranteed 15 billion of subordinated debt.¹⁶⁰ In the decision of the European Commission on State Aid,¹⁶¹ the Commission approves the recapitalisation acknowledging the burden-sharing happened in the form of a swap between subordinated debt and ordinary shares.¹⁶² The decision states that: "there is sufficient burden-sharing by

¹⁵⁶ This is a peculiar contingency that materialises in the case of Veneto Banks and will be discussed in Section 5.3.

¹⁵⁷ Article 32(4)(d) BRRD.

¹⁵⁸ Marco Bodellini, 'Greek and Italian "Lessons" on Bank Restructuring: Is Precautionary Recapitalisation the Way Forward?' (2017) 19 Cambridge Yearbook of European Legal Studies 144.

¹⁵⁹ Precautionary recapitalization is one of the options currently on the table also to deal with the distress of Banca Carige Group. See Cristina S Dias and Jerome J Deslandes, 'Recent Measures for Banca Carige from a BRRD and State Aid Perspective' (2019) PE 624.413.

¹⁶⁰ Martin Götz, Jan Pieter Krahnen and Tobias Tröger, 'Taking Bail-in Seriously: The Looming Risks for Banking Policy in the Rescue of Monte Paschi Di Siena' (SAFE Policy Letter 2017).

¹⁶¹ European Commission, C (2017) 4690 final. State Aid SA.47677 (2017/N) – Italy New aid and amended restructuring plan of Banca Monte dei Paschi di Siena. Retrievable at <u>http://ec.europa.eu/competition/state_aid/cases/270037/270037_1951496_149_2.pdf</u>.

¹⁶² European Commission, C (2017) 4690 final, paragraph 17(iv): "In the specific case of MPS, burden sharing is implemented by means of a conversion of subordinated debt instruments in ordinary shares at pre-defined conversion rates. Out of 11 issuances subject to conversion, one is converted at a rate of 18% of the nominal value (a Floating Rate Equity-linked Subordinated Hybrid or "FRESH"), three at a rate of 75% of the nominal value (Tier 1 issuances) and seven at a rate of 100% of the nominal value (Tier 2 issuances)."

shareholders and also subordinated debt holder",¹⁶³ but refrain from quantifying the amount of burden sharing deemed to be sufficient.¹⁶⁴ Therefore, also creditors below the 8% threshold can expect to be at least partially shielded by public interventions via precautionary recapitalisation of solvent but distressed banks.¹⁶⁵

4. Effort in Monitoring in an Ideal Environment

What prevents market discipline from effectively working is twofold. In the first place, the implicit guarantee is still in place, given the impracticability of the resolution framework.¹⁶⁶ Moreover, even assuming that resolution will be applied and will deliver efficient outcomes, scholars have argued that the high level of ex-ante unpredictability of the bail-in process would endanger the ability of the investor to discipline the risk-taking behaviours of their borrowers.¹⁶⁷

To test the hypothesis stated at the beginning of this chapter, i.e.: the BRRD legal design inherently dilutes the incentives toward monitoring, this section builds up an ideal environment where the exogenous impediments to resolution are ruled out by assumption, so to assess the impact of the legal design in itself. This allows us to introduce and explain the basic incentives structure to monitor provided by the Directive's legal design. Eventually, Section 4.2 introduces the NCWO principle and the 8% rule, discussing how these dilute the investors' incentives to monitor.

5.1 Dreaming of a Smooth Resolution: Assumptions for an Ideal World

A smooth and credible resolution is what the EU financial regulator dreams of. In more hopeful words, the medium-term objective to be pursued. In any case, for studying the impact of the legal design of the BRRD, it is necessary to dig into the dream, assuming that

¹⁶³ Paragraph 103.

¹⁶⁴ In all the Italian cases, there are several problems of ex-post restitutions to retail investors in case of misselling. See Filippo Fiordiponti, 'Le Aspettative Restitutorie Di Azionisti e Creditori Ai Tempi Del Bail-In' (2016) 15 Analisi Giuridica dell'Economia 527; Raffaele Lener, 'Profili Problematici Delle Nuove Regole Europee Sulla Gestione Delle Crisi Bancarie' (2018) 37 Banca Impresa Società 13.

¹⁶⁵ The application of precautionary recapitalization tool is critically discussed in Nicolas Véron, 'Precautionary Recapitalisation: Time for a Review?' (Bruegel 2017) 21.

¹⁶⁶ Many problematic instances have been arisen from this perspective. The most discussed and serious one is the inability of resolution to deal with systemic crises.

¹⁶⁷ Tröger (n 116).

resolution works smoothly and credibly indeed. Specifically, it is necessary to take two broad assumptions:

(a) smooth functioning of the bail-in mechanism; i.e.: bail-in is always and consistently applied in case of bank distress;¹⁶⁸

(b) smooth functioning of the market for bail-inable securities; i.e.: investors are able to screen and monitor the risk-taking behaviours of the bank and adjust the price accordingly.

The latter assumption, which specifically pertains to the market for bail-inable securities, can be further disentangled in further assumptions necessary for (b) to hold. Namely:

- bail-in commitment is ex-ante credible;¹⁶⁹

- the market for bail-inable securities is liquid,¹⁷⁰ and a secondary market exists so to continuously monitor the risk-profile the bank's behaviours;¹⁷¹

- investors have perfect information in determining the outcome of the application of the rules disciplining the market of bail-inable securities, as discussed in Section 3;

- supervisory and resolution authorities exercise their discretionary powers consistently so that investors can anticipate the outcome of the resolution procedure;

- bail-inable creditors have homogeneous interests; hence, they can be treated as a class;

- the Minimum Amount for Own Fund and Eligible Liabilities (MREL) is adequate, and the banks comply with it.¹⁷²

Given that these assumptions hold, the (fully rational) investor faces the norms discussed back in Section 3 and responds accordingly. That is to say, as long as the return

¹⁶⁸ This broad assumption is made up of several narrower ones discussed in the literature. See, for instance, Avgouleas and Goodhart (n 58); Bernard, Capponi and Stiglitz (n 100).

¹⁶⁹ This is the direct consequence of point (a); for a setting in which bail-in commitments are credible see Bernard, Capponi and Stiglitz (n 100).

¹⁷⁰ Following Pistor (n 38) 316.

¹⁷¹ If such a secondary market does not exist, a further assumption has to be taken; namely, the risk profile of each security is stable over time, so that once it has been priced and sold in the primary market the disciplining activity is concluded. On the dynamic nature of the risk-profile of bail-inable securities see Tröger (n 116) 36.

¹⁷² Mathias Dewatripont, 'European Banking: Bailout, Bail-in and State Aid Control' (2014) 34 International journal of industrial organization 37.

on their investment is subject to the viability of their borrower, investors will take every efficient action to maintain such viability.

Investors will undertake those actions as long as the marginal cost of exerting monitoring is lower than the marginal benefit investors' gains, in expected terms.

Indeed, monitoring is not a costless activity since gathering and computing relevant information about the risk-profile and sustainability of the borrowing bank involves activities that come at a cost, e.g.: employing a team of analysts to take the investment decision and to determine the investor's willingness to pay for bail-inable securities. Moreover, since a secondary market for bail-inable securities exists by assumption, monitoring should be carried out on a continuous basis, so to decide whether to exit (or enter) the market and at what price.

Therefore, at this point, it is crucial to introduce the cost of exerting monitoring to understand how the incentives toward monitoring respond to the legal framework. If monitoring were costless, investors would always monitor their borrower to the larger extent possible so to correctly price their investment.

Within this framework, the bank is entering in resolution with an attached probability known by assumption.¹⁷³ Investors decide, accordingly, the level of effort in monitoring that maximises their return. Indeed, the assumptions assure that the investors can impact on the probability of the bank entering in resolution.

The level of effort crucially depends on the costs and benefits of monitoring. The critical aspect is the amount of losses, in expected terms, investors are going to suffer in case of resolution (i.e.: the bank reaches the point of non-viability).

The investor aims to minimise expected losses; accordingly, investors face actual costs for engaging in monitoring activities (e.g.: convey information). On the other hand, the benefits stemming from exerting monitoring activities consists of the decrease in the probability of entering in resolution.

In this framework, each creditor will engage in monitoring as long as benefits (i.e.: reduction in expected losses consequent to the reduction in resolution probability) outweigh the costs (i.e.: costs to exert monitoring). Throughout the analysis, the cost of

¹⁷³ While in reality there is, at least to some extent, ex-ante Knightian uncertainty.

monitoring will be stable so that the level of discipline that is efficient for investors vary according to the benefits stemming from monitoring.

To substantiate this theoretical and seemingly abstract construct, think of Investor "I" face a loss of 100 in case of resolution. The probability of resolution, which is here known by assumption, is 10%. Expected losses are 10 in this scenario. The investor knows, by assumption, that exerting monitoring activities that cost 2, the probability of resolution decrease to 7,5%. Expected losses are now 7,5 so that it is efficient for the investor to engage in monitoring.

The Investor can also put more effort in its monitoring, decreasing the probability of resolution to 6,5% for a cost of 4. In this case, the Investor will decide not to engage in costlier monitoring. The cost of monitoring plus the expected losses the investor still faces amount to 10,5 and outweigh the expected losses with no monitoring (10).

The underlying criterion to carry out the analysis is to understand what and who shield creditors from bearing losses. According to this criterion, the rules shaping the incentive structure of investors can be divided into two categories: the ones dealing with "contractual shielding" mechanisms, i.e.: embedded in investors' contractual arrangements; and the ones introducing regulatory exceptions to the bail-in rules, protecting investors further than their contractual entitlement grant them. This second category can be labelled as "external shielding". The first category of norms encompasses, the hierarchy and the equitable treatment principles, whereas the NCWO rule and the 8% rule belong to the second category.

Therefore, the rules on "contractual shielding" represent the baseline scenario that each investor in bail-inable debt faces The Hierarchy and Equitable treatment principles describe how losses are allocated, shaping the basic incentive structure of bail-inable creditors and pertaining to their contractual entitlement. For instance, the contractual entitlement of an investor in senior unsecured bonds shields her from losses by investors in subordinated debt. In the same vein, the contractual entitlements of two investors in senior unsecured debt treat those in an equitable manner.

Figure 4 depicts the baseline scenario where bail-in works smoothly and the probability of resolution to be triggered depends on the level of monitoring. The y-axis represents the

amount of expected losses; while, the x-axis represents the liability-side of the bank balance sheet, ordered according to the seniority of each class.

The expected losses are decreasing in seniority and are stable within each class, complying with hierarchy and equitable treatment principles. In this scenario, the seniority (Hierarchy principle) of bail-inable creditors guides the allocation of expected losses. Losses are constant within each class of creditors (Equitable Treatment principle).

Specifically, the Hierarchy principle, from the investor's perspective, means that the higher the seniority of a claim is, the lower the expected losses are. Therefore, the optimal level of effort in monitoring is lower for senior unsecured creditors than for subordinated ones. The Equitable Treatment principle implies that expected losses are not decreasing linearly, but in a staggered way so that the level of expected losses is constant for the creditors with the same seniority.

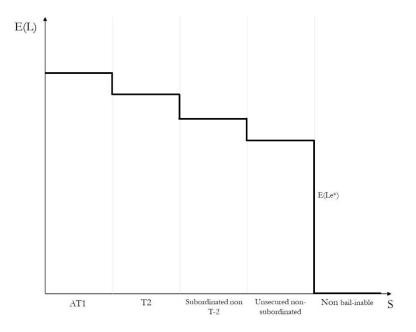


Figure 4 - Basic Incentive Structure of bail-inable creditors

The assumptions allow not to consider, at this stage of the analysis, the impact of the exemptions and exclusions of Article 44(2) and (3). Investors who know in advance which liabilities fall under those provisions embed the information in their behaviours. The consequences of such an instance are twofold: on the one hand, the creditors that will be

excluded or exempted will exert no monitoring.¹⁷⁴ On the other hand, the exemption/exclusions do not directly affect investors' incentives, but only the level of expected losses.¹⁷⁵

Finally, it is worth noting that, holding the heroic assumptions stated at the beginning of the Section, private incentives of single investors are aligned, at an aggregate level, with social welfare. Investors engage in monitoring as long as the magnitude to which expected losses decrease outweigh the cost of monitoring. This means that creditors' monitoring minimises the probability of resolution.

4.2 Nightmares into a Dream?

The baseline scenario depicted in Figure 4 represents something close to a dream for regulators: a distressed bank internally recapitalised in a going-concern without adverse spillovers. No credibility issues, information asymmetries nor any other external factors can threat such a dreamlike environment.

Nonetheless, the dreamlike resolution can turn into a nightmare even without opting out of the assumptions designed in Section 5.1. It suffices to embed the rules stemming from competing policy goals. In pursuing these competing goals, the Directive provides for "external shielding" mechanisms which alter the incentive structure and result in inherent dilution of incentives toward monitoring.

Before discussing how the NCWO rule and the rules on public aid alter the baseline scenario, it is important to stress the ontological difference between the two sets of rules discussed in this section. "Contractual shielding" rules imply that investors whose claim have different seniority will exert different levels of discipline. This descends by the fact that more senior claims face a lower probability of bearing losses since junior creditors shield them. Therefore, the level of privately efficient monitoring depends on the existence of other investors suffering losses first.

¹⁷⁴ The counter-intuitive consequence of this stream of argumentation is that, in the real-world scenario, a non-trivial level of uncertainty in this respect increase the ex-ante incentives to monitor of at least this part of creditors.

¹⁷⁵ This means that, if - for instance - junior creditors are expected to be exempted, the expected losses for senior creditors are going to be higher, increasing the Marginal Benefit of exerting monitoring.

On the contrary, "external shielding" rules imply that investors, despite their seniority, can reduce their exposure in case of resolution via external mechanisms (i.e.: the counterfactual liquidation scenario and the State intervention).

To appreciate the fundamental difference between the two categories of rules considered, think of the simple numerical example described in Section 5.1. When only "contractual shielding" rules are in place (the baseline scenario), the investor is facing losses in case of resolution and can influence the probability of resolution if she exerts costly monitoring.

If "external shielding" rules play a role, the situation might dramatically change. For instance, some investor may expect to recover 25% of their exposure under normal liquidation because of any of the mechanisms discussed in section 4.3. Now, the investor expects to bear losses for 75 in resolution and if the probability of resolution is 10%, the expected losses are 7,5. The investor still has to choose whether to engage in costly monitoring (cost of 2) to decrease the probability of resolution from 10% to 7,5%. Now, given the extra-contractual expectation of being shielded via the NCWO principle, exerting monitoring is not rational for the investor. Monitoring costs 2 and the benefit from monitoring is the difference between expected losses with and without monitoring (7,5-5,6 = 1,9).

It is crucial to emphasize that whether the NCWO actually applies is irrelevant, what is relevant is the reasonable expectation of being partly shielded via NCWO.¹⁷⁶ This represents a step forward as compared with previous analysis and adds to the understanding of market discipline in the context of bank resolution.¹⁷⁷

5.2.1 No Creditor Worse Off

As discusses before, the NCWO principle imposes that bail-in has to consist of a welfareneutral procedure from the creditors' perspective. In stating this, the European Legislator aimed at protecting the investors' property rights, so to comply with their constitutional rights.¹⁷⁸ From the eye of the investors, this means that, despite the level of expected losses

¹⁷⁶ This can happen both ex-ante, when applying the resolution tool, or ex-post through compensation ex Article 75.

¹⁷⁷ As compared, for instance, with Tröger (n 116).

¹⁷⁸ Diego Valiante, 'Harmonising Insolvency Laws in the Euro Area' (2016) 153.

stemming from the resolution procedure, they cannot bear actual losses greater than in the insolvency counterfactual scenario. Put differently: creditors foresee to be shielded from losses exceeding the losses expected under normal liquidation procedure.

This affects the incentives of the investors toward monitoring of the investors. The counterfactual insolvency scenario artificially shields investors from losses. This is conceptually opposite to the idea of market discipline and aims at protecting property rights.¹⁷⁹

As Section 4.3 discussed, the impact of the NCWO principle can derive from different channels, some of which are endogenous to resolution; namely the exemptions/exclusion of Article 44.¹⁸⁰

The basic incentive structure showed that investor would be able to re-calculate the expected losses they are going to incur, under the assumption that investors know ex-ante which liabilities will be exempted and excluded from the bail-in procedure. Nevertheless, those exemption/exclusion hinge upon investors' incentives through the NCWO principle,¹⁸¹ since they increase the spread between the investors' treatment under resolution and in the alternative insolvency scenario.¹⁸²

In Figure 5, the NCWO conceptualisation is added to the basic incentive structure of Figure 4: the dashed line in the Figure represents an example of such a conceptualisation, thus representing the amount of losses in the alternative liquidation scenario.

The example provides a quite conservative approach, as both AT1 and T2 instruments are assumed to bear full losses in the counterfactual insolvency scenario. It is worth noting that if the dashed line (NCWO) intercept the solid line, the expected losses are capped,

¹⁷⁹ In their legal understanding, as enucleated by Article 1 of the 1st protocol to the ECHR: "*Every natural or legal person is entitled to the peaceful enjoyment of his possessions. No one shall be deprived of his possessions except in the public interest and subject to the conditions provided for by law and by the general principles of international law*".

¹⁸⁰ Up to a certain extent, the same argument goes for theoretically eligible securities, which are issue under a third country who is not accepting the contractual recognition ex Article 55. On the other hand, there are instance where NCWO can play a role, such as ex-post claw-back, which cannot be anticipated at all even assuming ex-ante perfect information.

¹⁸¹ As shown in Appendix (Section <u>6)</u>, specifically in Figure 10.

¹⁸² In the cases in which exemptions/exclusions would be treated differently under the two scenarios. This is, for instance, the case of Article 44(3)(a) [practical impossibility to implement the bail-in].

consequently diluting incentives to monitor. This is exemplified by the grey area "A" in the Figure.

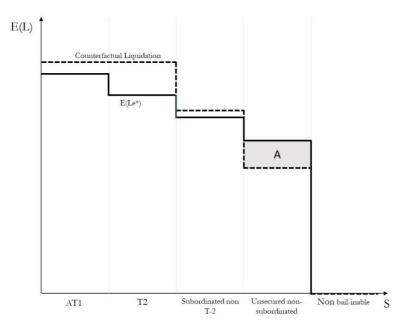


Figure 5 - Incentive Structure of bail-inable creditors when the NCWO principle is in place

To sum up, the NCWO can dilute incentives by way of capping losses creditors can incur in resolution. The channel through which this can concretely happen consist of the rules applied in resolution whose spillovers affect the counterfactual insolvency scenario.

5.2.3 8% Threshold

Scholars tend to agree that the BRRD did not eradicate the governmental guarantee on banks' solvency once and for all. Indeed, as discussed back in Section 4.4, the BRRD itself recognises the possibility of using public funds during resolution to prevent spillovers. Thus, even in the ideal setting plotted here, it is reasonable to expect public interventions once there has been an 8% contribution of insiders.

From the investors' perspective, this exogenously impacts their payoff structure, altering the level of losses they expect to bear. For instance, if the claim of Investor A has seniority above the threshold of 8% of total liabilities (including own funds), he can reasonably expect to be, at least partially, shielded by public intervention.

For such a process to happen, the assumption of a smooth market for bail-inable securities needs to be specified. In particular, the investors need to have complete

information about whether their claim is junior or senior to the 8% of eligible liabilities out of the total amount of liabilities. This has two implications: first, the investors need complete information on the capital structure of their borrower; second, they also need complete information about exemptions/exclusion of liabilities according to Article 44 and their impact in reaching the 8% threshold.

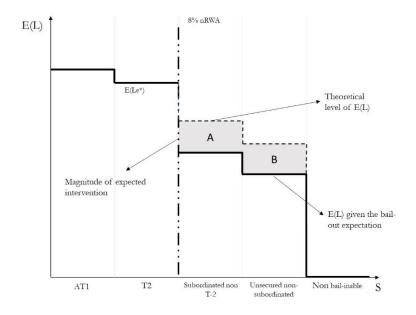


Figure 6 - Incentive Structure of bail-inable creditors when the 8% threshold is in place

Figure 6 graphically depicts the situation. For the sake of simplicity, we assume that the 8% threshold falls at the end of T2 instruments. As expressed before, the expectation to be shielded by public intervention lowers the expected losses. Hence, the graph highlights a discontinuity between the expected losses in the basic scenario (vertical line) and the resulting incentives in case of public intervention. The grey areas "A" and "B" represents the incentive dilution corresponding to the public shielding of senior investors.

To sum up, the flexibilities embedded in the BRRD generate a discontinuity on the investors' incentive structure lying above or below the threshold of 8% of eligible liabilities out of total liabilities. Indeed, creditors above such a threshold can reasonably expect to be bailed-out. Moreover, considering the precautionary recapitalisation detailed in Section 4.4, the threshold required for burden-sharing can be lower than 8%. Therefore, more investors expect the shielding effect of public intervention, worsening the ex-ante incentives toward monitoring.

Finally, in terms of the effect of both NCWO rule and the state intervention rules, the expected result is to lower the sensitivity of interest rates to the actual risk profile of the borrower, decreasing the level of discipline imposed to managers' behaviours. Overall, both the rules lower the expected losses of investors so that the return on investment (interest rate) required diminishes.¹⁸³

5.3 A Dream or a Nightmare: Where Will we Wake up?

So far, Section 4 has speculated about an ideal environment where, holding specific assumptions, it is possible to conclude that certain aspects of the legal design of the BRRD inherently impair incentives toward market discipline. Thus, a dream-like environment where resolution works smoothly can easily turn into a nightmare.

It is now time to wake up and assess whether the theoretical speculation proposed can hold in real life and bail-inable creditors fully internalise the probability of future losses in their pricing.

Even though it is not possible to evaluate all the cases of resolution in light of the theory proposed so far, it is crucial to provide at least some anecdotal evidence showing the inability and/or unwillingness of investors to discount future losses.

Some cases, such as the resolution of Banco Popular and the precautionary recapitalisation of Monte Paschi Bank, have already been briefly analysed and support my findings.¹⁸⁴ On the Banco Popular case, several cases on violation of the NCWO rule are pending both in front of the ECJ and the SRM Board of Appeal.¹⁸⁵ This hint at the fact that investors relied on the NCWO protection, or that at least they are opportunistically trying to get some ex-post compensation.¹⁸⁶ On the MontePaschi Bank case, the Italian State

¹⁸³ It is important to notice that this does not mean that the cost of funding for the bank has not increased after the BRRD entered into force, but that such an increase is not tightly linked with the behaviour of the individual bank, so that its discipline effect is limited.

¹⁸⁴ A wider review of recent resolution cases can be found in World Bank, *Understanding Bank Recovery and Resolution Directive in EU: A Guideline to the BRRD* (Word Bank 2016); T Philippon and A Salord, 'Bail-Ins and Bank Resolution in Europe: A Progress Report. Geneva Reports on the World Economy Special Report 4' [2017] International Center for Monetary and Banking Studies (ICMB), Geneva (Switzerland). For an up to date analysis of recent cases, see Marco Ventoruzzo and Giulio Sandrelli, 'O Tell Me the Truth About Bail-In: Theory and Practice' (2019) 13 The Journal of Business, Entrepreneurship & the Law 187.

¹⁸⁵ See, for instance Case T-570/17, Algebris (UK) and Others v Commission. Among other pleas, the claimants argue that the NCWO rule was breached in the resolution decision.
¹⁸⁶ In line with the argument proposed by de Serière (n 118).

stepped in before resolution after shareholders and junior creditors born some losses out of resolution, in the form of share dilution and debt swap.¹⁸⁷

The investors in Contingent Convertible issued by Deutsche Bank¹⁸⁸ provided a further paradigmatic case of the inability of investors to ex-ante discount future losses in pricing their instruments.¹⁸⁹ Deutsche Bank reported losses for the fiscal year 2015 and, once the news became public, the price of the shares fell, eroding the capital position of the bank and getting close to breaching the so-called "combined buffer requirement".¹⁹⁰ According to the existing regulation, if the capital ratio of a (still solvent) bank breaches such "combined buffer requirements" distributions on Contingent Convertible instrument (i.e.: payment of the 6% coupon) can be cancelled, so that the investors somehow bear the costs of early distress. This is in line with the new philosophy underpinning the resolution framework, i.e.: private sector involvement.¹⁹¹

The market panic that stemmed for the fear of missing a coupon testifies that investors did not internalise the probability of future losses on their investment. The price of the instrument dropped, losing almost 30% of their value in one month and recovering only after the regulator intervened exploiting a legal loophole for allowing lawful distribution of the coupon in 2016.¹⁹²

¹⁸⁷ See European Commission, C (2017) 4690 final. State Aid SA.47677 (2017/N) – Italy New aid and amended restructuring plan of Banca Monte dei Paschi di Siena. Retrievable at <u>http://ec.europa.eu/competition/state aid/cases/270037/270037 1951496 149 2.pdf</u>.

¹⁸⁸ Contingent Convertible instruments (Cocos) are bail-inable instruments that are also part of regulatory capital. In this case, they were part of Additional Tier 1 capital pursuing Article 51 and 54 of the Capital Requirement Regulation (CRR).

¹⁸⁹ An extensive description and analysis of the case can be found in Paul Glasserman and Enrico Perotti, 'The Unconvertible CoCo Bonds' in Douglas D Evanoff and others (eds), *Achieving Financial Stability: Challenges to Prudential Regulation*, vol 61 (World Scientific 2017).

¹⁹⁰ Articles 131 and 141 of the Capital Requirement Directive (CRDIV). The Combined Buffer Requirements consists in normal minimum capital requirements (Article 92 CRR), institution specific additional capital requirements (Article 97 CRD IV) and additional buffers (Articles 131 and ff. CRD IV).

¹⁹¹ For more information about the underlying legal mechanisms and the ambiguities existing in the EU law and supervisory practices, see B Mesnard and M Magnus, 'What to Do with Profits When Banks Are Undercapitalized: Maximum Distributable Amount, CoCo Bonds and Volatile Markets' [2016] European Parliament (Briefing, PE 574.399) 1.

¹⁹² The legal point was the stacking order of Pillar 2 requirements imposed by the supervisor. The new praxis is to differentiate between Pillar 2 requirements and Pillar 2 Guidance, where only the first is binding and counts for breaching the "combined buffer requirements". See, finally, EBA Guidelines on common procedures and methodologies for the supervisory review and evaluation process (SREP), EBA/GL/2014/13, 19 July 2018.

Skipping the payment of coupon is a mild way of bearing losses as opposed to a fullyfledged bail-in or a going-concern conversion. However, market participants were unable to discount such a possibility in pricing the instruments that they only react retrospectively once the problem materialised. One would expect an efficient market discipline regime to work precisely in the opposite direction. This, anecdotally, confirm the soundness of the findings of the qualitative model developed in the previous sections.

5. Conclusion

The chapter has tackled the long-lasting debates on the ability of creditors to discipline banks' behaviours. In doing so, the chapter adopted the perspective of the post-crisis stream of reforms and the alleged alignment between the interests of bail-inable debt holders and of regulators/supervisors.

The rules shaping the market for bail-inable securities hinge upon features external to the status of investors under resolution, i.e.: counter-factual insolvency situation; possibility of granting public money to the bank. The analysis carried out in Section 4 showed that the overall outcome of these rules is to dilute the incentives to monitor banks' risk-taking behaviour. Such an outcome stems from the shielding-effects that specific external features impacted by the BRRD rules have on investors. In other words, as long as investors rationally expect to be shielded from losses thanks to mechanisms out of their contractual arrangements, the incentives to discipline the borrowing bank risk-taking behaviours will not be optimal.

The inherent dilution in incentive derives from the coexistence of a plurality of policy objectives. Indeed, all the features at stakes, including creditors' monitoring, should be included, *latu sensu*, within the resolution objectives.

"Maintaining market discipline"¹⁹³ and "minimising reliance on extraordinary public financial support" are expressly mentioned by Article 31(2). The protection of property rights is implicitly part of those objectives as it represents a pillar of the legal system, protected by national constitutions as well as at European level.¹⁹⁴ Even though the BRRD

¹⁹³ Even though this research made clear that the word "maintaining" associated to the concept of Market Discipline in the banking industry is, to say the least, misleading.

¹⁹⁴ As enshrined by Article 1, Protocol 1 of the European convention of Human Rights. Whether or not the NCWO is the apt mean to efficiently protect PRs falls beyond the scope of this research. On that see Tröger

explicitly states that "the resolution objectives are of equal significance",¹⁹⁵ the actual legal design and the foreseeable resolution practice lean toward the primacy of stability consideration. In a nutshell, the co-existence and the interplay of multiple policy goals addressed by the BRRD impede to provide bail-inable creditors with optimal incentives to monitor their borrower.

Even though conflicting objectives in resolution have been heavily understudied, it seems unreasonable that an alternative design could fix the incentive dilution toward monitoring, allowing for the same level of flexibility and protection of property rights. In the same vein, preserving financial stability and protecting property rights outweigh market discipline in terms of minimising resolution costs and avoiding destruction of value.

The enthusiasms about the disciplining capacity of the new resolution framework appear to be misplaced, or at least overemphasised. Expecting bail-inable creditors to carry out an optimal level of monitoring and adjust the price of securities accordingly is little more than a dream, even though little evidence of their behaviour exists so far. Neither theory nor current practices support such an expectation. Therefore, at least in the current regulatory framework, the effectiveness of bail-in in preventing and addressing future crises cannot solely rely on the disciplining capacity of bail-inable creditors.

⁽n 9); Wojcik (n 75)..

¹⁹⁵ Article 31(3) BRRD. An identical provision can be found in the SRMR, Article 14(3).

6. Appendix - A Stylised Application of the NCWO Principle

The principle of NCWO has been heavily criticised for its vagueness and complexity: beyond the appealing idea and the underlying rationales, it is difficult to grasp how it is supposed to concretely work. Therefore, building on the previous legal analysis, it is useful to provide some easy and simplified numerical examples. This allows to better understand how the NCWO principle alters the incentive structures of investors. Moreover, this example shows that the NCWO is not just a theoretical safeguard, but it can have a concrete impact on the resolution process and investors in bail-inable securities.

"Bank A" in normal times own assets worth 100, wholly made up of loans. Bank A's funding consists of capital, two layers of debt and deposits (Figure 7 – Panel 1). For the sake of simplicity, we assume that the equity ratio (Total Assets/Equity) of Bank A is 8% of total assets and it matches the regulatory requirements.

Baseline scenario (Panels 3 and 4). An idiosyncratic shock happens and Bank A's loans now worth only 70, with a total amount of losses of 30 (Panel 2). Bank A is now failing, and The Resolution Authority decides to apply the bail-in tool to restore a net asset value equal to zero and sufficient capital, pursuing Article 46.

To cover the losses capital holders are completely wiped out. Junior creditors are, then, partly wiped-out [22] so that losses are fully covered and partly converted into new equity [3]. Moreover, senior claims are partly converted into equity [3] to restore the appropriate level of regulatory capital (Panel 3). In this case, no creditor is worse-off, as in the counterfactual scenario of liquidation both depositors and senior creditors fully recover their investments and junior creditors have a recovery rate of 12%.¹⁹⁶ In such a situation NCWO has no impact on the resolution process and, hence, in investors' ex-ante incentives, as shown in Figure 7.

Let's now consider two alternatives in which the scenario depicted so far is altered. The first alternative scenario implies that during the liquidation procedure liabilities are clawed back; the second considers the case in which some of the liabilities are considered to be ineligible by the Resolution Authority, for any of the reasons provided by Article 44

¹⁹⁶ This goes under the assumption that the debt-equity swap follows the rate of conversion of 1:1. The amount of converted capital remain approximately the 8% of total assets.

(2) and (3). The main difference between those two scenarios is that in the first the assessment of the counter-factual liquidation changes, while in the second what change is the bail-in outcome.

Claw-back Scenario (Panel 5). During the liquidation procedure, the Court orders the clawback of capital whose value is 5. Imagine, for instance, that the directors unlawfully distributed dividends in time of financial distress instead of increasing the banks reserves. This alters the counterfactual liquidation scenario since the amount of distributable assets increases accordingly and junior creditors recover a larger share of their investment, with a recovery rate of 32%. In this scenario, junior creditors are worse-off, as depicted in Panel 3. Figure 8 shows that junior creditors suffer higher losses under bail-in than under liquidation. Thus, they are entitled to compensation pursuant Article 75 BRRD.

Non-eligible liabilities scenario (Panel 6). For any of the reasons listed in Article 44 (2) and (3), the Resolution Authority decides that a fraction of junior debt [15] cannot be bailed in. This can happen for a wide number of reasons. Imagine junior securities issued under the law of a third country that is not promptly bail-inable; or the even more compelling case in which the exempted junior liabilities are held by a distressed bank that cannot bear that kind of losses without becoming failing. In this situation, for covering the losses [30], both capital [8] and the part of eligible junior debts left [10] are wiped-out. Moreover, a part of senior debt is wiped-out as well [12] to cover the reaming losses and the other is converted into equity [5]. Finally, to restore the regulatory capital, Deposit Guarantee Scheme has to step in and make a subrogated contribution ex Article 109(1)(a). In fact, there are no other eligible liabilities: thus, Deposit Guarantee Scheme is liable for the amount by which covered deposits would have been written down.

Figure 10 shows that both junior and senior creditors suffer higher losses under bail-in than under liquidation. Thus, they are both entitled to compensation pursuant Article 75 BRRD. Moreover, since covered depositors would have incurred losses, the Deposit Guarantee Scheme has to step in to bear them, so that the array of actors involved in the bail-in process is larger under these circumstances.

133

(4) COUNTERFACTUAL LIQUIDATION						
ASSETS		LIABILITIES				
Loans	70	3	Junior deb			
		17	Senior Deb			
		50	Deposits			
Total assets	70	70	Total Liabilities			

ASSETS		LIABILITIES		
Loans	100	8	Capital	
		25	Junior Debt	
		17	Senior Debt	
		50	Deposits	
Total assets	100	100	Total Liabilities	

(1) NORMAL TIMES

(2) IDYOSINCKATIC SHOCK						
ASSETS		LIABILITIES				
Loans	70	8	Capital			
		25	Junior Debt			
		17	Senior Debt			
		50	Deposits			
		-30	Losses			
Total assets	70	70	Total Liabilities			

(3) APPLICATION OF BAIL-IN						
ASSETS		LIABILITIES				
Loans	70	6 Capita				
			(converted 3 junion +			
			3 senior)			
		14	Senior Debt			
		50	Deposits			
Total assets	70	70	Total Liabilities			

(5) COUNTERFACTUAL LIQUIDATION							
WITH CLAWBACK							
ASSETS LIABILITIES							
Loans	70	8	Junionr				
Clawed back assets	5	17	Senior Debt				
		50	Deposits				
Total assets	75	75	Total Liabilities				

(6) APPLICATION OF BAIL-IN TOOL WITH EXEMPTED CREDITORS						
ASSETS LIABILITIES						
Loans	70	6	Capital			
DGS contribution	1	15	Junior Debt			
DGS contribution	1	15	(excluded)			
		0	Senior			
		50	Deposits			
Total assets	71	71	Total Liabilities			

Figure 7 - Application of NCWO to the stylised balance sheet of Bank A

Level of losses				
	Bail-in	Liquidation		
Capital	100%	100%		
Junior Debt*	88,00%	88,00%		
Senior Debt*	0,00%	0,00%		
Depositors	0,00%	0,00%		

* Under the bail-in scenario, in determining the level of level of losses, we assume a 1:1 rate of conversion between equity and junior/senior debt.

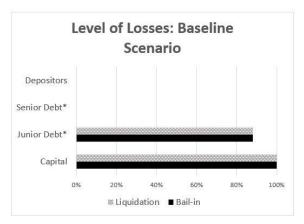


Figure 8 - Level of losses under bail-in and liquidation regime in the baseline scenario

Level of losses		Level of Losses: Clawback Scenario			
Bail-in	Liquidation	Depositors			
100%	100%	Senior Debt			
88,00%	68,00%				
0,00%	0,00%	Junior Debt			
0,00%	0,00%	Capital			
	Bail-in 100% 88,00% 0,00%	Bail-in Liquidation 100% 100% 88,00% 68,00% 0,00% 0,00%			

* Under the bail-in scenario, in determining the level of level of losses, we assume a 1:1 rate of conversion between equity and junior/senior debt.

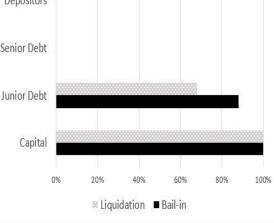


Figure 9 - Level of losses under bail-in and liquidation regime in the clawback scenario

Level of losses					
	Bail-in	Liquidation			
Capital	100%	100%			
(Eligible) Junior Debt	100,00%	88,00%			
Senior Debt	70,50%	0,00%			
Depositors (via DGS)	2,00%	0,00%			

* Under the bail-in scenario, in determining the level of level of losses, we assume a 1:1 rate of conversion between equity and junior/senior debt.

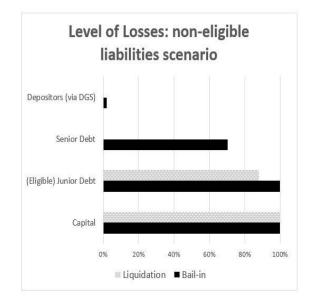


Figure 10 - Level of losses under bail-in and liquidation regime in the Non-eligible liabilities scenario

Part II – Positive Analysis

Chapter 5 - Bail-Inable Securities and Financial Contracting

Can Contracts Discipline Bankers?

Abstract

The post-crisis stream of reforms, especially the new recovery and resolution framework, has been often welcomed for its aim to increase market discipline in the banking sector, allocating the losses to shareholders and creditors of failing banks and not anymore on the general public through state bailout. Nonetheless, the concrete mechanisms according to which such turnaround should happen, and the corporate governance consequences of financial reforms have been severely understudied.

The chapter fills this gap and tackles the trade-off between market discipline and financial stability in the post-crisis EU regulatory environment through the lenses of financial contracting. Building on debt as a mechanism to contingently allocate control, the analysis approaches the regulatory framework as a set of restrictions to contractual freedom, exploring the room for investors to discipline risk-taking of banks through specific contractual arrangements.

This enriches the current understanding of bank corporate governance as it embeds debt contracts as an external governance tool that having the potential to discipline risk-taking behaviours. The chapter demonstrates that, given the current regulatory framework, the contractual channel for discipline bank risk-taking is largely unavailable, as prudential regulation prevents creditors from contracting over relevant contingencies.

Traditional contractual devices are scrutinised against the qualitative requirements for regulatory capital and bail-inable securities and turned out to be largely unavailable because of regulatory constraints. This limits the ability of investors to limit the risk-taking appetite of managers. Therefore, the attention moves to the peculiar case of contingent convertible instruments (Cocos), discussing some design features that might allow investors to successfully reduce the risk-taking incentives both before and after the distress of the bank, enhancing market discipline after all.

Keywords: Incomplete Contracts, Contractual Freedom, Regulatory Foreclosures, Covenants, Contingent Convertibles.

1. Introduction

Can investors discipline bankers through contracts? To address this question, it is wise to take a step back and briefly recall the fundamental features of bank governance, the resolution framework and its ex-ante potential.

Corporate governance failures and excessive risk-taking have often been blamed as two major drivers of the latest financial crisis.¹ These failures are ultimately rooted in the existing trade-off between financial stability policies and moral hazard.² The easiest exemplification of such a trade-off is the implicit guarantee of the State on the solvency of financial institutions, especially the "systemically relevant" ones, leading creditors not to exert appropriate monitoring and softening the budget constraints of bank managers

The financial crisis hit particularly hard on the EU Member States, and the existing regulatory framework was unprepared to face it. The EU has answered with a massive wave of reforms leading up to the European Banking Union, which was welcomed by Commissioner Barnier as "nothing less than a revolution: the most ambitious project since the creation of the euro".³

The recovery and resolution framework⁴ represents one of the pillars of the Banking Union, providing EU-wide uniform rules for the recovery and resolution of distressed banks.⁵ Among the tools provided by the Directive, the bail-in tool has drawn substantial policy and academic attention as a regulatory innovation having the potential to disrupt the discourse on financial stability. A bank bail-in consists in the power of the resolution authority to impose losses of failing banks on both shareholders and creditors through write down or conversion, carried out in an administrative procedure.⁶

¹ See, Jacques De Larosière and others, 'Report of the High-Level Group on Financial Supervision in the EU' [2009] European Commission. Brussels para 23.

² See William A Allen and Geoffrey Wood, 'Defining and Achieving Financial Stability' (2006) 2 Journal of Financial Stability 152, 160.

³ Speech at the Peterson Institute for International Economics, Washington, 13 June 2014.

⁴ This chapter focuses on the Bank Recovery and Resolution Directive (BBRD) - Directive 2014/59/EU of the European Parliament and of the Council of 15 May 2014 establishing a framework for the recovery and resolution of credit institutions and investment firms [2014] *OJ L 173*.

⁵ Substantive legislation binds all MSs while procedural and institutional arrangements are harmonised only at Eurozone level.

⁶ Karl-Philipp Wojcik, 'Bail-in in the Banking Union' (2016) 53 Common Market Law Review 91, 95.

Some commentators focused on the alleged *ex-ante* benefits of the bail-in tool. These claim that, without the State implicit guarantee, investors should exert better monitoring, disciplining the hazardous behaviour of the management. Moreover, banks are required to hold in their balance sheet an adequate amount of bail-in eligible liabilities, to assure that, in case of distress, the resolution authority can efficiently perform a bail-in.⁷

However, many doubts surround the efficiency and effectiveness of the new regime.⁸ Since a general assessment of the bail-in tool falls out of the scope of this dissertation, the proceeding of the chapter analyses potential consequences of the new resolution regime on the risk-taking incentives of banks and the role of bail-inable creditors, i.e.: on the moral hazard problem. The role of creditors in disciplining risk appetite of banks results from the interplay of the governance and financial structure of the bank, where the latter is a function of regulatory constraints.

Specifically, this chapter discusses financial contracting as a potential channel to discipline bankers. In other words, it aims to answer the following question: given the regulatory framework, can private solutions (i.e.: contracts) provide adequate incentives toward optimal risk-taking? Answering such a question allows furthering the understanding of the relationships between regulation of financial structure and corporate governance of banks as well as the governance consequences of the BRRD.

This chapter fills a relevant gap in the literature on bank governance and bank regulation more in general. The economics and financial literature extensively discussed contracts as a mechanism to disciplining the behaviours of the borrowing corporations.⁹ The distinctive features of banking and especially the extensive reliance on short-term debt led both the legal and economic literature to focus on price adjustment as the only

⁷ Minimum Requirement for Own Fund and Eligible Liabilities (MREL) – Art. 45 BRRD. Hence, also regulation on quantitative and qualitative requirements for regulatory capital shall be considered.

⁸ Regarding efficiency, see Charles Goodhart and Emilios Avgouleas, 'A Critical Evaluation of Bail-in as a Bank Recapitalisation Mechanism', in Douglas Evanoff et al. (ed), *The New International Financial System: Analyzing the Cumulative Impact of Regulatory Reform* (World Scientific, 2015). Regarding effectiveness, see Tobias H Tröger, 'Too Complex to Work: A Critical Assessment of the Bail-in Tool under the European Bank Recovery and Resolution Regime' (2018) 4 J.Financ.Reg, 35. Note, also, that the resolution objectives listed in Art. 31 BRRD do not take into account any *ex-ante* benefit.

⁹ Starting from Philippe Aghion and Patrick Bolton, 'An Incomplete Contracts Approach to Financial Contracting' (1992) 59 The review of economic Studies 473.

channels for creditors' influence.¹⁰ Chapter 4 discussed the promise and perils of market discipline through price adjustment in the context of bank resolution. This Chapter complements that analysis and directly discusses (bail-inable) debt contracts as the means to discipline banks. Among the studies on bank debt governance, to the best of the author knowledge, this chapter is the only in-depth study that carefully analyses the interplay between contractual arrangements and prudential regulation.

As I will show, debt contracts of bail-inable securities are generally unable to discipline bank risk-taking because of peculiarities of bank activities that restrain debt contract from performing as well as in the non-financial industries. Nonetheless, the chapter will argue that specific contractual arrangements imposed on a new type of hybrid debt (contingent convertible) can enhance discipline both before and after the event of a bail-in.

The contribution takes an interdisciplinary approach, embracing elements of both banking law and corporate governance. In building a suitable analytical framework, Section 2 draws insights from the corporate finance theory of debt, mostly focusing on agency and incomplete contract theory, as well as from the economic theory of bank regulation.

Grounded on the theoretical foundation of Section 2, Section 3 approaches the qualitative requirements imposed on bail-inable liabilities as constraints to contractual freedom and discusses whether and to what extent creditors can employ contractual devices to discipline bankers. Section 4 devotes particular attention to the case for contingent capital, i.e.: liabilities whose design is to absorb losses at a contractually predetermined trigger event, focusing on the governance features that parties can contract upon. The analysis rests upon the assumption that Cocos are always consistently converted or written down.¹¹

Many consider contingent convertible items as potentially disruptive instruments in achieving safe and sound banks. Thus, economists on both sides of the Atlantic lively

¹⁰ Mark J Flannery, 'Debt Maturity and the Deadweight Cost of Leverage: Optimally Financing Banking Firms' (1994) 84 The American Economic Review 320.

¹¹ This assumption, so far, proved not to hold in reality. See Paul Glasserman and Enrico Perotti, 'The Unconvertible CoCo Bonds' in Douglas D Evanoff and others (eds), *Achieving Financial Stability: Challenges to Prudential Regulation*, vol 61 (World Scientific 2017).

discussed the promises and perils of these items.¹² On the contrary, their governance impact is, to the best of the author's knowledge, heavily understudied, especially in Europe.¹³ Section 5 concludes.

2. Incomplete Contracts and Bail-inable Securities

As outlined in the introduction, this contribution aims at investigating the relationship between the financial and governance structure of banks in the new regulatory framework. Yet, a plain legal analysis of the post-crisis reforms appears unfit to the purpose. Hence, insights from the corporate finance literature as well as the theory of bank regulation represent necessary building blocks to provide a sound framework for the analysis.

2.1 A Theory of Debt

The role of debt and debt contracts is one of the focal points in corporate finance. Thus, going through the main theoretical explanations of debts and the role of financial contracting is crucial for understanding the role of new bail-inable instruments.

Corporate finance scholars firstly approached the debt from the perspective of the firm, investigating its optimal capital structure, i.e.: which combination of equity and debt financing maximises the value of the firm. Modigliani and Miller¹⁴ demonstrated that, under a certain set of assumptions,¹⁵ the choice between equity and debt does not affect the overall value of the firm (Irrelevance Proposition).¹⁶

This basic yet revolutionary idea was later refined, questioning its assumptions. For what is here of interest, the refinements related to agency and incomplete contract theory

¹² For a comprehensive survey, see Mark Flannery, 'Contingent Capital Instruments for Large Financial Institutions: A Review of the Literature' (2014) 6 Annu.Rev.Financ.Econ. 225.

¹³ In the US some attention has been devoted to the topic, see John Coffee Jr, 'Systemic Risk after Dodd-Frank: Contingent Capital and the Need for Regulatory Strategies beyond Oversight' (2011) 111 Colum.L.Rev. 795. Besides, the policy recommendation by Coffee would be unavailable according to the EU regulatory framework.

¹⁴ Franco Modigliani and Merton Miller, 'The Cost of Capital, Corporation Finance and the Theory of Investment' (1958) 48 The American economic review 261.

¹⁵ Absence of bankruptcy costs, symmetric information and absence of taxes.

¹⁶ This approach represents the theoretical background for recent and proposals for sharply increasing regulatory capital of banks. See, Anat Admati and Martin Hellwig, *The Bankers' New Clothes: What's Wrong with Banking and What to Do about It* (Princeton University Press 2014).

deserve further discussions. The agency theory, among other features, explains the fundamentals of debt-holders role in the corporation; while, incomplete contract theory takes a step forward, explaining why people decide lending money and the crucial role that contracts have on that decision.

Jensen and Meckling, relaxing the assumption of symmetric information, showed that shareholders partially shift the risk (and costs) of bankruptcy to bondholders (risk-shifting). Therefore, being shareholders in charge of decision-making, risk-taking tend to be excessive since shareholders bear only a small fraction of expected bankruptcy costs.¹⁷ "Gambling for resurrection" incentives represent the extreme consequence of this phenomenon: once financial distress approaches, shareholders are rationally prone to undertake negative net present value projects, yielding high returns with low probabilities, since they would fully gain the benefits without bearing any costs.¹⁸

Building on agency theory, the "Costly Contracting hypothesis"¹⁹ of debt argues that controlling the bondholder-shareholder conflicts can increase the value of the firm. In other words, creditors can play a positive role in the governance of the firm. Although financial contracting is costly, parties are willing to bear these costs (e.g.: draft a covenant) as long as the benefits deriving from financial contracting outweigh the bargaining and enforcement costs, at the margin.

The literature analysed so far explains the role of debt for the value of the firm, whereas it failed to explicate why do people are willing to lend and become creditors. This link is crucial, as corporate governance has been defined as the ways in which suppliers of finance (including creditors) to corporations assure themselves of getting a return on their investment.²⁰

¹⁷ This issue is amplified in banking, given their inherently highly levered nature. The fraction of bankruptcy costs borne by shareholders is smaller and incentives toward risk-taking increase. This represents a standard argument for capital regulation, as explained in the continuing of the section. See John Armour and others, *Principles of Financial Regulation* (Oxford University Press 2016) ch 16.

¹⁸ For a simple numerical exemplification, see Marco Becht, Patrick Bolton and Ailsa Röell, 'Why Bank Governance Is Different' (2011) 27 Oxford Review of Economic Policy 437.

¹⁹ Such hypothesis builds mainly on Stewart Myers, 'Determinants of Corporate Borrowing' (1977) 5 J.Financ.Ec. 147; Clifford Smith Jr and Jerold Warner, 'On Financial Contracting: An Analysis of Bond Covenants' (1979) 7 J.Financ.Ec. 117.

²⁰ Andrei Shleifer and Robert Vishny, 'A Survey of Corporate Governance' (1997) 52 J. Financ. 737.

In the understanding of how creditors assure themselves of getting a return on their investment, the introduction of contract incompleteness signed a pathbreaker change.²¹ Aghion and Bolton modelled debt contracts as a mechanism to allocate control contingently on future situations that are difficult or impossible to describe *ex-ante*.²² Accordingly, the capital structure of a firm is relevant for managerial incentives as long as contracts are incomplete, i.e.: their enforcement is constrained by the lack of compelling provisions for each and every possible course of action.

Contingent allocation of control evokes, first and foremost, statutory bankruptcy, where the ability of the shareholders to retain control is contingent on meeting the debt obligation. Besides, one can think of debt covenants restricting the courses of action available to the firm and thus limiting the control power of shareholders.²³ Again, secured debt allocates fact control over specific assets to a creditor, contingent on default of contractual obligation.

2.2 Bank Debt and its Peculiarities

In the specific context of banks, the understanding of contingent allocation of control needs to be broadened. Debt is excessively difficult to restructure,²⁴ and short-term debt is an (inefficient) way of allocating control.²⁵ Given the impossibility to design long-term contracts *ex-ante*, parties agree on short-term exposures with the perspective of rolling them over as long as the condition of the firm situation does not deteriorate.²⁶

²¹ Sanford J Grossman and Oliver D Hart, 'The Costs and Benefits of Ownership: A Theory of Vertical and Lateral Integration' (1986) 94 J.Polit.Ec. 691.

²² Philippe Aghion and Patrick Bolton, 'An Incomplete Contracts Approach to Financial Contracting' (1992) 59 Rev.Financ.Studies 473.

²³ For a complete taxonomy of covenants, see Michael Bradley and Michael Roberts, 'The Structure and Pricing of Corporate Debt Covenants' (2015) 5 Q.J.Financ.

²⁴ Patrick Bolton and Olivier Jeanne, 'Structuring and Restructuring Sovereign Debt: The Role of a Bankruptcy Regime' (2007) 115 J.Polit.Ec. 901.

²⁵ Technically: an inefficient equilibrium derived by the impossibility of differently allocation control. See Douglas Diamond and Raghuram Rajan, 'A Theory of Bank Capital' (2000) 55 The Journal of Finance 2431.

²⁶ On the relevance of short-term contract in bank financing, see Flannery, 'Debt Maturity and the Deadweight Cost of Leverage: Optimally Financing Banking Firms' (n 10). Short-term funding also implies funding and liquidity risk, that have been blamed as the main driver of the latest financial crisis, on this matter see Markus Brunnermeier, 'Deciphering the liquidity and credit crunch 2007-2008' (2009) 23(1) JEP 77.

Also considering this peculiarity, one could wonder whether, and to what extent, the theory of debt previously discussed applies to banks. Bank are, somehow, "special" for a wide array of reasons, among which at least two are here crucial²⁷.

First, banks perform a maturity transformation of their assets, as they borrow money short term and lend long term, exposing banks to (retail and wholesale) runs.²⁸ This provides a sound argument for deposit guarantee which, in turn, begs for intrusive regulation substituting for the lack of monitoring by depositors.²⁹ As a by-product, banks implicitly rely on public bailouts, strengthening the moral-hazard problem.

Second, big and interconnected banks generate systemic risk, meaning that the failure of a financial institution results in much bigger costs than the ones borne by the institution, as the effects of one failure propagate to the rest of financial system (e.g.: contagion risk, trust issues, etc.).³⁰

The post-crisis wave of reforms has confronted both of these issues introducing the concept of loss absorbency capacity of the bank's liabilities. This means that banks should bear in their balance sheet sufficient instruments for internal recapitalisation, minimising the impact on financial stability.³¹ Those instruments can be either capital, as defined by the Basel III accords,³² or non-capital instruments that are apt to absorb losses.³³ What makes an instrument apt to absorb losses are its qualitative characteristics, i.e.: contractual arrangements.

In the European Union, the regulatory framework for loss-absorbing instruments is composed by the Capital Requirement Regulation (CRR),³⁴ laying down qualitative and quantitative requirements for capital instruments; and the BRRD, dealing with the

²⁸ Douglas Diamond and Philip Dybvig, 'Bank Runs, Deposit Insurance, and Liquidity' (1983) 91 J.Polit.Ec. 401.

²⁷ For a comprehensive explanation, se e Markus Brunnermeier et al., *The Fundamental Principles of Financial Regulation*, vol 11 (ICMB, Internat Center for Monetary and Banking Studies 2009).

²⁹ The so-called "representation hypothesis", as proposed by Mathias Dewatripont and Jean Tirole, 'The Prudential Regulation of Banks' (MIT Press 1994).

³⁰ On systemic risk see extensively, Steven Schwarcz, 'Systemic Risk' (2008) 97 Geo.LJ 193.

³¹ Financial Stability Board, 'Key Attributes of Effective Resolution Regimes for Financial Institutions' (2011).

³² BCBS, 'Basel III: A Global Regulatory Framework for More Resilient Banks and Banking Systems' (2010).

³³ See Financial Stability Board, 'Principles on Loss-Absorbing and Recapitalisation Capacity of G-SIBs in Resolution - Total Loss Absorbency Capacity' (2011).

³⁴ Regulation (EU) No 575/2013 of the European Parliament and of the Council of 26 June 2013 on prudential requirements for credit institutions and investment firms [2015] OJ L 176.

qualitative requirements for non-capital instruments, considered "eligible" to be counted as bail-inable liabilities.³⁵ Once the bank goes into financial distress and becomes "failing or likely to fail",³⁶ the resolution authority can decide to write-down or convert bail-in eligible claims through the so-called bail-in mechanism, recapitalising the bank without the need for a State bailout.³⁷

Therefore, from an ex-ante perspective, loss-absorbing instruments are designed to work as a self-insurance buffer against the risk of financial distress, insofar as the losses arising from financial distress are allocated to investors in bail-inable securities and not on the general public. In other words, the guarantee on banks solvency is not provided only by State's fiscal capacity, but also by bank's insiders that bear losses first.

In a world of complete contracts,³⁸ this should also optimise risk-taking incentives of bankers, since each future courses of action would be governed in a way consistent with the fulfilment of contractual obligations attached to bail-inable securities, i.e.: not becoming "failing or likely to fail" so to avoid losses for bail-inable debt-holders.³⁹

Nonetheless, in a world of incomplete contracts characterised by a vast degree of uncertainty in Knightian sense,⁴⁰ such an outcome is dubious. Even more so, considering that qualitative requirements on loss-absorbing instruments and the administrative discretion of the resolution authority further constrain the possibility of efficiently allocating control. Thereby, the proceeding of the chapter discusses the qualitative requirements for bail-in eligible liabilities from the perspective of the investor, i.e.: as a set of constraints to contractual possibilities.

³⁵ Quantitative requirements for bail-inable securities are not set down in primary legislation but are individually determined by the resolution authority together with the supervisory authority, pursuing Art. 45(6) BRRD.

³⁶ Art. 32(1)(a) BRRD.

³⁷ On the doubt over the efficiency and effectiveness of these mechanisms, see supra note n. 8.

³⁸ The ideal situation in which each and every future course of action can be *ex-ante* forecasted and disciplined.

³⁹ See, for instance, Jianping Zhou and others, 'From Bailout to Bail-in: Mandatory Debt Restructuring of Systemic Financial Institutions' [2012] Journal Issue 3.

⁴⁰ Frank H Knight, *Risk, Uncertainty and Profit* (Harper & Row 1921).

3. Contractual Freedom and Regulatory Constraints

Qualitative requirements of bail-inable instruments assure that, in the event of financial distress, the bank can absorb losses, according to the seniority of its liabilities: the more junior a liability is, the stricter requirements are. Hence, the primary objective of qualitative requirements is to preserve financial stability and minimise the need for public bailouts.

From the perspective of an investor, strict qualitative requirements mean constraints on the ability to bargain on the terms of the investment. This implies, in turn, limited chances for contractual solutions to efficiently allocate contingent control and more reliance on the role of regulators and supervisors⁴¹ in disciplining the manager's behaviour. Moreover, as discussed in the previous Chapter, the discretion of the Resolution Authority in imposing losses in the event of distress additionally hampers the condition of investors in bail-inable securities, resulting in uncertainty about the return on their investment.⁴²

The proceeding of the section outlines the qualitative requirements of capital and noncapital bail-inable securities (3.1). Afterwards, the chapter discusses the compliance of control allocation mechanisms with such requirements. This allows to understand the channels, if any, through which an investor can efficiently allocate control and bargain out of supervisory discretion (3.2).

⁴¹ Consistently with the Representation Hypothesis, see supra note n. 29.

⁴² On the ambiguity in the interpretation and the application of the "public interest" principle in recent bank distress cases in Europe see Wolf-Georg Ringe, 'Bank Bail-In between Liquidity and Solvency' (2016) 92 Am. Bankr. LJ 299, 29.

3.1 A Brief Overview of Qualitative Requirements⁴³

The BRRD⁴⁴ requires institutions to meet at any times a Minimum Requirement for Own Funds⁴⁵ and Eligible Liabilities (MREL).⁴⁶ Quantitatively, MREL is a tailor-based requirement, while the CRR statutorily set the required amount of own funds.

Before individually addressing each class of items, three general features deserve some attention. First, for absorbing losses, eligible instruments must provide a genuine contribution of wealth; thus, they cannot be owned by, secured by, funded by or guaranteed by the issuing institution. If that happened, the losses would be indirectly born by the issuer itself. Second, eligible instruments rank below all the others and, within eligible instruments, each class of instruments has different seniority. Third, Article 48 BRRD regulates the sequence of subordination, allocating the losses to CET1 holders first, then AT1, T2 and eventually other eligible liabilities, as described in Figure 11. Specifically, the description will consider qualitative requirements on maturity, loss-absorption, repayment of the principal amount, and distribution of interests/dividend.

⁴³ This section focuses partly on Additional Tier 1 instruments and mainly on Tier 2 instruments, as Common Equity Tier 1 instruments fall out of the scope of this research.

⁴⁴ Art. 45 BRRD. In this contribution, MREL is preferred over TLAC as a regulatory standard on which to base the analysis given its Eurocentric perspective. Nonetheless, the core of the arguments proposed would not vary significantly. On the inter-relation between MREL and TLAC see, EBA, 'Final Report on MREL' (2016).

⁴⁵ The aim of MREL requirement is to make the bank able to absorb losses and restore their capital position, allowing it to continuously perform their critical economic functions during and after a crisis. As a first approximation, it consists of the sum of Tier 1 and Tier 2 capital, see Art. 71 CRR.

⁴⁶ Bank liabilities that are not exempted *ex* Art. 44(2) and complies with the requirements of Art. 45(4).



Figure 11 - Capital and bail-in eligible liabilities waterfall

For explanatory purposes, non-Tier2 instruments are analysed first and, subsequently Tier 2 and Additional Tier 1. Indeed, to be eligible, junior liabilities should comply with senior's requirements and with further requirements specific to the senior class. The analysis covers rules on subordination, the maturity of instruments, repayments and distributions. Figure 12 summarises all the requirements.

MREL eligible instruments must have a remaining maturity of at least one year.⁴⁷ Hence, for instance, a bond whose maturity is 31st January 2025 will be fully counted as MREL eligible until 31st January 2024. Moreover, Article 44(2) BRRD exempts from the application of bail-in some classes of liabilities that are incompatible with the aim of the tool, such as covered deposits.⁴⁸ MREL eligible instruments are not required to comply with specific rules on repayments of principal amount and distribution of interests.

Coming to capital instruments, Tier 2 liabilities must be issued with an initial maturity of at least five years.⁴⁹ The instrument can be redeemed (called, repurchased or repaid) in

⁴⁷ Art. 45(4)(d) BRRD. Note that liabilities with more than 7 days to maturity can still be bailed-in in resolution, but they do not count for MREL compliance.

⁴⁸ For an in-depth analysis of exemptions of Art. 44(2), see Tröger (n 8).

⁴⁹ Art. 63(1)(g) and 64 CRR. In the last 5 years before maturity, the liability is linearly amortised so that only a fraction can be counted as Tier 2 capital. Nonetheless, it is still full MREL eligible. On the other hand, the full instrument is not MREL eligible anymore when has less than 1-year maturity even though a fraction of the instrument can still be counted as regulatory capital. Such inconsistency does not hamper the overall argument of this contribution.

advance after five years from the issuance and with prior supervisory approval.⁵⁰ Besides, no contractual provisions can provide incentives for early repayment;⁵¹ as well as no contractual clause can give the holder the right to accelerate the repayment of interests and the principal amount of the instruments.⁵²

Instrument	Main Source	Maturity	Loss Absorbency/ Subordination	Distributions	Repayments
Non-Tier 2 bail-in eligible	Articles 44, 45 and 48 BRRD	At least 1 reaming year.	BRRD framework After Tier 2 instrument.	No specific requirements	No specific requirements
Tier 2	Articles 62-65 CRR	- At least 5y at issuance; - callable after 5y with supervisory permission. - linear amortization in the last 5y.	BRRD framework After AT1 instruments.	No specific requirements	 no contractual incentives to redeem or repay in advance; call option at sole discretion of the issuer; instruments are callable or redeemable after 5 years upon supervisory approval; no contractual indication of anticipated repurchase or repayment; No contractual provision for repayment acceleration.
Additional Tier 1	Articles 51-55 CRR	Perpetual, callable after 5 years with supervisory permission.	CRR framework Rank below Tier 2; Principal write down or conversion upon a trigger event; BRRD framework After CET1 instrument.	- Paid out of distributable assets - Full discretion for the issuer to cancel distribution	 no contractual incentives to redeem or repay in advance; call option at sole discretion of the issuer; instruments are callable or redeemable after 5 years upon supervisory approval; no contractual indication of anticipated repurchase or repayment; no contractual provision for repayment acceleration.

Figure 12 - Outline of the main qualitative requirements for bail-in eligible liabilities

Whereas AT1 and T2 items share the provisions governing redeemability, and constraints on contractual clauses, the main difference between the two lies in the perpetuity of AT1 items. Moreover, distributions should be paid out of distributable items

⁵⁰ Art. 63(1)(j) and 77 CRR.

⁵¹ Art. 63(1)(h),(i),(k).

⁵² Art. 63(1)(I) CRR.

(profits, retained distributable earnings) and the issuer has full discretion in cancelling distributions

Lastly, loss-bearing provisions out of a resolution procedure complement the principle of seniority in resolution.⁵³ According to the CRR framework, AT1 items must be written down or converted into CET1 when the level of CET1 falls below 5,125% of RWA, allowing the institution to have new equity when that would be difficult or too expensive to raise. The trigger event for write down or conversion can be higher than the statutory one if provided in the contract.⁵⁴

3.2 Compliance of Contractual Devices

This Section aims at bringing together the framework developed Section 2 and the analysis of the qualitative requirements discussed in Section 3.1. It argues that many of the usual contractual devices are largely unavailable in banking because such devices do not comply with existing regulation.

First of all, it is easy to rule out the possibility of complying with capital and MREL requirements through short-term or secured debt for financial stability purposes. Short-term exposures are prone to run in case of idiosyncratic or systemic turmoil. On the other hand, the stability of financial institutions, as well as the feasibility of resolution procedures, beg for long-term non-runnable items on which other short-term investors, depositors and the market as a whole can rely.

In a similar vein, eligible liabilities need to absorb losses. Therefore, secured items are radically incompatible with the aim of capital regulation, and the principles of resolution, as the loss-absorbency capacity would only be fictional, and the institution would still bear the losses.

The situation is more entangled when it comes to covenants. Covenants salience can be grasped by referring to Patrick Bolton: "In short, the area where the issue of

⁵³ Art. 52(1)(n) and 54 CRR.

⁵⁴ This specific aspect is crucial. Section 4 discusses it widely.

contractual incompleteness perhaps matters most, when it comes to debt contracts, is the design and enforcement of debt covenants.⁵⁵

First, for the sake of financial stability and public trust, using a covenant breach as an event of default to force debt renegotiation represents an unavailable option.⁵⁶ Contractually granting the opportunity to force a financial institution into bankruptcy in case of a breach would provide the creditor with disproportionate powers, putting her in the position to generate significant negative externalities for the whole economy. Covenants can also have other functions. For instance, covenants are used to speed up the repayment in case of a breach, allowing to end a risky exposure. Again, covenants can be used to impose behavioural remedies upon a breach.⁵⁷

As previously described, covenants speeding-up repayments are unavailable for capital instruments, while there are no constraints for non-capital eligible items. One could say that the regulator has extensive control over capital items both through regulatory tools, such as the ban on the acceleration of repayment, and supervisory tools, such as the necessary permission to call items earlier than the original maturity.

Instead, behavioural covenants (e.g.: restriction on payment of dividends) are, in principle, compliant with the requirements of both capital and non-capital items. However, covenants are costly to draft and enforce. Therefore, it might well be that, even if available, their costs outweigh the benefits. Banks assets and operations are, by definition, opaque; so that monitoring costs are higher than in non-financial firms.

Besides, there is a set of rules mimicking the possible behavioural covenants that could be imposed.⁵⁸ Think, for instance, about the restrictions on dividends provided by Article 141 of the Capital Requirement Directive.⁵⁹ Thus, in comparison with non-financial firms,

⁵⁵ Patrick Bolton, 'Corporate Finance, Incomplete Contracts, and Corporate Control' (2013) 30 The Journal of Law, Economics, & Organization i64, 75.

⁵⁶ This solution is widely employed and desirable in corporate debt. See empirical evidence furnished in Greg Nini, David C Smith and Amir Sufi, 'Creditor Control Rights, Corporate Governance, and Firm Value' (2012) 25 The Review of Financial Studies 1713.

⁵⁷ Restriction on investments (e.g.: mergers), on financing (e.g.: future senior debt issuances) and on dividends, as categorised in Bradley and Roberts (n 23).

⁵⁸ See back in Section 2 about the theory of banking regulation and the Representation Hypothesis (n. 29).

⁵⁹ Directive 2013/36/EU of the European Parliament and of the Council of 26 June 2013 on access to the activity of credit institutions and the prudential supervision of credit institutions and investment firms [2013] *OJ L 176.* For a deeper analysis of the governance provisions contained in the CRD IV that might mimic

imposing covenants would be costlier, because of the higher cost of compliant drafting, monitoring and enforcement. On the other hand, benefits, if any, would amount to the marginal increase of mismanagement deterrence that a tailored-made covenant can yield on top of the supervisory rules.⁶⁰ To sum up, consistently with the Costly Contracting Hypothesis, qualitative requirements leave sufficient room for covenants even if complementary rules and the nature of financial institutions shrink the scope for efficient covenants.

Finally, some attention has to be devoted to the hypothesis of statutory bankruptcy and the special ways in which it materialises for banks. Once the bank reaches the point of non-viability, there are two main options: liquidation (gone concern) and resolution (going concern).⁶¹ For what is here of interest, we do not consider gone concern options, as the procedure of bank liquidation has no governance implication, i.e.: no contingent shift in control. On the contrary, in a going concern scenario, investors can have a potentially relevant governance impact when the resolution authority decides to convert eligible liabilities into shares.⁶²

Some authors have argued that converting debtors into shareholders may influence the incentives of managers toward risk-taking: creditors are thought to be more risk-averse than shareholders so that they would influence the management in that direction.⁶³ Moreover, the conversion of other instruments likely follows the substantial dilution or

potential covenants, see Luca Enriques and Dirk Zetzsche, 'Quack Corporate Governance, Round III? Bank Board Regulation Under the New European Capital Requirement Directive' (2015) 16 Theoretical Inquiries in Law 211.

⁶⁰ The risk of redundancy and conflicts for covenants on bail-inable securities and existing regulation has been highlighted also in Fiona Mann and others, 'Market Discipline and UK Bank Bondholders' (2017) 57 Bank of England Quarterly Bulletin 26.

⁶¹ In the liquidation scenario, the bank is shut down according to national insolvency and the legal entity cease to exist. In the resolution scenario, the critical functions of the bank continue, as provided by Art. 31(2)(a) BRRD, and the distress of the bank is coped with an administrative procedure employing one or more resolution tools provided in the BRRD. The result can be either full going-concern scenario, where the original legal entity is made viable and continues to operate (e.g.: bail-in tool) or a scenario where the original legal entity ceases to exist (e.g.: bridge institution tool).

⁶² Using the power provided by Art. 63(1)(f) BRRD, while the power to write down provided by Art. 63(1)(e) is not here considered for the reasons discussed above in the case of gone concern solutions.

⁶³ This is the underlying idea in Coffee Jr (n 13).

even the complete write-off of outstanding shares.⁶⁴ Hence, a radical shift in control would happen. Some preliminary observations are worth discussing.

First, as opposed to clearly defined economic rights, governance characteristics of converted shares are not clearly regulated. Indeed, eligible items ought to be converted into common shares, as preferences in distributions and repayment are not allowed under the subordination requirement of CET1.⁶⁵ On the contrary, neither the CRR nor the BRRD cover issue of governance rights of the converted items.⁶⁶

Second, the conversion would happen at the point of non-viability, so that the incentives of new shareholders would not sharply differ from the old ones' in terms of risk shifting and gambling for resurrection.⁶⁷ No rational reasons, indeed, lead to believe that allegedly risk-averse bondholders are sticking to their risk appetite in the event of conversion. Risk appetite cannot be assumed to be immutable,⁶⁸ but it changes according to the investor's payoffs.⁶⁹

Ultimately, the decision of public authorities over the most desirable course of action to undertake, i.e.: the probability of conversion, remains vastly discretionary.

Nonetheless, contracts might come at hand once again. It is possible to write contractual clauses for the conversion of eligible liabilities into CET1 items once a preestablished trigger event materialises (contingent convertibles or Cocos). Therefore,

⁶⁴ See Recital n. 77 BRRD: "Losses should first be absorbed by regulatory capital instruments and should be allocated to shareholders either through the cancellation or transfer of shares or through severe dilution".

⁶⁵ Differential rights in the magnitude of distributions are allowed in case of shares have limited or no voting rights, as provided by Art. 28(4) CRR.

⁶⁶ According to the CET1 requirements shares can have limited or no voting rights. See supra note n 65.

⁶⁷ This view is antithetical with the one proposed by some authors, claiming under the assumption that creditors structurally more risk-averse than shareholders are. See, for instance, Coffee Jr (n 13); Zhou and others (n 39).

⁶⁸ Here, the assumption on constant preference still hold and given the risk preference, the appetite toward risk varies according to the specific context. This conservative approach is sufficient for the argument. Nonetheless, one could go further and drop off the assumption of constant preference, leaning toward the behavioural literature on context-specific preferences. See, Amos Tversky and Itamar Simonson, 'Context-Dependent Preferences' (1993) 39 Management science 1179.

⁶⁹ This line of reasoning is reinforced by the fact the under the MiFID II framework bail-inable securities are classified as a "complex instruments", that makes highly complex for retail investors to buy them. Guidelines on complex debt instruments and structured deposits, 04 February 2016 | ESMA/2015/1787.

theoretically, investors can bargain out of regulatory discretion, assuming that Cocos are always and consistently written down or converted.

4. Bargaining out of Discretion: Contingent Convertibles

4.1 Rationale and Design Features

Contingent Convertibles represent an academic invention dating back to the early 2000s.⁷⁰ They have become popular in the aftermath of the financial crisis, as they seemed to be innovative items that could potentially disrupt the discourse on financial stability.⁷¹ Cocos consist in financial instruments that are written down or converted into equity when a contractually predetermined event (trigger) occurs, with the immediate consequence of recapitalising and deleveraging a bank that is going toward financial distress.⁷²

From a legal perspective, no EU regulation, neither CRR nor BRRD,⁷³ provides for a special regulatory regime for Contingent Convertibles even though they are part of bailinable securities and, usually, of regulatory capital. The Swiss regulator adopted a sharply different approach, where Cocos are the only instruments that count as regulatory capital other than CET1. Swiss regulation requires large banks to issue Cocos amounting to at least 9% of RWAs, of which at least two-third with a trigger point higher than 7% of capital over RWAs.⁷⁴

In the EU, Cocos count for regulatory capital as long as their characteristics comply with qualitative requirements for specific classes, as discussed in Section 3. Hence, they count as AT1 if they are perpetual and distributions are discretionary, or as T2 if those are long-term. Cocos can even count as non-capital bail-in eligible if their maturity is shorter

⁷⁰ Mark J Flannery, 'No Pain, No Gain. Effecting Market Discipline via Reverse Convertible Debentures' [2005] Capital Adequacy Beyond Basel: Banking, Securities, and Insurance 171. The published version is based on a working paper delivered in 2002.

⁷¹ See, among many other, Mark J Flannery, 'Stabilizing Large Financial Institutions with Contingent Capital Certificates' (2016) 6 Quarterly Journal of Finance 1650006.

 ⁷² Patrick Bolton and Frederic Samama, 'Capital Access Bonds: Contingent Capital with an Option to Convert' (2012) 27 Economic Policy 275.

⁷³ Art. 44(13) and (14) BRRD provides for the possibility to meet MREL with contractual bail-in.

⁷⁴ For the Swiss regime on Capital Adequacy of banking institutions, see the Verordnung über die Eigenmittel und Risikoverteilung der Banken und Wertpapierhäuser, entered into force the 1st January 2013. On the impact of Swiss regulatory framework, see Georg Junge and Peter Kugler, 'Quantifying the Impact of Higher Capital Requirements on the Swiss Economy' (2013) 149 Swiss Journal of Economics and Statistics 313.

than five years or they embed covenants that are incompatible with capital instruments. However, issuing non-capital Cocos would make little sense since the bank would need to issue costly instruments twice. Thus, it is reasonable to argue that Cocos are either AT1 or T2, depending on their characteristics,⁷⁵ with the additional constraint that the trigger event of AT1 cannot be lower than 5,125% of CET1 over RWAs.⁷⁶

Looking closer at the literature on convertible items, it appears clear that "contingent convertible" represents an umbrella concept that comprehends a wide variety of items, whose goal and main characteristics are similar while sharply differing in their design. This is not the place for providing a comprehensive survey of all the possible Cocos' designs, but some crucial aspects ought to be introduced.

First, setting the correct trigger event is crucial for efficient design. This represents a conundrum that financial economists are heavily discussing. Here it is sufficient to emphasise that there are two main policy options: Cocos with high or low triggers. High trigger indicates the fact that the triggering event is relatively far from the point of non-viability,⁷⁷ while low trigger means the opposite.

Second, Cocos can contractually provide both for conversion and write-down of their principal amount once the event is triggered.⁷⁸

Third, a further variation is to design re-convertible items, i.e.: contractually establish a second event that, if triggered, converts back the shares into Cocos. The re-conversion can be automatic or in the form of an option in favour of the converted shareholders. As Section 4.3 illustrates, the design with a reconversion option has beneficial effects from a corporate governance perspective.

⁷⁵ Besides, for tax shielding purposes, most likely Cocos issuances take the form of bonds even if they could in principle be preferred stocks.

⁷⁶ Art. 54(1) CRR.

⁷⁷ The market value of shares represents the crucial variable, as when multiplied by outstanding shares and divided by the assets as indicated by latest available accounting data provide a proxy for the market value of banks equity and the level of financial distress.

⁷⁸ For mutual banks, only the principal write-down option is available, as they do not have common shares to exchange with convertible bonds. Thus, for instance, Rabobank in 2010 issued convertible bonds providing for writing their principal amount down once the event is triggered.

Given the rationale and the design features of Cocos, the following section explores the impact of issuing Cocos on risk-taking incentives.

4.2 Cocos and Risk-taking

About the impact of Cocos on risk-taking, there is no consensus in the economic literature, since there is not a generalised view on how to approach the issue and the outcome is highly dependent on the assumptions of the various models.⁷⁹ The overall effect on risk-taking appetite encompasses three main dimensions.

First, the immediate consequence of converting Cocos into ordinary shares is to deleverage the balance sheet of the bank which, in turn, reduces the incentives for "risk shifting" and "gambling for resurrection" behaviours. This can be a persistent effect only if the bank is profitable. If the value of shares keeps decreasing, the beneficial effect of deleveraging will not last.

Second, there is an effect on incentives toward monitoring. Coco holders bear losses with relatively high probability, so that their incentives to monitor banks activities in general, and the trigger event-related issues in particular, increase.⁸⁰

Third, and most relevant for our purposes, there might be "pure" governance effects, i.e.: contractual design of convertible items positively affects the agency problems among corporate constituencies, providing for ways to assure a return on investment⁸¹ better aligned with risk-decreasing attitude. The remainder of the section discusses the potential for beneficial governance effects and the necessary contractual features for it to materialise.

⁷⁹ Some papers argue for risk-reduction effect while some others claim the exact opposite. See, respectively, Natalya Martynova and Enrico Perotti, 'Convertible Bonds and Bank Risk-Taking' [2018] Journal of Financial Intermediation; Tobias Berg and Christoph Kaserer, 'Does Contingent Capital Induce Excessive Risk-Taking?' (2015) 24 Journal of Financial Intermediation 356.

⁸⁰ Note that the increase on monitoring incentives may well be suboptimal, because the costs still outweigh the expected benefits or because of the complex and unpredictable legal framework. On the sub-optimality of market discipline through monitoring, see Emilios Avgouleas and Jay Cullen, 'Market Discipline and EU Corporate Governance Reform in the Banking Sector: Merits, Fallacies, and Cognitive Boundaries' (2014) 41 Journal of Law and Society 28.

⁸¹ See the definition of corporate governance by Shleifer and Vishny (n 20).

4.3 Governance Features of Coco Design

The crucial issue in assessing the governance benefits deriving from Contingent Convertibles rests upon the type of shares Cocos are converted in.⁸² As a first approximation, one can think of two main possibilities. First, converting Cocos into plain ordinary shares that do not differ from the pre-existing ones in the voting and economic rights; second, converting Cocos into different kind of shares with different voting and economic rights.

As discussed in Section 4.1, if the converted shareholders have the same position of the pre-existing ones, there is no rational ground for arguing that their risk incentives are going to act as more risk-averse just because they were bondholders beforehand.

However, as the previous discussion may have clarified, designing financial instruments for banks is all but straightforward and unrestricted, so it is issuing CET1 instruments. Thus, for qualifying as CET1, shares should not be in any way preferred to other CET1 items in neither distribution of dividends nor liquidation.⁸³ This hampers, at least in the EU framework, the argument put forward by Coffee about positive governance effects if Cocos convert into preferred stocks with considerable voting rights.⁸⁴

Within equally subordinated shares, CRR allows differentiating the quantity of voting and economic rights. Banks, in principle, can issue multiple, restricted or non-voting shares and economic rights can be adjusted accordingly; i.e.: higher economic rights can be attached to shares with fewer or no voting rights.⁸⁵

Given this framework, governance effects arise both before and after conversion. In good times, shareholders are averse to conversion if that means a considerable dilution of their voting or economic rights.⁸⁶ Moreover, and most importantly, once the bank runs into

⁸² For explanatory purposes, this section assumes that the troubled bank has only one class of shares providing one vote to each share. A complex structure with multiple share classes would not hamper the overall argument, even though can make more difficult the shift in control (for instance in case of multiple voting shares.

⁸³ Art. 28(1)(h)(i) CRR. This implies that preferred stocks would not count as CET1 but as AT1 instruments.

⁸⁴ See Coffee Jr (n 13).

⁸⁵ Art. 28(4) CRR.

⁸⁶ This is also an argument in favour of large conversions that can *ex-ante* threaten shareholders. Moreover, as discussed supra (note 82), if the banks have a complex dual class structure the *ex-ante* effect could be

financial distress and the conversion happens, coco holders are playing an active governance role whose content is highly dependent on the contractual design of converted shares. If risk appetite is context-dependent so that one cannot rationally expect that coco holders are sticking to their risk-averse attitude once converted, this is also true for contractual entitlements that vary the context and so the appetite toward risk.

The governance role of converted shareholders varies according to the design of convert shares. We discuss three possibilities.

1) No voting rights: in this scenario, converted shareholders have no say in the decision-making process of the bank, so that their direct governance impact is negligible, whereas the "deleveraging effect" stays the same. Anyhow, higher economic rights, compliant with CET1 requirements, could be attached to non-voting share so that the *exante* aversion of pre-existing shareholders to conversion can be slightly amplified.

2) Same voting and economic rights: in this situation, the argument about contextdependent risk appetite applies; hence, converted shareholders have the same risk incentives as the pre-existing ones. However, if controlling shareholder extracts detrimental private benefits from control,⁸⁷ the conversion can still have beneficial governance consequences. If the amount of converted shares is significant enough to alter the existing control power, converted shareholders can push for a more shareholder's value-oriented management, for instance, substituting the incumbent managers. Moreover, the conversion scenario in this situation would amplify the *ex-ante* aversion toward the conversion of controlling shareholders that may opt for limiting the private benefit extracted from the bank. Nevertheless, being absent regulatory requirements to issue Cocos, a more straightforward solution is not to issue them in the first place.

Even out of the latter scenario, an option to re-convert can modify the incentive parallelism. In this scenario, new shareholders may decide to reconvert to Cocos once a second trigger event is breached. So, in case of a high-trigger Coco that converts into shares, once the turmoil has passed, the converted shareholders have the opportunity to

weakened. An immediate follow-up of this argument is that high-trigger Cocos amplify the aversion to conversion.

⁸⁷ On private benefits of control and the cases in which it is harmful to firm's value see Alessio Pacces, *Rethinking Corporate Governance: The Law and Economics of Control Powers* (Routledge 2013).

opt for reconversion to a relatively safer asset, undercutting the shift toward larger risk appetite. This would elicit risk-preferences of converted shareholders so that the genuinely risk-averse ones will push for a more cautious approach to get out of distress and reconvert to bonds. Thus, if the trigger is high enough not to provide "gambling for resurrection" incentives and the amount of converted shares is big enough to impact on the control of the bank significantly, the reconversion option can be a powerful tool.

3) Limited voting rights: it is relatively common for companies to issue classes of shares whose voting rights are limited to specific issues (usually strategic decision, such as mergers) or contingent to some event (e.g.: dividends are not distributed for two years in a row). In our context, limited voting rights seem more likely to occur. In such a scenario, most of the arguments proposed for (unrestricted) voting shares are applicable, including the beneficial effect of an option for reconversion.

What sharply differs from the latter design is that restricted voting shares are not apt to perform a shift in control, since they do not usually provide for voting rights in the election of the board. Therefore, the magnitude of the beneficial impact is more limited than for the previous design, especially with regard to limiting rent extractions Finally, limited voting shares can provide enhanced economic rights, which *ex-ante* increase the aversion toward the conversion of pre-existing shareholders.

While it is impossible to provide a comprehensive glance all the possible design features; yet, the three above mentioned are, arguably, the paradigm of general application. Indeed, on top of the main designs discussed, one can think of a wide variety of more "exotic" variations. For instance, converting Cocos into a class of shares that have the specific right to appoint one or more directors or, again, the case for multiple voting rights shares.

Nonetheless, this chapter is not in the position to analyse all of these cases in-depth since they are highly jurisdiction dependent. Not only capital requirements impose qualitative restrictions on the rights attached to shares, but also national corporate laws. So, for instance, it is relatively easy to issue multiple voting shares in Anglo-Saxon

159

jurisdiction, while that is not the case in Civil law-oriented ones, where the principle oneshare-one-vote is harder to opt-out of for companies that are already listed.⁸⁸

The same argument goes for the specific rights to elect directors: it could be relatively simple in Italy, where the slate voting procedure for board election represents a wellestablished legal tool, while it may turn to be virtually impossible in Germany, where the co-determination principle makes the composition of the board a particularly delicate equilibrium.

To sum up, assuming that Cocos are consistently written down or converted at the trigger point, the contractual design of Cocos matters for corporate governance. Design features that differentiate the incentives of pre-existing and converted shareholders are potentially able to decrease the overall risk appetite of the bank. This holds as long as the trigger event for the conversion is set relatively high, and the amount of converted shares is significant enough to impact on corporate decision-making. This markedly differs CoCos from other bail-inable securities, as their design, given the current regulatory framework, is unfit to discipline risk-taking behaviours of managers.

5. Conclusion

The chapter discusses the trade-off between financial stability and market discipline through the lens of contractual possibilities in designing bail-inable securities. Financial stability considerations prevail both in the pre-crisis and post-crisis regulatory framework, being absent compelling arguments to drop-off and strongly favour market discipline imposed through contract.

Given the current regulatory framework, the chapter explores the room left to investors for impacting on banks stability through contractual arrangements, mainly following the literature on the contingent allocation of control and looking at financial

⁸⁸ This represents, nowadays, an oversimplification of the composite landscape offered by national corporate laws. For a comprehensive and problematised overview, see Marco Ventoruzzo, 'The Disappearing Taboo of Multiple Voting Shares: Regulatory Responses to the Migration of Chrysler-Fiat' [2015] Bocconi Legal Studies Research Paper; Guido Ferrarini, 'One Share–One Vote: A European Rule?' (2006) 3 European Company and Financial Law Review 147. For the latest development on multiple voting shares and the distinction between already listed and yet-to-be-listed companies, see Claire A Hill and Alessio M Pacces, 'The Neglected Role of Justification under Uncertainty in Corporate Governance and Finance' (2018) 3 Annals of Corporate Governance 276, 320.

regulation as constraints to contractual freedom. Moreover, it tackles the issue of the governance consequences of issuing contingent convertible instruments given the EU regulatory framework, which, to the best of the author's knowledge was an unexplored field in the European literature.

Traditional contractual devices are typically unavailable because of either the capital regulation or the recovery and resolution framework. Moreover, even when contractual devices are compliant with existent regulation, the room for actually impacting on bankers' behaviour is limited, also because of the risk of redundancy with other pieces of legislation and the supervisory activities.

The situation changes in the case for Contingent Convertible instruments under the assumption that conversion or write down consistently happens at the trigger point. From the perspective of financial stability, Cocos represent a powerful buffer, especially if the trigger event is far from the point of non-viability. Moreover, the available contractual characteristics of Cocos, if properly designed, can have an impact on the *ex-ante* and *expost* risk appetite of banks that decides to issue them. In particular, the crucial design features consist of voting rights, economic rights, and reconversion options, so to diversify the incentives of original shareholders from the ones of Coco holders.

Part II – Positive Analysis

Chapter 6 - Toward an Optimal Composition of Bail-Inable Debtholders?

Abstract

This chapter intends to address the composition of bail-inable debtholders and the relevance of counterparties in resolution. A wide array of studies focused on the EU resolution regime for distressed banks, whose core insight is to allocate losses to bank's insiders (bail-inable creditors). Nevertheless, both regulators and academics overlooked the importance of identifying actual investors in bail-inable securities (i.e.: who is going to bear losses), neglecting to recognise how the shape and magnitude of counterparty risk is crucial for the credibility and effectiveness of the new regime.

This contribution aims at filling this gap, highlighting the relevant trade-offs and providing informative data on bail-inable security holders. It highlights that the market is adjusting towards a desirable composition of holders even though a considerable room for improvement is still available, and a mix of different investors might yield superior outcomes.

This exercise deepens the current understanding of the impact of the new framework on market preferences, providing evidence on both the credibility of the resolution framework and the perspectives of effective application of the new tools.

Finally, the chapter discusses some possible ways forward, underlining the importance of increasing the share of sophisticated investors that are specialised in dealing with bail-inable securities, especially for junior positions. It proposes a balanced mix of investors with different business models and time horizons so to minimise systemic risk while maximising governance benefits. The chapter concludes that to incentivise market players to shift toward more efficient composition, granting ex-ante governance rights is warranted.

Keywords: Investors' Incentives; Stability v Discipline; Institutional Investors; Debt-holders Composition

1. Introduction

The main idea behind bail-in and, more generally, the new resolution framework is to allocate bank losses to investors and not to the general public through bailouts. Hence, studying the specific role of the counterparties of bank in bail-inable securities seems a natural approach to the problem of efficiency and effectiveness of the new framework. Despite such an intuition, both regulators and academics overlooked and almost neglected the issue.¹

The positions of academics and policymakers on the new resolution framework can be broadly divided into two strands. On the one hand, some authors argued that the new framework and the bail-in tool in particular, yield a more sound and resilient system, protecting taxpayers and (at least partly) addressing the Too-Big-To-Fail (TBTF) problem.² On the other hand, many other authors expressed a more sceptical view on the efficiency and credibility of the new resolution framework, claiming that it is unfit to address the TBTF problem and might even create additional systemic concerns.³

These two strands of literature have, accordingly, different takes on what bail-inable creditors will (or will not) be able to do for enhancing the level of market discipline and diminishing the moral hazard problem, leading to excessive risk-taking. Who believes in the new resolution framework argue that since the implicit guarantee of the sovereign on bank solvency has been void, creditors that are subject to the bail-in tool have all the incentives to effectively monitor bankers' activities in times of normal market conditions. Conversely, others have challenged this view, arguing that bail-inable creditors have neither the

¹ With the notable exception of a recent working paper by Wolf-Georg Ringe and Jatine Patel, 'The Dark Side of Bank Resolution: Counterparty Risk through Bail-In' (2019) 31. In this working paper, the authors approach the issue from the perspective of systemic risk creation through counterparty risk.

² See, for instance, Jianping Zhou and others, 'From Bailout to Bail-in: Mandatory Debt Restructuring of Systemic Financial Institutions' [2012] Journal Issue 3. See also, more specifically in the EU context Thomas Huertas, 'The Case for Bail-Ins' in Patrick S Kenadjian (ed), *The Bank Recovery and Resolution Directive: Europe's Solution for" Too Big To Fail"?*, vol 13 (Walter de Gruyter 2013); Thomas Huertas and Maria J Nieto, 'A Game Changer: The EU Banking Recovery and Resolution Directive', vol 19 (2013) <https://voxeu.org/article/banking-recovery-and-resolution-directive>.

³ Emilios Avgouleas and Charles Goodhart, 'Critical Reflections on Bank Bail-Ins' (2015) 1 Journal of Financial Regulation 3.

incentives nor the capabilities to positively and significantly impact on the risk-taking appetite of the bank they have borrowed to.⁴

Unsurprisingly, policymakers have sided with the first view on both resolution and the potentially beneficial role of bail-inable creditors. In this vein, the FSB states that an effective resolution regime should, among other objectives, "be credible, and thereby enhance market discipline and provide incentives for market-based solutions".⁵ Similarly, in the BRRD,⁶ the European legislator affirms that: "The bail-in tool will [therefore] give shareholders and creditors of institutions a stronger incentive to monitor the health of an institution during normal circumstances".⁷

This latter statement hints at the fact that having an allegedly credible resolution framework in place should enhance the quality of bank governance. In this perspective, bail-inable creditors play a crucial role, as their incentives are in line with the regulatory goal of maintaining the bank stable and solvent.

Nevertheless, digging deeper in the matter, it is not clear whether investors that are theoretically more willing and capable of disciplining risk-taking of their borrowers pose more stability concerns. This specific manifestation of the trade-off between financial stability and market discipline⁸ represents the ground question to which this analysis aims at contributing. In so doing, the analysis of the role of bail-inable creditors is quintessential.

The role of creditors is salient given the regulatory requirement, contained in the BRRD, of issuing enough bail-in eligible liabilities (MREL).⁹ The resolution authority specifies

⁴ See, with different arguments, Emilios Avgouleas and Jay Cullen, 'Market Discipline and EU Corporate Governance Reform in the Banking Sector: Merits, Fallacies, and Cognitive Boundaries' (2014) 41 Journal of Law and Society 28; Tobias H Tröger, 'Too Complex to Work: A Critical Assessment of the Bail-in Tool under the European Bank Recovery and Resolution Regime' (2018) 4 Journal of Financial Regulation 35.

⁵ Financial Stability Board, 'Key Attributes of Effective Resolution Regimes for Financial Institutions' (2011).

⁶ Bank Recovery and Resolution Directive (BBRD) - Directive 2014/59/EU of the European Parliament and of the Council of 15 May 2014 establishing a framework for the recovery and resolution of credit institutions and investment firms [2014] *OJ L 173*

⁷ Recital n. 67 BRRD.

⁸ Andrew Crockett, 'Market Discipline and Financial Stability' (2002) 26 Journal of Banking & Finance 977; Markus Konrad Brunnermeier and others, *The Fundamental Principles of Financial Regulation*, vol 11 (ICMB, Internat Center for Monetary and Banking Studies 2009).

⁹ Minimum Requirement for Own Funds and Eligible Liabilities (MREL). On MREL see Chapter 3, Section 3.2.

how much is enough, for each individual bank, on a tailor-made basis.¹⁰ However, on average, the required MREL capacity should amount to 26% of RWAs, and European Banks are far from reaching this goal.¹¹

These preliminary remarks underline two salient features going at the core of the analysis. First, an enormous amount of bail-inable securities needs to be issued and, consequently, held. This might appear a trivial observation. The remainder of the analysis shows that, on the very contrary, that is dense of relevant consequences. Throughout the chapter, this will be called "existence constraint". Second, who holds those debt instruments matters because of the different investment strategies of the holders as well as the different willingness and ability to discipline the issuing banks.

Nonetheless, the analysis of the corporate governance role of bail-inable creditors¹² has remained superficial and unsatisfactory in both the benevolent and critical approach to the matter.

Most of the contributions on the new resolution framework states, correctly, that neither bank crossholdings, nor substantial households' holdings are desirable. What remains unsatisfactory is the lack of in-depth analysis of the concrete channels through which creditors are supposed to influence their borrowers, scrutinising the impact of the new regulatory framework on those channels. Indeed, this aspect of the new resolution framework has only been tangentially touched upon by several authors that took different focal points.

¹⁰ For Globally Systemic Important Banks (G-SIBs), more specific quantitative requirements are required at a supranational level, according to the Total Loss Absorbency Capacity (TLAC) framework. See Financial Stability Board, 'Principles on Loss-Absorbing and Recapitalisation Capacity of G-SIBs in Resolution - Total Loss Absorbency Capacity' (2011).

¹¹ Dominique Laboureix, speech at 6th Industry Dialogue: 2017 MREL Policy, accessible at <u>https://srb.europa.eu/sites/srbsite/files/20171120 6th industry dialogue item 2 mrel dominique labou</u> reix.pdf. (accessed 10-02-2010). The MREL shortfall was estimated in 117 billion euro.

¹² Following professors Pacces and Heremans who argued: "all aspects of behaviour of financial firms can be ultimately understood as Corporate Governance issues". See Alessio M Pacces and Dirk Heremans, 'Regulation of Banking and Financial Markets', *Encyclopedia of Law and Economics - Volume 9* (Edward Elgar 2012). With specific regard to bail-in, professor Armour and co-authors claimed that: "This [the use of bail-in tool] has both financial and governance consequences for the bank [...] as the former debt-holders become equity holders", John Armour and others, *Principles of Financial Regulation* (Oxford University Press 2016) 359.

On the contrary, as I will argue throughout the chapter, who owns bail-inable securities represent one of the main cornerstones to make the system more resilient and resolvable. In addressing this gap in the literature, the chapter discusses the discrete impact on corporate governance of different types of investors in bail-inable securities and, building on such a discussion, proposing some potential path to take a step forward toward resolvability.

Thus, the chapter faces the following question: what is the optimal composition of bailinable debt holders? Therefore, it carries out a positive assessment of the state of the art and provides some tentative normative considerations on optimal composition. Developing a better understanding of the preconditions to implement a bail-in from the perspective of counterparty-risk motivates the analysis.¹³ Throughout this study, I will show that: different investors do play distinct roles and have diverging incentives in entering in the market for bail-inable securities; so that a balanced mix of investors might yield a more efficient outcome in terms of both corporate governance and financial stability.

In answering such a complex and challenging question, the chapter proceeds as follows: Section 2 pinpoints the policy and academic relevance of the matter and sets some methodological specifications. Section 3 builds a benchmark of a theoretically perfect buyer, drawing from the existing literature on the holders of bail-inable securities. Section 4 describes available data, their limitations and provides a snapshot of the limited knowledge that is currently available, supplying some descriptive statistics. Section 5, building on the previous two sections, discusses the pros and cons of each category of investors from both a corporate governance and a financial stability perspective. Section 6 moves to normative considerations. In the absence of a "perfect buyer" of bail-inable securities, Section 6 discusses which mix of investors can positively impact bank governance and preserve financial stability. Section 7 concludes.

¹³ In the same sense, see Martin R Götz and Tobias Tröger, 'Should the Marketing of Subordinated Debt Be Restricted/Different in One Way or the Other? What to Do in the Case of Mis-Selling?' (2016).

2. Why does this Matter and how to Study it

The corporate governance and corporate finance literature have extensively discussed mechanisms through which debtors can act as governance actors and their potential for disciplining influence to contain the risk-taking of credit institutions.¹⁴ In the context of banks, one can mainly think of three main channels: price adjustments (i.e.: trading or threat of trading), contractual design of debt securities and "private engagement" of investors (see Figure 13).

Previous chapters critically addressed the case for market discipline through price adjustments¹⁵ and the case for contingent allocation of control through contracts¹⁶, pointing out the impediments posed by the legal design of the existing regulation. Hence, even assuming the credibility of the resolution framework, the market for bail-inable securities cannot smoothly work. Therefore, the generality of holders is not able to use market-based or contractual based arrangements to discipline risk-taking of their borrower.

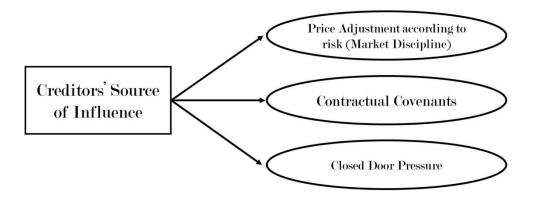


Figure 13 - Channels for creditors' influence

¹⁴ For a comprehensive overview, see Jean Tirole, *The Theory of Corporate Finance* (Princeton University Press 2006) ch 1.6.

¹⁵ This is the point on which the current literature mostly focus, See, with different arguments and perspectives, Avgouleas and Cullen (n 5); Tröger (n 5); Mark J Flannery and Robert R Bliss, 'Market Discipline in Regulation: Pre-and Post-Crisis' in Allen N Berger, Philip Molyneux and John OS Wilson (eds), *Oxford Handbook of Banking* (3rd edn, Oxford Handbook of Banking (3rd edition), Oxford University Press, forthcoming 2018). On the specific impact on market discipline of the BRRD legal design, see also Chapter 4. ¹⁶ See Chapter 5.

This chapter adds a further layer of complexity to the analysis, decomposing the category of bail-inable creditors and highlight the different incentives and abilities of different bail-inable securities holders.

The case of bail-inable securities held by households as compared to hedge funds is a straightforward example in this regard. The difference between the two types of holders is clear in terms of sophistication, business models, investment strategy, portfolio diversification, ability to convey and process available information, etc.¹⁷

Despite its relevance for resolution and supervision, the regulator remained neutral about the matter and little is known about the actual composition of bail-inable debt holders and even less about the "optimal" composition of holders.

In searching for optimal composition, corporate governance considerations must complement financial stability ones and, more precisely, the "adverse spillovers" different investors might generate. The tension between corporate governance role of holders and the threat they pose to financial stability is going to be better illustrated later. Suffice to say that the benefits cannot be considered without the costs they imply. In other words, a composition assuring the maximum level of benefits in terms of corporate governance and, at the same time, creating considerable concerns from a financial stability perspective is far from being optimal.

Even though a definitive solution for such an unexplored and evolving issue is a farreaching goal, this contribution aims at providing some elements for the debate, framing the relevant trade-offs.

So far, the (limited) literature on the topic focused mainly on who should not buy bailinable debt for financial stability purposes. On the contrary, to the best of the author's knowledge, no throughout analysis of the consequences of different compositions have been carried out.

¹⁷ The fact that different holders of the same security behave in different ways and pursue different objective has been acknowledge long ago in equity-related research, as exemplified by the gigantic amount of research on shareholder activism. For a broad introduction to the matter, see Stuart L Gillan and Laura T Starks, 'The Evolution of Shareholder Activism in the United States' (2007) 19 Journal of Applied Corporate Finance 55.

This specific aspect is particularly relevant for supervisors and resolution authorities. If different compositions yield different outcomes in terms of market discipline, the activities of supervisors and the resolution planning should adjust accordingly, relying more (or less) on the market information.¹⁸ Moreover, it would make a remarkable difference in resolution planning, especially in relations with the exclusions and exemptions provided by Article 44 (3) of BRRD, influencing the ex-ante credibility of bail-in itself.¹⁹

For the purpose of the present study, the impact on corporate governance²⁰ of the bail-inable securities holders should be disentangled, for the sake of explanation, into four main aspects:²¹

(1) the incentives and the capability of monitoring bank activities ex-ante;

(2) the investment strategy and consequent risk-appetite of the holder;

(3) the ability to influence the decisions of the borrower;²²

(4) the holdings of bail-inable debt should be relatively concentrated to avoid rational apathy.²³

Notably, the ability to influence management for creditors represent a black box and shading light into it is all but straightforward.²⁴ The main channel one can think of is the so-

¹⁸ For the difference between direct and indirect effect of market discipline see Mark J Flannery, 'The Faces of "Market Discipline"' (2001) 20 Journal of Financial Services Research 107.

¹⁹ For a deeper analysis of the exemptions from bail in see Chapter 4. Here it suffices to notice that in case of high levels of crossholdings among banks, the resolution authority might exempt a large part of the debt from bearing losses to avoid contagion, pursuing Article 44(3)(c) BRRD. Taking into account the composition of bail-inable debtholders beforehand, such an outcome can be anticipated, and the resolution plan adjust accordingly.

²⁰ On shareholders' apathy see Wolf-Georg Ringe, *The Deconstruction of Equity: Activist Shareholders, Decoupled Risk, and Corporate Governance* (Oxford University Press 2016) 9.

²¹ Following the definition given by professors Shleifer and Vishny back in 1997: "Corporate governance deals with the ways in which suppliers of finance to corporations assure themselves of getting a return on their investment". Andrei Shleifer and Robert W Vishny, 'A Survey of Corporate Governance' (1997) 52 The journal of finance 737.

²² The differentiation between monitoring and influence is consistent with the economic literature on market discipline. See Flannery (n 19).

²³ Another crucial element that falls beyond the scope of this chapter is the trading activity close to conversion: who steps in and who opts out once probability of default increase? Unfortunately, there is no available data on such flows.

²⁴ In a broader view, the influencing mechanisms of all the investors represent a sort of black box, especially when it comes to analysing the corporate governance role of institutional investors. In this respect, a growing literature is attempting to investigate on private engagement strategies. See Joseph A McCahery, Zacharias

called "private engagement":²⁵ the growing tendency of investors to directly address management and directors out of the official channels, in the shadow of corporate law powers. For instance, Michelle Edkins, Global Head, BlackRock's Investment Stewardship Team for BlackRock, stated: "In our experience (private engagement) has a fair degree of traction with management. And we can raise (an) issue without having to dictate how management should address it".²⁶

Assessing the governance role of individual classes of investors accounts for only one side of the story. Hence, when it comes to adverse spillovers, two main components ought to be considered: the first can be labelled as "Contagion Risk" and the second as "Adverse economic consequences", where the latter represent a sort of residual category, i.e.: negative externalities whose direct channel is not contagion.

"Contagion risk"²⁷ relates to the risk that financial distress of one bank spills over to counterparties or the whole financial system. In the context of the new resolution framework, the contagion risk is easy to conceptualise.

Think, for instance, of the case of crossholding, where a Bank A holds in its portfolio a substantial amount of bail-inable instruments of Bank B. If Bank B enters into financial distress and the Resolution Authority decides to allocate losses on bail-inable instruments, the value of Bank A's assets will decrease accordingly. Such losses might, consequentially, result in Bank A's distress.

Contagion can also indirectly materialise from institutions that get their leverage from banks, such as hedge funds. The trade-off between more concentration to enhance

Sautner and Laura T Starks, 'Behind the Scenes: The Corporate Governance Preferences of Institutional Investors' (2016) 71 The Journal of Finance 2905.

²⁵ See 'Shareholder Engagement: A New Era in Corporate Governance' <u>https://deloitte.wsj.com/riskandcompliance/2013/10/01/shareholder-engagement-a-new-era-in-</u> <u>corporate-governance/ (</u>accessed 14.11.2018).

²⁶ Barry B Burr, 'Money Managers Increasing Activism on Governance—But Quietly, Pension and Investments'. https://www.pionline.com/article/20120319/PRINT/303199980/money-managers-increasing-activism-on-governance-but-quietly accessed 14.11.2018

²⁷ See Avinash D Persaud, 'A Ticking Time Bomb: TLAC and Other Attempts to Privatise Bank Bailouts' [2016] Butterworths Journal of International Banking and Financial Law 160. See also Dirk Schoenmaker, *Contagion Risk in Banking* (LSE Financial Markets Group 1996).

incentives to intervene and more dispersion to decrease the risk of contagion needs no further explanations.

CORPORATE GOVERNANCE	SPILLOVERS
(1) Ex-ante incentives and capability to monitor	(1) Contagion Risk
(2) Investment strategy & Risk preference	
(3) Ability to influence decision making	(2) (Other) Adverse Economic Consequences
(4) Holding Concentration of Bail-inable Debt	
SENIORITY OF THE CLAIM	
EXISTENCE CONSTRAINT	

Figure 14 - Dimension to consider for analysing the impact of different holders of bail-inable securities

Adverse spillovers can also rise from aspects not directly related to financial stability. Think, for instance, of the case in which households hold a considerable stake of bail-inable debt. When losses materialise and the resolution authority allocates them to bail-inable creditors, the fact that households bear losses does not directly implicate contagion risk. However, it shrinks the spending capacity of households, yielding adverse consequences on the real economy. A similar argument holds for other categories of investors, such as pension funds.²⁸

Beyond corporate governance and adverse spillovers, a third dimension, which horizontally influences the magnitude of effects on both governance and spillovers, is the seniority of the bail-inable claim. It is clear that the junior the holding position, the higher the probability of actually bearing losses. Consequentially, the more junior a liability is, the higher the ex-ante incentives to monitor and the higher the probability for adverse

²⁸ Persaud (n 28).

spillovers to materialise. Given the complexity of the framework, the proceeding of the analysis will mainly focus on the first two dimensions (i.e.: governance and spillovers), while the consideration on the seniority of the holding positions will be limited and strictly functional to the other two.

Finally, taking the regulatory framework as a given, the analysis must cope with the "existence constraint". At first sight, this statement might appear little more than a tautology. Nonetheless, to grasp the enormous role it plays, it suffices to consider few figures. First, at the beginning of 2017, the amount of Risk-Weighted assets of the 20 top European banks amounted to over 6 trillion euros.²⁹ For the same period, Dominique Laboureix, Board member of the Single Resolution Board, estimated that the average MREL target, applying SRB 2017 MREL policy,³⁰ was on average the 26% of RWA.³¹ The same estimation prudentially forecasts an aggregate shortfall of 117 billion Euro, of which 47 billion in subordinated instruments. This implies that, willingly or unwillingly, an enormous amount of bail-inable securities must be issued and, consequently, held by investors.

Piecing together all these elements, it is possible to broaden the perspective so to properly position this contribution in the current academic debate. This chapter aims at answering, at least partially, another heavily debated yet unsolved question: do investors that are theoretically more willing and capable of disciplining risk-taking of their borrowers also pose more stability concerns?

This contribution, indeed, aims at enhancing the current understanding of the tradeoff between market discipline and (financial) stability, given the current regulatory framework. In fact, a robust impact on corporate governance of some investors would enhance market discipline.

 ²⁹ See Jan Schildbach, 'Where Do European Banks Stand? 10 Years after the Start of the Financial Crisis. 10 Years after the Start of the Financial Crisis' (2017) <https://www.dbresearch.com/PROD/PROD/RPS_EN-PROD/PROD00000000450356/Where_do_European_banks_stand%3F_10_years_after_the_.PDF>.
 ³⁰ SRB, Minimum Requirement for Own Funds and Eligible Liabilities (MREL) SRB Policy for 2017 and Next Steps. Available at https://srb.europa.eu/sites/srbsite/files/item 1 - public version mrel policy - annex i - plenary session.pdf (accessed 10-02-2020).

³¹ Dominique Laboureix, speech at 6th Industry Dialogue: 2017 MREL Policy, accessible at <u>https://srb.europa.eu/sites/srbsite/files/20171120 6th industry dialogue item 2 mrel dominique labou</u> <u>reix.pdf</u>. (accessed 10-02-2010). The estimation considers a sample of 76 banks, accounting for almost 80% of total assets of the banks subject to SRB authority.

3. Who Should Hold Bail-inable securities?

In exploring the role of investors in bail-inable securities, a first necessary step is to set out a benchmark. It is not possible to assess the role different investors play without having in mind an "ideal buyer". The definition of the "ideal buyer" of bail-inable securities constitutes the focus of this section. In the proceeding of the chapter, the "ideal buyer" will represent the benchmark against which to assess the corporate governance impact of investors' categories and their adverse spillovers.

In so doing, the regulatory framework to be given. Therefore, the desirability of the burden-sharing policy³² and the resolution principles in allocating losses are not part of the analysis.

To begin with, it useful to highlight some of the partial paradigms proposed in the recent literature. Even though no detailed analysis of the desirable holding composition exists, some authors have tangentially discussed the desirable characteristics of the holders of bail-inable securities.

Krahnen and Moretti³³ mainly focus on minimising the risk of contagion, advocating in favour of institutional investors pursuing a long-term strategy such as pension funds, life insurance companies, and private bankers. The authors also propose a stringent limit to access the market for bail-inable securities to long-only investors.

Gotz and Tröger,³⁴ in arguing against households holding, propose that the ideal investor in bail-inable debt must have three main characteristics: (1) being a sophisticated investor, (2) not being part of the banking sector (3) having a business model with no asset/liability maturity mismatch. Such a paradigm considers aspects of both

³² European Commission, Communication from the Commission on the application, from 1 August 2013, of State aid rules to support measures in favour of banks in the context of the financial crisis ('Banking Communication' (2013/C 216/01).

³³ JP Krahnen and L Moretti, 'Bail-in Clauses' [2015] Financial Regulation. Cambridge University Press, Cambridge.

³⁴ See Götz and Tröger (n 14).

governance and stability. The sophistication requirement looks at the ability to convey and compute information and, therefore, at market discipline.

On the other hand, other elements look at financial stability, such as the ban on both the banking sector and other investors performing maturity transformation activities.³⁵ Cross holdings increase bank interconnectedness, thus generating contagion risk. Avoiding maturity transformation would increase the loss-absorbency capacity of investor whose risk of running in liquidity issues in case of substantial losses is lower.³⁶ Such a description fits insurance companies, pension funds and high net-worth individuals.³⁷

Persaud³⁸ considers both "contagion risk" and "adverse economic consequences" among the negative spillovers stemming from investing in bail-inable debt. The author argues that neither banks and leveraged investors nor long-term investors should invest in bail-inable securities. The doubts about the first category mimic the arguments already put forward by the majority of the literature, i.e.: crossholding is a threat to financial stability. In addition to this standard remark, Persaud adds a layer of complexity, juxtaposing to contagion risk other potential economic downsides. The author criticises the superficial view according to which long-term investors should own bail-inable securities since their investment strategy focus on assets whose risk falls over time, while bail-inable securities are the exact opposite.³⁹

These approaches are, in principle, not mutually exclusive: each of them points out relevant aspects of investing in bail-inable debt for specific classes of investors. Nonetheless, taking the current regulatory framework as a given, these approaches compete with each other and turn out to be incomplete. As mentioned beforehand, one has to consider the "existence constraint": bail-inable securities must be issued and, consequently, held.

 ³⁵ On maturity transformation and its implication for the fragility of banks, see Armour and others (n 13) 278.
 ³⁶ Brunnermeier and others (n 9) 32.

³⁷ Benjamin Bernard, Agostino Capponi and Joseph E Stiglitz, 'Bail-Ins and Bailouts: Incentives, Connectivity, and Systemic Stability' (2017) wp23747.

³⁸ Persaud (n 28).

³⁹ The probability of a bank running in financial distress and facing the need for resolution in the short term is relatively low in good times, while it increases sharply in the long term.

Comparing the theoretical constructs on "who should invest in bail-inable debt" and the amount of securities that needs to be issued a paradox arises: on the one hand nobody should, for different and reasonable rationales, buy bail-inable securities; on the other hand, the amount of bail-inable securities that need to be marketed is stunning.

In facing such a paradox, the analytical framework proposed in Section 2 comes at hand for two main reasons. First, it considers potential benefits that specific classes of holders can bring to the borrowing bank in terms of corporate governance impact. Second, it represents a framework apt to perform a maximisation exercise, given the "existence constraint". The bail-in represents a way to redistribute losses of bank distress from taxpayers to investors.⁴⁰

Therefore, building on the theoretical framework depicted so far, this chapter discusses the optimal mix of investors, i.e.: the mix of investors assuring the best result in terms of maximising the governance benefit while minimising the adverse spillovers. In other words, the chapter focuses on marginal improvements that different compositions of bail-inable debt-holders yield. On the contrary, it steers clear of the discussion on the efficiency of the new regulatory regime as compared with the old one or other possible regimes.⁴¹

As I mentioned, achieving an optimal composition of bail-inable debtholders implies maximising the positive impact of investors on corporate governance and, at the same time, minimising adverse spillovers.⁴² On the other hand, maximising beneficial corporate governance impact means that investors should be capable and willing to monitor the borrower's activities, have risk appetite that is compatible with socially desirable levels of risk-taking (i.e.: a relatively low-risk appetite) and willing and capable to influence the decisions of their borrowers. On the other hand, minimising adverse spillovers means that investors should have as little interconnection as possible among them. Interconnectedness can be both sectorial

⁴⁰ In this respect, one may consider the expression "loss absorbency capacity" as misleading, since losses are not plainly absorbed, but just allocated to other counterparties that are hopefully able to bear them without getting into trouble.

⁴¹ On the efficiency of new EU regimes see, for instance, Avgouleas and Goodhart (n 4).

⁴² A formal exercise, where such a maximization problem is modelled, falls out of the scope of this contribution that, instead, focus on the relevant institutional characteristics

and geographical. So, for instance, is not desirable to have a high proportion of domestic holding, while it is desirable to have a considerable amount of holdings out of the Euro Area countries.⁴³ Moreover, the probability of being bailed-in must be consistent with the loss absorbency capacity of each investor, i.e.: investors with highly mismatched balance sheet should opt for senior holdings. Finally, investors should not have holdings accounting for a too-high share of their portfolio, especially if their preferred investment strategy seeks for assets whose risk decreases over-time.

By way of preliminary conclusion, no bulletproof investor in bail-inable securities exists. No one can satisfy all of the relevant conditions: maximising corporate governance benefits, minimising the threat to financial stability and other adverse spillovers and, at the same time, satisfying the existence constraint.

If no specific category of investors can efficiently hold bail-inable securities, it is necessary to look at a solution where a mix of different, individually suboptimal, investors can yield the best workable outcome.

Section 4 provides some data about holders of bail-inable securities, so to understand whether the current composition reflects the theoretical considerations discussed so far. Should that not be the case, the analysis discusses the exogenous factors impeding to match such benchmark. Thereupon, Section 5 act as a Hegelian synthesis⁴⁴ between the theoretical framework depicted so far (thesis) and the limited evidence provided by publicly available data (antithesis).

4. What we Know about Bail-inable Holders

This section aims at showing the relevant information on the holders of bail-inable securities that is, at the time of writing, publicly available.

The analysis is based on the data provided by "Security Holding Statistics" (SHS), a database compiled by the ECB statistic services.⁴⁵ The SHS provides data on the holders of

⁴³ Martijn A Boermans and Sweder van Wijnbergen, 'Contingent Convertible Bonds: Who Invests in European CoCos?' [2017] Applied Economics Letters 1.

⁴⁴ Georg WF Hegel, *Science of Logic* (WH Johnston and LG Struthers eds, George Allen & Unwin 1812).

⁴⁵ Established by the Regulation (Eu) No 1011/2012 Of The European Central Bank of 17 October 2012 concerning statistics on holdings of securities (ECB/2012/24) as lastly amended by Regulation (EU) 2018/318 of the ECB of 22 February 2018 amending Regulation (EU) No 1011/2012 concerning statistics on holdings of securities (ECB/2018/7), OJ L 62, 5.3.2018, p. 4. Reporting methodology has been furtherly developed in the

an array of securities issued by EU credit institutions (i.e.: banks) as of 2013. It computes the amount of securities held by different categories of investors. Section 4.1 further discusses the specificities and the limitation of the data.

Before moving to the description of the dataset, it is important to stress how this empirical evaluation represents a necessary step to understand whether and how market forces are adapting to the new regulatory environment as well as to detect factors that potentially impede an efficient adjustment.

Even though the available data do not allow for comprehensive statistical exercise, which would fall out the scope of the analysis in any case, having a clear picture of the current aggregate composition and recent trends will prove to be insightful. Section 4.1 describes the data, discusses the related literature and highlights the scope and limitation of the analysis.

4.1 Data and Limitations

The analysis is based on the "Security Holding Statistics" (SHS), a database compiled by the ECB statistic services. The publicly available data consist of only a fraction of the data collected and are aggregated at country level. Thus, we only know the category of investors holding bail-inable securities issued by the banks of each Euro Area Countries. Moreover, these data are collected on a security-by-security basis, according to the mandatory reporting of the holders. For this reason, only the holdings of EA investors are part of the dataset.⁴⁶ Data on investors' holding, which represent the focus of the analysis, have been collected from the fourth quarter of 2013.⁴⁷

Guideline of the ECB of 22 March 2013 concerning statistics on holdings of securities (ECB/2013/7), OJ L 125, 7.5.2013, p. 17, as lastly amended by Guideline (EU) 2018/323 of the ECB of 22 February 2018 amending Guideline ECB/2013/7 concerning statistics on holdings of securities (ECB/2018/8), OJ L 62, 5.3.2018, p. 38.

⁴⁶ Accessible at <u>http://sdw.ecb.europa.eu/browse.do?node=9689727</u>. Accessed on 22 January 2019.

⁴⁷ For a comprehensive overview, see ECB, 'Who Holds What? Nwe Information on Securities Holdings' [2015] ECB Economic Bullettin 72.

Among the available classes of securities, the SHS provides data on the holders⁴⁸ of "non-covered debt securities", issued by European Banks and with initial maturity longer than one year. The analysis focuses on this class of securities and their holders.⁴⁹

Few examples may clarify the cases covered by available data. The data cover the case of a German household holding non-covered debt issued by a Spanish bank; whereas, the data do not cover the case in which a US investor holds non-covered debt issued by the same Spanish bank:⁵⁰ the SHS data cover only investors resident in the Euro Are. Data do not cover the case in which an Italian pension fund holds non-covered debt issued by a Danish bank: the data cover only securities issued by Euro Area banks.

The data, and consequently the analysis, suffer from two main limitations. First, the scope of the analysis is limited. In this regard, the previous examples highlight the limitation of the analysis. It is not possible to have a complete view of the holders of all the outstanding debt of a bank, but only the distribution among sectors of the holders located in one of the Euro Area countries, since those are the only ones having a legal obligation to report their holding to the ECB. In the same vein, it is not possible to provide a comprehensive assessment of the exposure of each sector in bail-inable securities, since the data include only the securities issued by banks located in Euro Area countries.

Second, the data do not exactly match "bail-inable securities" but only proxies them.⁵¹ In this respect, two main aspects ought to be considered. First, in the real world, understanding, ex ante, which securities are bail-inable according to Article 44(2) and (3) of the BRRD is not straightforward, since the Resolution Authority retains considerable discretionary power.⁵² Moreover, specifically on SHS data, it is only possible to extrapolate non-covered debt issuances whose initial maturity is longer than one year. However, no

⁴⁸ The data capture only holders that are residents in the Euro Area or non-resident holders whose securities are deposited with Euro Area custodians.

⁴⁹ Consistent with MREL requirement set out in Article 45(4)(d), pursuing which only securities with remaining maturity of at least 1 year can count to meet MREL.

⁵⁰ Unless the securities are deposited with a Euro Area (for instance, French) custodian.

⁵¹ According to the BRRD, all banks liabilities that are not exempted *ex* Art. 44(2) [e.g.: insured deposits] are bail-inable.

⁵² On these issues, see back Chapter 4 where such complications where ruled out by assumption so to being able to discuss the effects of the legal design. See also, Tröger (n 5).

specific information is available on the main characteristics, including the seniority of the claim.

Despite these limitations, the (limited) literature⁵³ on the matter consistently relied on this proxy since non-covered debt securities mirror to a large extent the instruments that constitute banks' "own funding and eligible liabilities" other than CET1 instruments⁵⁴. Hence, this represents a "state of the art" proxy for bail-inable securities. Given that the analysis refrains from any causal interpretation of the data, such proxy can be prudently used. In what follows, the phrases "bail-inable securities" and "non-covered debt" will be used as synonyms.

The holders of bail-inable securities are split into five main categories: (1) households;⁵⁵ (2) Monetary financial institution (other than Central Banks), which encompass banks and money market funds;⁵⁶ (3) Insurance Firms and Pension Fund; (4) Non-Financial Corporation; (5) Other financial institutions (OFIs), such as private bankers, hedge funds, investment funds (other than pension funds), mutual funds.⁵⁷

As the description of the data and the sample of reference made clear, no casual interpretations can be inferred; therefore, the rest of this section will focus on providing a snapshot of the current composition of bail-inable debt holders and showing some of the relevant trends over the last five years. In so doing, the proceeding of the Section will partly rely on previous studies and partly on original and updated data processing, depending on

⁵³ See, mainly, Claudia Pigrum, Thomas Reininger and Caroline Stern, 'Bail-in: Who Invests in Noncovered Debt Securities Issued by Euro Area Banks?' (2016) 32 Financial Stability Report 101; Anne-Caroline Hüser and others, 'The Systemic Implications of Bail-in: A Multi-Layered Network Approach' [2017] Journal of Financial Stability; Mr Giovanni Dell'Ariccia and others, *Trade-Offs in Bank Resolution* (International Monetary Fund 2018). See also, ECB, 'Financial Stability Review - November 2016' (2016). In Box 7 there is the analysis: "The evolution of Sectoral holding of bail-inable debt".

⁵⁴ Pigrum, Reininger and Stern (n 54). See, with a different design and slightly different data used, Ringe and Patel (n 2).

⁵⁵ Together with Non-Profit Institutions Serving Households (NPISH), such as such as: trade unions; professional or learned societies; consumers' associations.

⁵⁶ This clearly implies some issues in separately assessing the two categories. Nonetheless, previous empirical evidence shows that the amount of MMF exposures is less the 1/6 as compared with banks and these exposures are particularly concentrated in the Netherlands, France and partially Germany. Therefore, in the amount of crossholdings that will be displayed in the proceeding of the section such overestimation shall be considered for those countries.

⁵⁷ On the methodology employed in aggregating the data on the basis of sector holders see, Jose Cartas and Qi He, 'Issuance and Holdings of Securities in a "From-Whom-to-Whom" Framework', *Handbook on Securities Statistics* (International Monetary Fund) ch 8.

the public availability of relevant data. Specifically, Section 4.2 focuses on the available data on the geographical distribution of holders, relying on previous studies; Section 4.3 discusses the distribution of bail-inable debts across sectors of Euro Area investors, presenting original data processing; Section 4.4 provides limited evidence on the distribution of holders according to seniority, relying on previous studies.

4.2 Geographical Distribution: EA vs non-EA

As mentioned beforehand, the actual geographical distribution of holders represents one of the limitations of the available data. Nonetheless, it is possible to discuss some crucial aspect of such a dimension whose relevance encompasses both systemic-risk considerations and adverse economic consequences. On the contrary, geographical distribution seems not to have direct governance consequences.

The geographical distribution of investors on bail-inable debt has a twofold impact on systemic risk: on the one hand, high concentration of holders in the same jurisdiction increases the level of interconnectedness⁵⁸ among local actors, intensifying both the contagion risk and potential adverse economic spillovers. On the other hand, if investors in bail-inable debt are located worldwide, potential losses propagate to a larger part of the global financial system.⁵⁹ Small shocks can be efficiently absorbed globally, while large shocks might trigger a domino effect worldwide generating a regulatory appetite for ring-fencing against foreign risks.⁶⁰

Nonetheless, if one takes into consideration not only contagion risk but also di adverse consequences on the economy at large, a greater geographical diversification seems to be desirable. Indeed, allocating most of the bank losses on domestic households, pension

⁵⁸ On the so-called "Too-Interconnected-to-fail" problem see, among many others, Anne-Caroline Hüser, 'Too Interconnected to Fail: A Survey of the Interbank Networks Literature' (SAFE 2016) 91.

⁵⁹ Geographical diversification also entails more cross-border issues in implementing resolution. Even though this aspect falls out of the scope of the analysis, the literature has monotonically insisted on cross-border issues as one of the main elements in arguing against the credibility of the new resolution regime. See, for instance, Federico Lupo-Pasini and Ross P Buckley, 'International Coordination in Cross-Border Bank Bail-Ins: Problems and Prospects' (2015) 16 European Business Organization Law Review 203.

⁶⁰ Katia D'Hulster and Inci Ötker-Robe, 'Ring-Fencing Cross-Border Banks: An Effective Supervisory Response?' (2015) 16 Journal of Banking Regulation 169.

funds or banks would mean to harm the spending capacity of the population and tighten to a massive extent the ability of access to bank credit.

From the perspective of Euro Area (EA) stability, a substantial amount of non-EA holding is therefore desirable⁶¹ even though, looking at the data, is far from being reached in many EA countries. This part mostly relies on data published on previous studies, since not all the relevant data are publicly available.⁶²

Figure 15 shows the distribution of holders of non-covered debt issued by banks, distinguishing between EA and non-EA holders. Conceptually, this represents a proxy of the ability of each banking sector to attract international investors. On average, the holders of non-covered debt issued by EA banks are mostly resident within EA (61%), while 39 % are non-EA investors.⁶³ Beyond such an aggregate figure, what immediately attracts the attention of the observer is the massive cross-country variation. For instance, Italian (95%)⁶⁴ banks heavily rely on EA market for bail-inable debt; while other countries have a much more balanced situation, and some others lean toward a non-EA majority of holdings. German banks are among the "balanced" ones, with 47% of EA holdings, while the reliance on EA investors of Dutch (39%) and Finnish (36%) banks is particularly limited.

The case of Italian banks reflects the hardship of the country in having a strong and attractive position in international financial markets, suggesting that the link between banks and their sovereign has not been severed⁶⁵ or, at least, that path dependency plays a major role. On the contrary, the figures on non-EA holdings of "more virtuous" countries as the Netherlands and Germany signals a greater capacity to attract foreign funds. Finally, these data are less significant in the case of EA countries with traditionally strong economic and financial ties to non-EA countries. This is the case, for instance, of Finnish banks, whose

⁶¹ Boermans and van Wijnbergen (n 44).

⁶² Specifically, Figure 16 is taken from ECB (n 54). Figure 17 is taken from Pigrum, Reininger and Stern (n 54). The choice of relying on other studies is due to the fact that relevant data, even when available, suffered from category mismatches between relevant databases (specifically, Security Holding Statics Database and Balance Sheet instruments database) and reporting inconsistencies. All data on this section refers to the fourth quarter of 2015.

⁶³ There is a 2% of non-covered debt whose holding is unreported.

⁶⁴ But also Greek (90%) and Spanish (71%) banks with, respectively, 90% and 71% of Euro Area holdings. See Figure 26 in the Appendix.

⁶⁵ Valerie De Bruyckere and others, 'Bank/Sovereign Risk Spillovers in the European Debt Crisis' (2013) 37 Journal of Banking & Finance 4793.

non-covered debt is mainly held by non-EA investors. This result is probably driven by the close ties with the Swedish and Danish financial system, accounting for a large proportion of the banking market share.

A closer analysis of data on domestic and EA investors reinforces the previous argument (Figure 16): here, it is clear how high stakes of EA investors holding are associated with considerable domestic biases (both in Italy, Spain and Greece). On the other side of the spectrum, Benelux countries show an almost negligible amount of domestic holdings, steadily below 10 %, with the Netherlands leading the group with only 3% of domestic holdings.

Finally, EA holding can be further disentangled. Figure 17 shows the geographical distribution of non-covered debt held in the EA distinguishing between "Domestic holdings", "non-domestic holding of the Top 3 holding countries" and "non-domestic holding of the other than Top 3 holding countries". The Figure shows that most of non-domestic EA holdings are located within the "Top 3 holding Countries", with the partial exception of Luxemburg, the Netherlands and Ireland where around 20% of non-covered bank debt is held throughout the rest of Eurozone.

This overview showed that generally, within the Euro Area, the domestic bias in noncovered debt holding is deeply rooted. Moreover, the high cross-country heterogeneity hampers the "level playing field" in the internal market, which represents one of the primary goals of the entire resolution framework⁶⁶. Indeed, the domestic effects of implementing a resolution procedure in Italy or the Netherlands will be sharply different.

⁶⁶ See Recital 108 BRRD: "Ensuring effective resolution of failing institutions within the Union is an essential element in the completion of the internal market. The failure of such institutions has an effect not only on the financial stability of the markets where it directly operates but also on the whole Union financial market. [...]Ensuring effective financing of the resolution of those institutions across Member States is not only in the best interests of the Member States in which they operate but also of all the Member States in general as a means of ensuring a level competitive playing field and improving the functioning of the internal financial market".

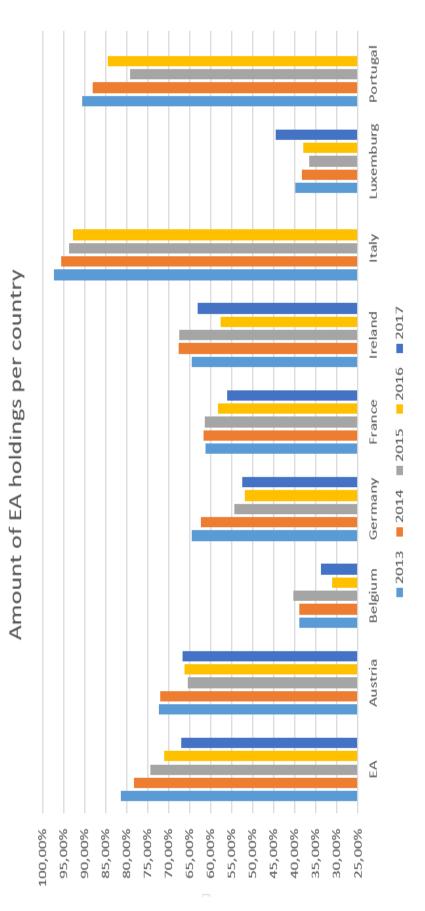


Figure 15 - Geographical distribution (within or outside Euro Area) of holders of non-covered debt securities. Own calculations.

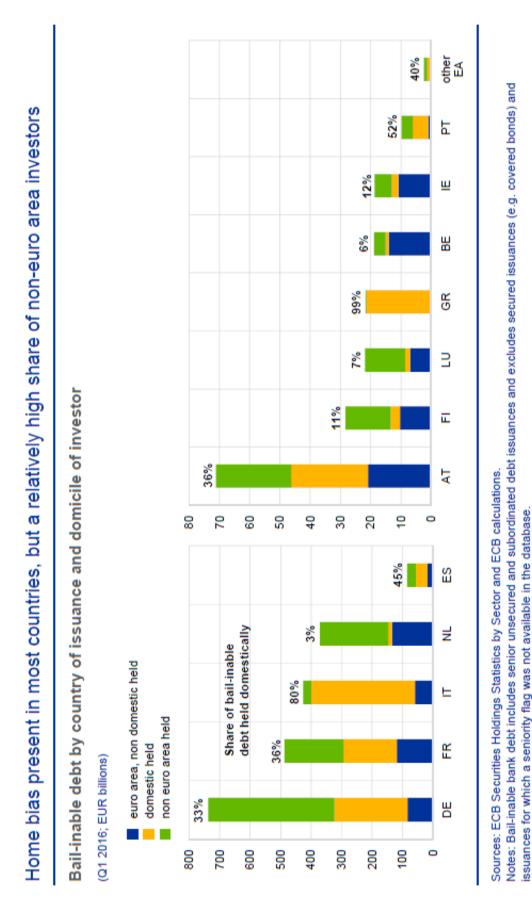


Figure 16 - Geographical distribution of holders according to the country of issuance (domestic, Euro Area, Non-EA). ECB (2016).

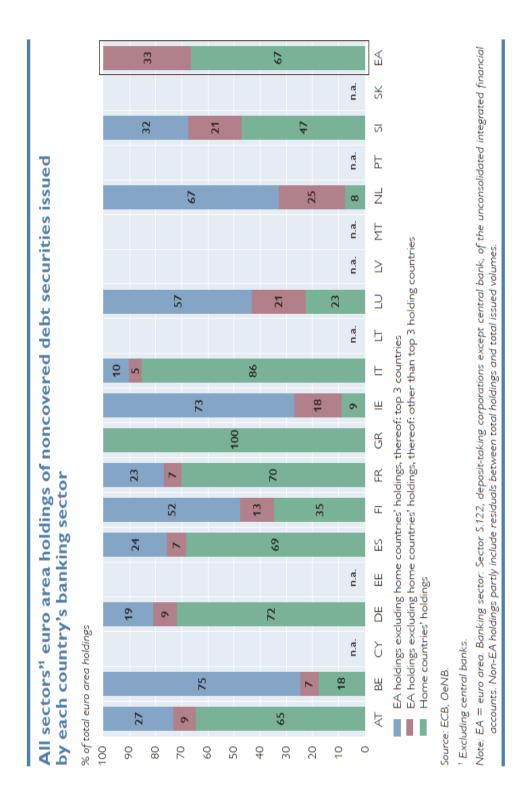


Figure 17 - Geographical distribution of non-covered debt securities holders within Euro Area. Pigrum (2016).

4.3 Distribution by Sector with EA holders

The situation becomes even more entangled looking at the sector-by-sector composition of bank non-covered debt held by Euro Area investors.⁶⁷ The analysis is based on updated data retrieved from the SHS database and is has a twofold structure: first, it provides a snapshot of the sector-by-sector composition at the end of 2017;⁶⁸ second, it discusses some observable trends on sector composition between 2013 and 2017.

Figure 18⁶⁹ shows the sector-by-sector composition of holders of debt issued by six EA countries⁷⁰ and the Euro Area average. Looking at EA data, the striking figure relates to the share of crossholdings,⁷¹ accounting for 46% of holdings, while institutional investors only hold 37% of non-covered debt. Such a figure is almost evenly distributed between "Insurance Firms and Pension Funds" (IF&PF) and "Other Financial Institutions" (OFIs). Finally, a smaller though significant share of non-covered debt is held by households (13%), while the exposures of governments and non-financial firms are limited (cumulatively 4%). Nevertheless, compositions at country level vary considerably. First, some countries rely on crossholdings much more than EA average shows. Notably, Spain (61%) and Portugal (79%) lead the way, while also Italy (50 %) and Germany (54 %) crossholdings are above average. On the contrary, French and Dutch banks exhibit a shallow level of crossholdings (31%).

Institutional investors, on the other hand, clearly act as a substitute for crossholdings. Indeed, the countries with lover amount of crossholdings show, conversely, high holdings by IF&PF and OFIs. That is the case for French and Dutch banks whose non-covered debt is held by institutional investors for 59%, well above the EA average. On the contrary, the other countries show a reverse picture, with low institutional investors' holdings.

⁶⁷ As discussed earlier, available data do not allow for having the same information for non-EA investors. Therefore, the proceeding of the analysis captures only a limited share of outstanding debt that varies county by county depending on the percentage of EA holding. For instance, sector-by-sector data cover 95% of non-covered debt issued by Italian banks, but only the 53% of debt issued by German banks. This might lead to overestimate the amount of Households holdings that is reasonable to assume as mainly domestic, for the countries with a high stake of non-EA holdings, such as Germany, the Netherlands, etc.

⁶⁸ Figure 26 in the Appendix shows the percentage amount of holding for 11 EA countries and its evolution between 2013 (Q4) and 2017 (Q4).

⁶⁹ Figure 27 in the Appendix shows the same statistics for all the EA countries.

⁷⁰ Namely the countries with higher level of outstanding non-covered debt.

⁷¹ See the caveat on the possible overestimation back at note 56.

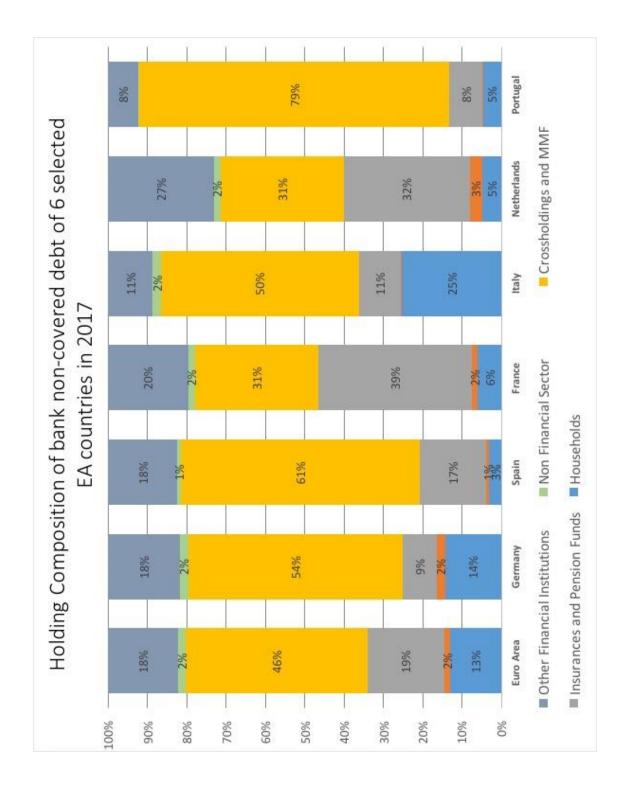


Figure 18 - Sector composition of non-covered debt held by EA investors 2017Q4 in selected EA countries. Own calculations.

Finally, the majority of the countries considered show a low stake of household's holdings, with the notable exceptions of Italy and Germany. Italy, in particular, shows a 25% of households' holding.

From this snapshot, one can see how holders of non-covered debt are mostly sophisticated investors, with the notable exceptions of Italy and, to a certain extent, Germany. Moreover, data show a high degree of substitutability between cross-holding and institutional investors' holdings.

This is where the market for bail-inable securities stands now; yet, it is important to understand how it has arrived here. In other words, has the demand-side of the market for bail-inable securities evolved over-time? Figure 19 shows percentage changes in sector holdings between 2013 and 2017, taking 2013 as a benchmark. The red line indicates the entrance into force of the bail-in tool, as of 1st January 2016.⁷²

The graph shows a sharp increase in institutional investors' holdings throughout the Euro Area bank non-covered debt. The increase was particularly relevant for OFIs in 2017 (+15% as compared with 2015 and +31% as compared with 2013). On the contrary, household's holdings have consistently decreased during the sample period, while crossholdings have been rather stable over-time.

However, these trends only capture Euro Area aggregate movement of the demandside of the market for bail-inable securities. Again, looking closer to the same trends at country levels, a spectacular level of heterogeneity arises. For instance, Figure 20 compares the same trends in sector holdings for non-covered debt issued by Italian and Dutch banks. The differences between the two are striking both quantitatively and qualitatively.

⁷² Article 130 BRRD. Since the data takes into account the end of each year, the 2015Q4 observation coincides with the entrance into force of bail-in. It is worth remembering that, given the nature of the available data the analysis cannot infer any kind of casual relationship between the bail-in entering into force and changes in holding composition. Moreover, such an inference would be particularly difficult to prove even with granular data as the investors were likely to anticipate it, since the first drafts of the BRRD dates back to 2012 and the final version was promulgated in May 2014

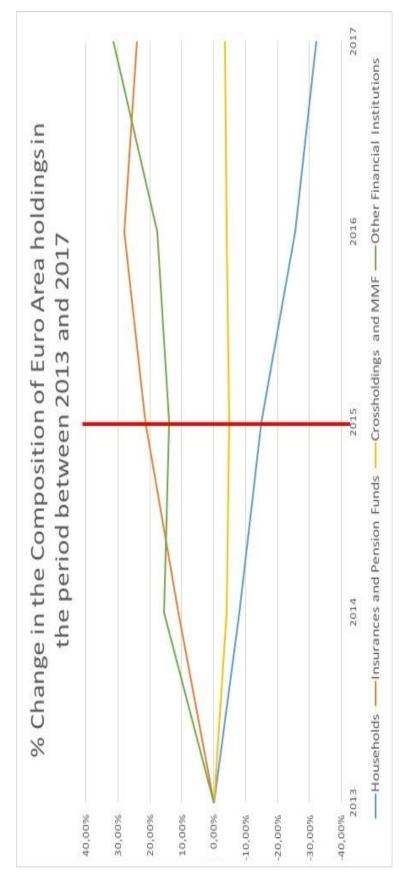
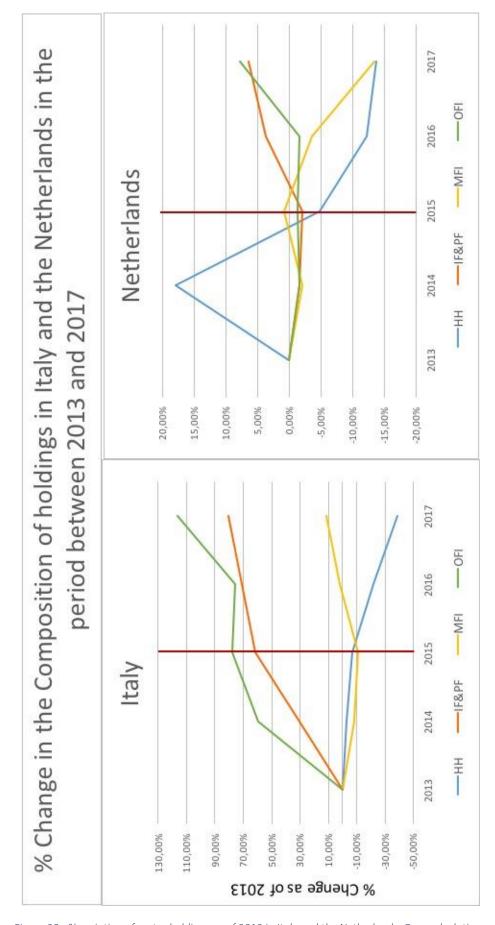


Figure 19 - % variation of sector holdings as of 2013. Own calculations.



Chapter 6 - Toward an Optimal Composition of Bail-Inable Debtholders?

Figure 20 - % variation of sector holdings as of 2013 in Italy and the Netherlands. Own calculations.

On the one hand, holding composition has been relatively stable for Dutch banks, where the stake of institutional investors has increased mainly in the last two years of the sample period, while crossholdings and households holding have decreased in the same time-set. On the other hand, the holding composition of non-covered debt issued by Italian banks experienced a sort of revolution, where institutional investors almost doubled their holdings (from 11,07% to 21,87%), while households nearly halved them (from 41.2 % to 25.3 %). Notably, crossholdings overall increased by 10% in the sample period although in the first part of the period crossholdings were decreasing. This may be deemed as a transitional trend, where crossholdings substitute for the sharp decrease in households' holdings in the wake of the latest turmoil with Italian failing banks.⁷³

Given the stunning cross-country variation in both trends and compositions, Section 5 will discuss specific data for each sector in assessing their governance and stability impact. Before moving to that analysis, Section 4.4 briefly surveys available data on the seniority of claims and the relative holders by sector.

4.4. Sector Holding and Seniority

As mentioned before, publicly available data do not allow analysing the sectorial preferences for bail-inable securities with different seniority. The category of "non-covered debt" encompasses both Additional Tier,⁷⁴ Tier 2, subordinated and senior unsecured instruments. Moreover, existing evidence based on studies carried out with proprietary datasets is extremely limited.⁷⁵

In the Financial Stability Review of November 2016,⁷⁶ the ECB showed a relevant shift in security holdings according to their seniority between 2013(Q4) and 2016(Q1). Specifically, crossholdings exposures shift toward senior positions, while households exhibit a preference for junior, and thence riskier and more remunerative, bank assets. The

 ⁷³ For a deeper analysis about the Italian case, see Edoardo Martino, 'Subordinated Debt under Bail-in Threat'
 (2017) 2 University of Bologna Law Review 252.

⁷⁴ As long as they are not issued in the form of preferred stocks.

⁷⁵ With the notable exceptions of Boermans and van Wijnbergen (n 44); ECB (n 54).

⁷⁶ See ECB (n 54) 100. Chart C.

same shift toward junior exposures has been observed for Insurance Firms and Pension Funds and, especially, for Investment Funds.

Consistent with those findings, Boermans and van Wijnbergen analysed the market for contingent convertibles (CoCos) issued by European banks between 2009 and 2015. They found that the market is steadily growing and that Coco holders mainly resides out of the Euro Area (74%). The investment funds (78%) located in the EA biggest financial hubs dominated the share of EA holdings: Luxemburg (46%) and Ireland (28%).

5. Divergent Incentives and Spillovers

It is now time to piece together the insights of the theoretical framework and the empirical evidence discussed earlier. Therefore, this section will address the role of each investor class in terms of both corporate governance and financial stability.

In so doing, the proceeding of the section introduces and discusses the specific trends of non-covered debt holdings in the sample period, highlighting abnormal variations that might be interpreted, at least partly, as a response to the new resolution framework. This allows for discussing the desirability of market adjustments and the necessity for further regulatory interventions. The analysis only considers the five European countries with the largest banking sector and the highest level of non-covered debt issued (France, Germany, Italy, Netherlands, Spain).⁷⁷

The categorisation that follows is somehow artificial, while a functional approach could have been more useful in answering the research question. Labelling an investor as a Pension Fund or Mutual Fund is neither necessary nor sufficient for arguing about the business model and the corporate governance role of each investor. Nonetheless, that is not this possible at this stage of research: aggregated data do not allow for a functional approach. Despite such a limitation, it is still informative for the reader to grasp the fundamental characteristics of each class of investors as reported by the SHS published by the ECB. Section 6, building on the arguments developed according to such an artificial

⁷⁷ At the end of 2017, the banking sectors of these 5 countries issued 86,94% of the outstanding non-covered debt with original maturity longer than 1 year.

categorisation, attempts to provide a functional interpretation of the state of the art and its desirable developments

In analysing specific investor classes, the discussion will encompass relevant pieces of regulation contributing to shaping the holding composition (especially when it comes to households and crossholdings).

5.1 Households

A. Corporate governance role and Adverse Spillovers. As already mentioned, many authors⁷⁸ have already argued against retail investors holding bail-inable securities. Such a general and intuitive scepticism about household's holdings is consistent with the framework of this research since they contribute neither in enhancing corporate governance nor in minimising adverse spillovers.

On the one hand, households lack the necessary sophistication for collecting and processing the relevant information on the risk-taking of their borrowers. Moreover, and perhaps more fundamentally, households radically lack the ability to influence the decision-making process of the borrowing banks.

On the other hand, in case of bank distress, imposing losses on household brings about significant negative spillovers that, in the categorisation proposed back in Section 2, can be labelled as "adverse economic consequences". In case of distress, if bank losses are allocated to households, whose portfolio is likely to be relatively undiversified, their spending capacity shrink harming the real economy and posing issues of social justice, making the option to "bail-in" politically unviable.⁷⁹ Consequently, a high level of

⁷⁸ Both tangentially in articles about resolution framework in general and with specific pieces discussing households' holdings. For the former see Avgouleas and Goodhart (n 4). For arguments against households investing in bail-inable securities see Simone Alvaro and others, 'The Marketing of MREL Securities after BRRD Interactions between Prudential and Transparency Requirements and the Challenges Which Lie Ahead' (2017) 15 CONSOB Legal Research Papers (Quaderni Giuridici).

⁷⁹ A paradigmatic example in this regard is represented by the Resolution of four small Italian Banks in November 2015, where losses where widely born by retail consumers that had often been victim of misselling. Such a resolution decision ("Decreto Salva Banche") opened up the floor for massive political debate and social opposition as well as for indirect bailout expenditures in the form of reimbursement of the losses born by retail investors. On this issue, see Bank of Italy, 'Financial Stability Report No. 1' (2016) <https://www.bancaditalia.it/media/notizia/financial-stability-report-no-1-2016/>. Specifically on legal and economic consequences of "Decreto Slava Banche", see Martino (n 74).

households' holdings might increase bailout expectations ex-ante, since bailing in households implies high societal costs.

The EU legal framework is not anymore completely agnostic to retail investors holding bail-inable securities. The European Securities and Market Authority (ESMA)⁸⁰ included debt instruments eligible for bail-in among the "complex" instruments under MIFID II,⁸¹ imposing stringent information duties on investment firms. Specifically, investment firms have the legal obligation to control the specific knowledge of the client on the products she is willing to invest in. Additionally, if the client shows insufficient knowledge about the risk of the financial product, investment firms have the legal obligation to warn the client that she is not in a position to judge whether to invest or not in the instrument.⁸² This mainly aims at preventing mis-selling.⁸³

In conclusions, households should hold a negligible amount of bail-inable instrument since the cannot act as effective investors in corporate governance and, at the same time, high societal costs stem from them bearing losses in case of a bail-in. In this vein, the MIFID II tightened the duty of investment firms to inform households about the riskiness of the product appropriately.

B. Trends. The Panel A of Figure 21 shows heterogeneous path when it comes to the percentage amount of bank non-covered debt held by households, while Panel B shows a somehow similar trend in the percentage change of non-covered debt held taking 2013 as the reference year, with a sharp but not uniform decrease.

In this diversified but somehow converging scenario, German banks represent a peculiar case. The amount of household's holding has remained stable throughout the sample period, around 14% of non-covered debt issued by banks that is now higher than the EA average. This appears to signal that German households firmly believe in the

⁸⁰ Guidelines on complex debt instruments and structured deposits, 04 February 2016 | ESMA/2015/1787. Bail-in eligible instruments are included among the "Debt instruments incorporating a structure making it difficult for the client to understand the risk" at paragraph 13.g.

⁸¹ Directive 2014/65/EU of the European Parliament and of the Council of 15 May 2014 on markets in financial instruments. OJ L 173, 12.6.2014.

⁸² Article 25(3) and 25(4)(iii) MiFID II.

⁸³ On the miss-selling, with specific analysis of the Italian and Portuguese case, see Götz and Tröger (n 14).

resilience of their banks. It is also possible that households dismissing their investment in bank debt in other countries have migrated to debt of German banks.

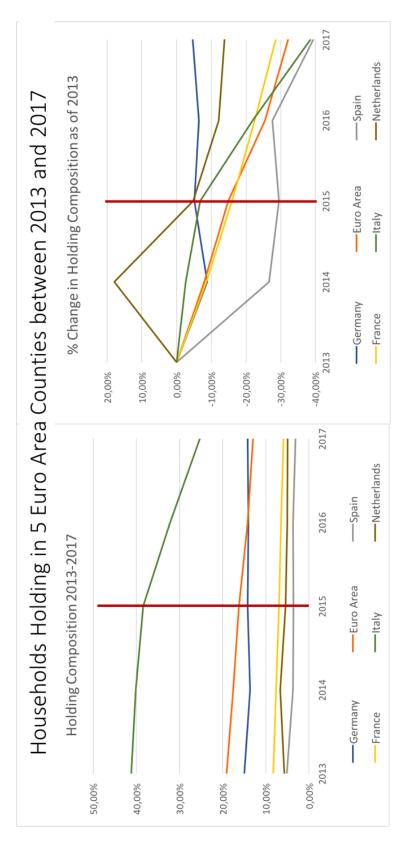


Figure 21 - Households Holdings trend between 2013 and 2017. Own calculations.

To sum up, the market forces seem to converge toward a low amount of household's holdings, which is in line with the theoretical expectations, with the considerable exception of German bank debtholders. Nonetheless, significant legacy issues and path-dependent behaviours have still to be overcome.

5.2 Bank Crossholdings

A. Corporate governance role and Adverse Spillovers. Bank crossholdings of bail-inable instruments also received a widespread opposition in the literature since it increases the interconnectedness of banks and correlates counterparty risks.⁸⁴ Despite such a predominant consensus, the policymaker did not regulate counterparties since it would be difficult to do and might have severe unintended consequences as well.⁸⁵

Unlike household's holdings, the analysis partly departs from the consensus against bank crossholding because of the "existence constraint" of bail-inable securities. Moreover, as stated in Section 3, policy-makers face a minimisation problem: systemic risk should be as low as possible but cannot be eliminated since it is somehow inherent to banking: reducing interconnection too much would increase the cost of funding and reduce the amount of credit available to the real economy.

The legal framework is not entirely agnostic when it comes to bank crossholdings: exante, the Financial Stability Board (FSB) and the Basel Committee on Banking Supervision (BCBS) modified Basel III standards to account for crossholdings.⁸⁶

⁸⁴ Bernard, Capponi and Stiglitz (n 38). In a more general setting, see Xavier Freixas, Bruno M Parigi and Jean-Charles Rochet, 'Systemic Risk, Interbank Relations, and Liquidity Provision by the Central Bank' [2000] Journal of money, credit and banking 611.

⁸⁵ See Wolf Wagner, 'Diversification at Financial Institutions and Systemic Crises' (2010) 19 Journal of Financial Intermediation 373. For a more general argument on anti-herding regulation, Ian Ayres and Joshua Mitts, 'Anti-Herding Regulation' (2015) 5 Harv. Bus. L. Rev. 1.

⁸⁶ This applies in relation to Total loss Absorbency Capacity (TLAC) representing a minimum requirement for "loss-absorbing" liabilities that since January 1st, 2019 onwards will be applied to Systemically relevant institutions (G-SIBs). Conceptually, TLAC and MREL are similar and pursue the same objective, even though they are not completely overlapping. On differences and similarities between TLAC and MREL, Jose Carlos Pardo and Victoria Santillana, 'The European MREL: Main Characteristics and TLAC Similarities and Differences' [2014] European Regulation Watch. On the perspective of reform to harmonise MREL with TLAC for the implementation of TLAC by European G-SIBs, see European Banking Authority, 'Final Report on MREL - Report on the Implementation and Design of the MREL Framework - EBA-Op-2016-21' (2016) 154.

In the TLAC Term Sheet,⁸⁷ the FSB provided for the necessity to deduct from one bank's TLAC the exposures to TLAC instruments issued by other banks.⁸⁸ This means that if a bank massively invests in other bank's bail-inable securities (crossholdings), that bank must issue more capital or eligible securities to comply with TLAC requirements.

The Basel Committee for Banking Supervision⁸⁹ implemented the FSB provision by modifying some of the Basel III provisions on capital definition. For what is here of strict interest, holdings exceeding 10 % of TLAC instruments of the issuer must be deducted from Tier 2 Capital for the investing bank. The same regime applies to non-regulatory capital TLAC-holdings exceeding 5% of the investing bank's common equity. On the other hand, MREL regulation does not provide for such deductions for non- G-SIBs.⁹⁰ In a nutshell, if the 13 European bigger banks (the ones designated as G-SIBs) want to have TLAC instruments issued by other banks in their portfolio, will need to hold more capital to account for the increase in contagion risk this pose.

Also, the BRRD recognises that bailing-in crossholdings might trigger a domino effect. Therefore, the BRRD grants the Resolution Authority with the power to exclude or partially exclude, in exceptional circumstances, liabilities whose bail-in would give rise to widespread contagion.⁹¹ This provision, although desirable in principle, might have an unwanted consequence: banks might be strategically incentivised to keep a high level of interconnection and reduce the likelihood of being bailed-in and, more generally, the credibility of the new resolution framework.⁹²

These two pieces may appear as somehow contradictory. On the one hand, crossholdings are penalised ex-ante by means of deduction in the capital and eligible

⁸⁷ Total Loss Absorbency Capacity, Financial Stability Board (n 11). See back Chapter 3, Section 3.2.

⁸⁸ ibid. Section 15: "In order to reduce the risk of contagion, G-SIBs must deduct from their own TLAC or regulatory capital exposures to eligible external TLAC instruments and liabilities issued by other G-SIBs in a manner generally parallel to the existing provisions in Basel III that require a bank to deduct from its own regulatory capital certain investments in the regulatory capital of other banks. The Basel Committee on Banking Supervision (BCBS) will further specify this provision, including a prudential treatment for non-G-SIBs."

⁸⁹ BCBS, 'Standard. TLAC Holdings. Amendments to the Basel III Standard on the Definition Capital' (2016).

⁹⁰ A proposal of Directive amending the BRRD is still pending in the moment I am writing. See, Proposal for a DIRECTIVE OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL amending Directive 2014/59/EU on lossabsorbing and recapitalisation capacity of credit institutions and investment firms, COM (2016) 852 final. ⁹¹ Article 44(3)(c) BRRD.

⁹² This is the main point put forward in Ringe and Patel (n 2).

liabilities holdings. On the other hand, the BRRD grants the resolution authority with the discretionary power of exempting crossholdings from bail-in in case of risk of contagion, giving rise to potential opportunistic behaviours.⁹³

On the governance side of the story, the discussion on crossholdings can be relatively short and clear-cut: no positive impact can derive banks who compete one another and are not willing to convey and compute relevant information to enhance the decision-making of other banks.

Therefore, the efficient level of crossholdings considerably differs from zero, especially if one considers the "existence constraint" (i.e.: that a gigantic quantity of bailinable instruments has to be issued and, consequently, held). Nonetheless, the discretion of the resolution authority, that appears reasonable from an ex-post perspective is likely to generate opportunistic behaviours ex-ante, especially for the majority of banks that will not be subject to TLAC deduction as of January 2019. For this reason, the arguments proposed so far root in favour of the application of a deduction system beyond G-SIBs, with slightly laxer threshold so as not to impose excessive burdens on smaller banks.

Furthermore, bank crossholdings should move toward senior position⁹⁴ so that the interconnectedness among banks lies at a lower level of the loss-absorbency capacity cascade and the actual probability of bearing losses is limited. On the other hand, junior positions that are more likely to bear losses should be held by investors raising lower systemic concerns and that are more willing and capable to monitor and influence the borrowing bank. In this sense, modulating the threshold and the level of deduction according to the seniority of the crossholdings, making junior crossholdings considerably more costly, should provide optimal incentives.

Before moving to the other categories of investors, an important caveat is worth discussing. Banks are not the sole highly leveraged investor performing transformation

⁹³ In this sense, ibid 15. argues that banks have incentives to hold others banks' bail-inable debt and increase systemic risk so to reduce the likelihood of an actual resolution happening; i.e.: hamper the ex-ante credibility of the entire resolution framework.

⁹⁴ As noted in Section 4.4 limited evidence suggest that this shift is happening. See, ECB (n 54) 100. Chart C.

activities. The whole shadow banking sector does so, without being subject to the whole banking regulation.⁹⁵ The proceeding of the analysis discussed some paradigmatic case of shadow banking if a subset of the category considers performing shadow banking activities.⁹⁶

B. Trends. The scenario of bank crossholdings reflects, to a certain extent, the theoretical expectations. The level is high relatively stable throughout the sample period: 48% in 2013 as compared with 46,26% in 2017.

Given the available data, it is not possible to clearly understand whether such a situation represents the result of strategic behaviours or whether the relatively constant overall amount is hiding a shift toward senior positions⁹⁷. Therefore, the explanatory power of the data particularly low for this category of holders. Moreover, since significant reforms are entering into force as of 1st January 2019, current levels might not represent a reliable indicator for the future developments.

Despite all of the above, it appears clear that countries belong to two different groups: with a very high level of crossholdings and with a relatively low level of crossholdings. Germany and Spain belong to the first group, laying well above the EA average but expose divergent trends: crossholdings in German banks are slightly decreasing over time (-11% between 2013 and 2017), on the contrary, Spanish crossholdings have increased in the sample period (+ 3%).

⁹⁵ Hossein Nabilou and Alessio M Pacces, 'The Law and Economics of Shadow Banking', *Research Handbook* on Shadow Banking (Edward Elgar Publishing 2018).

⁹⁶ Namely, Insurance Firms promising a rate of return and allowing for redeemable policies; money market mutual funds guarantee redemption value, bond funds tracking in index synthetically, through futures and warrants, without investing in the underlying assets.

⁹⁷ This represent the main claim in Ringe and Patel (n 2).

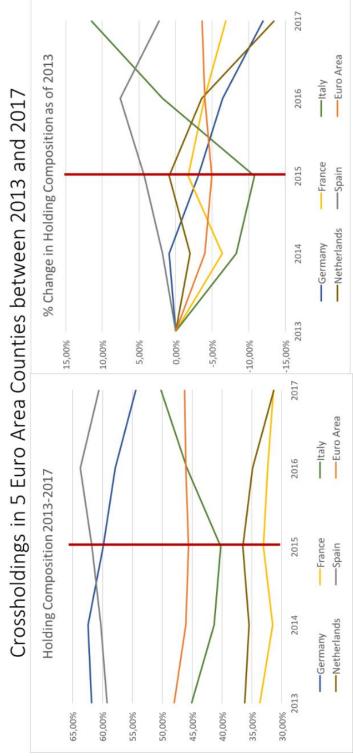


Figure 22 - Crossholdings trend between 2013 and 2017. Own calculations.

On the other side of the spectrum, "only" 31% of French and Dutch non-covered debt is held by other banks, with a notable decreasing trend, especially for the Netherlands in the last two years of the sample period (-13%). The high level of institutional investors' holdings balances this relatively low figure (see Sections 5.3 and 5.4). Generalising this observation, highly concentrated banking systems are also better able to position themselves in the international financial market and, consequently, need to rely less on crossholdings to satisfy the "existence constraint".

In such a scenario, Italy still plays a peculiar role, laying in the middle of the two groups. Italian banks' crossholdings seemed to sharply decrease in the first half of the sample period but, eventually, the figure increases again, with an overall net change of +11% between 2013 and 2017. This might be partly due to the sudden decrease in households' holding in the same portion of the sample period.

5.3 Pension Funds and Insurance Firms (PF&IFs)

Unlike previous categories, this Section is affected by a further layer of limitation. Available data are even more aggregated, displaying in one figure the combination of different kind of investors: pension funds and insurance companies. Therefore, the proceeding of the analysis will firstly discuss theoretical expectations on Pension Funds and Insurance Firms, highlighting the extent to which those are overlapping, and sketch the aggregate trends without being able to distinguish the "Pension Funds" and "Insurance Firms" components.

Finally, it is preliminary important to notice a common trait of the two investors included in this category. Indeed, both pension funds and insurance firms are types of institutional investors whose investments are funded by the contributions of clients and are functional to realise future goals defining the objective of the business, i.e.: paying out compensation in case of the insured harmful event happens and paying out pensions when the time is due. Another characteristic justifying the union of these two investor categories is the fact that, unlike "Other Financial Institution" (Section 5.4), for PF&IFs investing is not the core business of their activities, rather the natural consequence of their core activities according to which they hold liquid assets today against future payments.

5.3.1 Pension Funds

Pension funds are financial institutions whose primary source of funding is the contributions of employees and employers and whose liabilities consists of the future entitlement of employees to receive their pension when the time comes due. Pension funds invest the contribution of the participants to the pension scheme with a medium-

term perspective, so to maintain and marginally increment the value of its assets and be able to meet obligations toward pensioners in the future.

To shield against investment risk, pension funds retain highly diversified portfolios and, as long-term sophisticated investors, they should exert considerable monitoring over their investments. Moreover, pension funds pose little concerns from a financial stability perspective since they do not usually resort to high leverage in their activities, and they do not face the risk of a run.⁹⁸ Therefore, many commentators imagined pension funds as desirable holders of bail-inable securities.

Nonetheless, bail-inable securities contrast with the optimal investment strategies of a pension scheme⁹⁹, since they seek for assets whose risk falls over time. On the contrary, by their very design, the risk of bail-inable securities does not fall over time, since they are prone to bear losses in case of distress that might materialise in the future. Such a contingency is likely to refrain pension funds from massively investing in bail-inable securities so long as they consider the resolution framework to be credible (i.e.: the regulator will actually impose losses in case of distress).

Besides, imposing losses on pensioners might be economically inefficient and politically unviable. In this respect, there is evidence that pension funds are often shielded from bearing losses in bankruptcy.¹⁰⁰ In other words, it is more likely that the regulator will avoid or delay to take the necessary resolution decisions if that would endanger the solvency and stability of a pension scheme.¹⁰¹ Taking also these arguments into consideration, one might go as far as arguing that bail-inable securities held by pension funds are likely to have a, *de facto*, low loss absorbency capacity, endangering themselves the credibility of the resolution regime.

Overall, pension schemes should not invest massively in bail-inable securities even though they have, in theory, a positive potential impact on corporate governance.

⁹⁸ See, Armour and others (n 13) ch 22.4.

⁹⁹ See Persaud (n 28).

¹⁰⁰ See, for the case of bankruptcy beneficial treatment in the U.S., David A Skeel Jr, 'The Empty Idea of Equality of Creditors' (2017) 166 U. Pa. L. Rev. 699.

¹⁰¹ Remember that Article 44(3)(d) BRRD allow the Resolution Authority to exempt on a case by case ground liabilities that would generate a disproportionate value destruction in case of a bail-in.

Moreover, it is desirable that, when investing in bail-inable securities, they invest in relatively senior instruments whose probability of suffering losses is lower.

5.3.2 Insurance

Insurance firms are financial institutions that shield economic actors from risky events, allowing them to undertake activities that they would not have had undertaken, by pooling such risk.¹⁰² To do so, an insurance firm accepts the payment of a premium in exchange for the promise to make payment in the future if the risky event materialises.¹⁰³ Consequently, insurance firms invest premia against future pay-outs.

Before considering the corporate governance role and the potential adverse spillovers of investing in bail-inable securities, it is essential to preliminary define the scope of "insurance firms". This section considers the case for "traditional" insurance companies and does not take into consideration pathological cases where financial institutions are only labelled as "insurance firms" while de facto act as shadow banks or broker dealers.¹⁰⁴ The mind goes to the case of AIG, an insurance company acting as a dealer in the CDS market and needed government bailout during the 2008 financial crisis.¹⁰⁵

Given the narrow definition of Insurance Firms provided above, the adverse spillovers of them being bailed-in are somewhat limited. Insurance firms perform no maturity or liquidity transformations and are not likely to experience runs on their liabilities that are due when a probabilistic event materialises.¹⁰⁶ This latter characteristic also implies that the insurer's risk has a limited correlation with the financial cycle.

¹⁰² Armour and others (n 13) 493.

¹⁰³ Armour and others (n 9) Ch 22.3

¹⁰⁴ This is consistent with regulatory reforms striving for impeding shadow banking activities to insurance firms.

¹⁰⁵ On the role of CDS in the latest financial crisis and, specifically the AIG case, see René M Stulz, 'Credit Default Swaps and the Credit Crisis' (2010) 24 Journal of Economic Perspectives 73.

¹⁰⁶ For a simple definition of maturity and liquidity transformation activities see Armour and others (n 13) 277. Insurance receives premia from clients to insure them against future risks. Premia, unlike bank deposits, cannot be withdrawn on demand; thence the risk of run is minimal. As for the correlation with the financial cycle, the probabilistic, future, events can be correlated with the cycle. A spectacular example of correlation in the financial crisis were the CDS issued by insurance firms. Yet, as specified in the main text, this kind of insurance, performing de facto shadow banking activities, are not part of the narrow definition employed here. Moreover, the insurance group should be able to pool its risks by insuring also non-cyclical events (e.g.: hazardous activities, car insurance, etc.).

On the other hand, insurance firms are sophisticated investors with medium-term orientation, can monitor their investment and willing to influence their borrowers. Nonetheless, as with pension funds, insurance companies still suffer from some sort of incompatibility between their investment strategies and the design of bail-inable securities: the risk profile of the investments in bail-inable instrument does not fall over time.

Nonetheless, bailing-in an insurance firm is not as politically unavailable as with pension funds. One can, therefore, argue that the moral hazard problem does not affect insurance companies investing in bail-inable securities since it is far less likely that the regulator will avoid imposing losses on insurance than on pension funds. Moreover, Solvency II¹⁰⁷ already regulates capital requirements for insurance firms, mandating them to hold capital against their investment risk.

In conclusion, insurance companies should invest in the whole spectrum of bail-inable securities, also the junior ones. They are well-positioned to play a positive governance role while posing relatively low concerns in terms of adverse economics spillovers in case of losses. Regulation can make the investment in bail-inable securities relatively cheaper for insurance firms through risk-weighting regulation so to increase their willingness to buy.

5.3.3 Data and Trends

As mentioned above, given the highly aggregated nature of the available data, it is almost an impossible task to highlight reliable trends, especially because the expectations over the two components of the data, pension funds and insurance firms, diverge.

It is still possible to notice a general increase in PF&IFs holdings, consistent with the general decrease in households' holdings and crossholdings. Euro Area average at the end of the sample period was about 20 %, experiencing a considerable increase throughout the period (+ 24,05%). Again, such a figure lies between two groups of countries.

¹⁰⁷ Directive 2009/138/EC of the European Parliament and Of the Council of 25 November 2009 on the takingup and pursuit of the business of Insurance and Reinsurance (Solvency II). OJ L 335, 17.12.2009, p. 1.

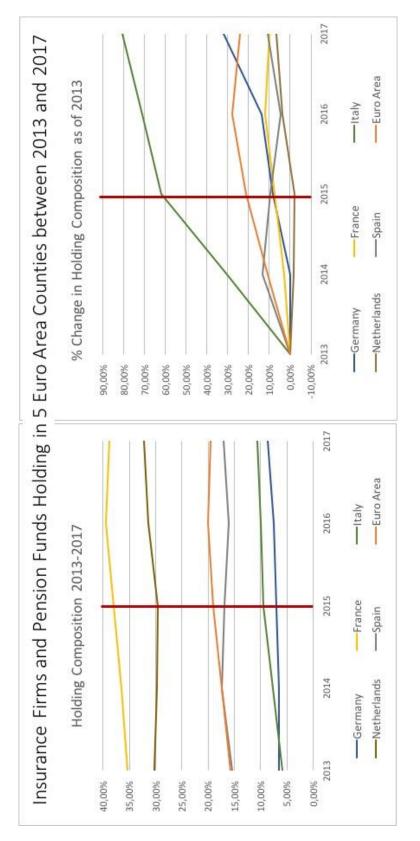


Figure 23 - Insurance Firms & Pension Funds holdings trend between 2013 and 2017. Own calculations.

Countries like France and the Netherlands have a high level of PF&IFs holdings, respectively 38,90% (+10,01%) and 32,16% (+6,43%) at the end of the sample period. Consistently with the Euro Area trend, the share of PF&IFs increased, but the relative

increase is lower than other countries whose PF&IFs is well below EA average. Those are Germany (8,61%) and Italy (10,42%). In relative terms, the figure on Italian bail-inable securities holdings is striking: the share of PF&IFs holdings almost doubled in 5 years (+80,75%). This figure is likely to partly offset the sharp decrease in households' holdings that Italy experienced in the same period.

Overall, path dependency and country heterogeneity play a major role in terms of PF&IFs holdings, even though it is reasonable to imagine that in the coming years the gap between countries with high and low PF&IFs holdings must be drastically reduced.

The general trend, throughout the Euro Area, shows a considerable increase in PF&IFs holdings. However, this trend is difficult to assess in terms of efficiency since the two components of such category, though sharing fundamental traits, differ quite dramatically when it comes to investing in bail-inable securities.

In conclusion, although an increase in professional investors' holding is overall desirable, it is unclear the extent to which this trend can yield efficient outcomes, especially in terms of credibility of the new resolution framework and, consequently, on the corporate governance role of bail-inable instrument holders.

5.4 Other Financial Institutions

In the ECB Dataset, "Other Financial Institutions" represents a residual category: it indicates those financial actors that are neither credit institutions nor PF&IFs. On the one hand, this category is increasingly highly heterogeneous. Therefore, data have limited ability to explain what is going on in the real world. On the other hand, the institutions that are part of this category share an important feature: their core business is to, broadly speaking, professionally invest money provided by their clients or borrowed (for leveraged institutions) according to different legal entitlements and business models.

Since it is impossible here to review all of the instances falling into the category; the proceeding of this section focuses on two prominent examples that are useful for the purpose of the analysis given their potential qualitative and quantitative impact: mutual funds, and activist hedge funds.

5.4.1 Mutual Funds

The category of Mutual Funds includes diversified and heterogeneous investment funds where an asset manager invests the money provided by clients while the latter retains investment risk. These funds can act as "passive" and "active" investors. Passive funds are getting increasingly popular among investors as are characterised by very low fees¹⁰⁸ and an investment strategy that mimics a benchmark or an index. Therefore, the decisions to enter or exit are not dictated by specific investment strategies and opportunities but by the value underlying shares and bonds composing the benchmark. On the contrary, active funds charge higher fees to their customers; these are justified by a more elaborated activity of market screening and asset picking. Section 6 discusses this differentiation and explains the different roles that those investors have in the mix of bail-inable debt holders.

From the perspective of adverse spillovers, mutual funds have a limited impact on contagion risk, since leverage in these institutions is limited if not prohibited. Nonetheless, in high yield bond funds, such as a fund investing in bail-inable securities, there is a moderate incentive to run.¹⁰⁹ If investors want to exit the funds in times of stress, they can redeem their share in the fund, with variable time windows and constraints depending on contractual arrangements.¹¹⁰ When the market for the underlying instruments (in this case: bail-inable securities) is illiquid, then the first to exit will have an advantage while the others will face the risk of a discount sale of the asset manager to match the demand for redemption.¹¹¹

This holds true for the "traditional" mutual funds; whereas, the so-called Money Market Mutual Funds (MMFs), performing shadow banking activities, pose peculiar risks in terms of financial stability.¹¹² However, this analysis can largely neglect the role of MMFs.

¹⁰⁸ As low as 3 basis points for the S&P500 trackers offered by Vanguard. See <u>https://investor.vanguard.com/etf/profile/VOO</u> (accessed 10-02-2020).

¹⁰⁹ Armour and others (n 9) 481.

¹¹⁰ Some funds issue shares that can be traded, such as ETF, while other funds offer more limited possibility to exit. Mark Mobius, *Mutual Funds: An Introduction to the Core Concepts* (John Wiley & Sons 2007).

¹¹¹ Douglas W Diamond and Philip H Dybvig, 'Bank Runs, Deposit Insurance, and Liquidity' (1983) 91 Journal of political economy 401.

¹¹² For an overview of the problems related to MMFS and the possible regulatory strategies to address those, see Jeffrey N Gordon and Christopher M Gandia, 'Money Market Funds Run Risk: Will Floating Net Asset Value Fix the Problem' [2014] Colum. Bus. L. Rev. 313.

After the latest reforms,¹¹³ "Constant Net Asset Value" MMFs cannot invest in instruments such as bail-inable securities anymore and, therefore, are out of the market.¹¹⁴ Therefore, the analysis can be limited to the Mutual Funds regulated under UCTIS Directives.¹¹⁵

From the perspective of Corporate Governance, the difference between active and passive funds matters. Active funds should proactively engage in the governance of the investee companies. Indeed, the higher fees allow them to engage in costly monitoring. They can play a twofold disciplining role: exiting their exposure or trying to influence the decision-making process of the bank. On the other hand, passive funds have been seen as inert players from a corporate governance perspective in order to save costs.¹¹⁶ Nonetheless, a new trend of the literature¹¹⁷ shows that also passive investors are, from a governance standpoint, active and privately engage the management.

For all those reasons, the investment in bail-inable securities by mutual investment funds is highly desirable since it poses a relatively low risk for financial stability and has a potential to play a positive role in corporate governance, especially since assets managers can specialise in this type of investment. Both active and passive approach to bail-inable securities holdings can play a positive role, for different reasons, as Section 6 will detail more precisely. Finally, it is worth noting that the more liquid the secondary market for bail-inable securities is, the more incentivised mutual funds will be to invest in such securities since the risk of "redemption run" is minimised.

5.4.2 Activist Hedge Funds

Hedge Funds are financial institutions that engage in a variety of activities following diverse investment strategies, which make "Hedge Fund" little more than a label. To cope with such heterogeneity, both EU and US laws define them in a negative way. The EU Alternative

¹¹³ Regulation (EU) 2017/1131 of the European Parliament and of the Council of 14 June 2017 on money market funds (Text with EEA relevance. OJ L 169, 30.6.2017, p. 8–45.

¹¹⁴ See Article 24 of the MMF Regulation.

¹¹⁵ Directive 2009/65/EC of the European Parliament and of the Council of 13 July 2009 on the coordination of laws, regulations and administrative provisions relating to undertakings for collective investment in transferable securities (UCITS). OJ L 302, 17.11.2009, p. 32.

¹¹⁶ On this debate, with convincing empirical analysis pointing at the active engagement of passive investment, see, Ian R Appel, Todd A Gormley and Donald B Keim, 'Passive Investors, Not Passive Owners' (2016) 121 Journal of Financial Economics 111.

¹¹⁷ McCahery, Sautner and Starks (n 25).

Investment Funds Directive (AIFD)¹¹⁸ defines Hedge Funds as investment funds that do not qualify as retail funds (UCITS)¹¹⁹ under the relevant legislation.

While it is impossible to account for all the possible variations and investment strategies of hedge funds, for the purpose of the present study, some features are crucial. First, hedge funds are highly sophisticated investors whose services are directed to clients with a high level of sophistication either. Second, the client's funds are, to different extents, locked up and withdrawal on demand is not possible. Third, most of the hedge funds often try to intrude in the governance of the firm they invest in to gain profits from reselling the securities at a premium at a later stage.¹²⁰ These are the so-called "Activist Hedge Funds" and, for the peculiar relevance they have for this study. This Section mainly focuses on them.

The contractual lock-in of client's funds minimises the risk of run. On the other hand, being leveraged, hedge funds face a fire sale risk when they hold illiquid assets, as bailinable securities may become in times of financial turmoil. Moreover, hedge funds may contribute to increase systemic risk through interconnection with other financial institutions. In this respect, the standard regulatory response has been to indirectly tackle the issue by requiring capital requirements and limit large exposure of banks towards leveraged funds.¹²¹

The fourth characteristic, i.e.: target investments for profiting from future selling after some corporate reorganisation has taken place, is instead crucial for assessing the impact hedge funds might have on the governance of targeted banks.

¹¹⁸ Directive 2011/61/EU of the European Parliament and of the Council of 8 June 2011 on Alternative Investment Fund Managers and amending Directives 2003/41/EC and 2009/65/EC and Regulations (EC) No 1060/2009 and (EU) No 1095/2010. *OJ L 174, 1.7.2011, p. 1–73*

¹¹⁹ Directive 2014/91/EU of the European Parliament and of the Council of 23 July 2014 amending Directive 2009/65/EC on the coordination of laws, regulations and administrative provisions relating to undertakings for collective investment in transferable securities (UCITS) as regards depositary functions, remuneration policies and sanctions. *OJ L 257, 28.8.2014*.

¹²⁰ For an introduction of the impact of hedge funds activism on corporate governance, see John C Coffee Jr and Darius Palia, 'The Wolf at the Door: The Impact of Hedge Fund Activism on Corporate Governance' (2016) 1 Annals of Corporate Governance 1.

¹²¹ On the desirability of indirect regulation, see Hossein Nabilou and Alessio M Pacces, 'The Hedge Fund Regulation Dilemma: Direct vs. Indirect Regulation' (2015) 6 Wm. & Mary Bus. L. Rev. 183.

First of all, it is worth remarking that activist hedge funds are highly sophisticated investors that are specialised in corporate governance engagement. Nonetheless, their intervention is not necessarily desirable. Back in Section 3, the impact on corporate governance was defined not only by the ability and willingness of monitoring and influencing the borrower but also by the preferences of the investor. In a sense, this represents a particular feature of the long-lasting debate on hedge fund short-termism.¹²² In time of distress a suitable strategy for a hedge fund is to lobby for diminishing the leverage of the bank by shrinking assets and, thus, reducing available credit for the real economy. Such a critique is grounded, though it might understate the actual potential of hedge funds.

Hedge funds activism usually does not work in isolation but in combination with passive investors that "decide" whether hedge funds claims are worth pursuing supporting them or not¹²³. Moreover, in the specific case of banks close to financial distress, the role of supervisor might actually constraint the possibility of hedge funds to implement deleverage via asset shrinking in a socially detrimental way.

Furthermore, on the governance side of the story, having hedge funds investing in bailinable securities can enhance market discipline based on price adjustment, thanks to their, often times, contrarian investment strategy. Indeed, it can reduce market volatility and enhance the quality of price discovery. Nonetheless, being the law as it is, hedge funds might have limited incentives to invest in bail-inable securities since the room they have for engaging with the management is rather limited. On the contrary, a normative shift somehow including bail-inable creditors in the internal governance dynamic may provide hedge funds with powerful incentive to enter the market for bail-inable securities.¹²⁴

¹²² On short-termism and corporate governance, see Mark J Roe, 'Corporate Short-Termism—in the Boardroom and in the Courtroom' [2013] The Business Lawyer 977. Empirically, many studies have showed how activism yield long-term improvement in the profitability and value of the targeted corporations. See Marco Becht and others, 'Returns to Hedge Fund Activism: An International Study' (2017) 30 The Review of Financial Studies 2933; Lucian A Bebchuk, Alon Brav and Wei Jiang, 'The Long-Term Effects of Hedge Funds Activism' (2015) 115 Colum. L. Rev. 1085.

¹²³ Alessio M Pacces, 'Exit, Voice and Loyalty from the Perspective of Hedge Funds Activism in Corporate Governance' (2016) 9 Erasmus L. Rev. 199.

¹²⁴ See Chapter 8.

A different, and arguably more important, limitation of hedge funds as bail-inable debtholders come from their investment strategy. Hedge-funds actively investing in debt instruments are usually late-comers: these invest in debt instruments whose price already dropped considerably. This way, the funds aim at realising a profit by selling back debt instruments at a higher price at a later stage.¹²⁵ This decrease the potential of hedge funds to positively impact corporate governance in good times but, conversely, increases such potential once the banks' stability deteriorates. This latter consideration highlights a further layer of complexity in analysing bail-inable debtholders, which is the discrete role of different investors over the lifecycle of the issuing bank.

In conclusion, from a social welfare standpoint, it is desirable to have hedge funds investing in bail-inable securities since they pose limited risks of adverse spillovers and the have the ability and willingness to impact on the corporate governance of the borrowing bank even though the desirability of such impact is ambiguous especially in times close to distress. In this respect, the relevance of a smart mix of investors in bail-inable securities supported by effective supervision becomes clear.

5.4.3 Data and Trends

The available data for this category of investors is particularly uninformative. "Other Financial Institutions" is a residual category and the impact of different investors included in this category might sharply differ, as the discussion of two prominent investor categories (Mutual Funds and Activist Hedge Funds) clearly showed.

Nonetheless, data still provide some limited insights. Throughout the sample period, OFIs' holdings (+31.30 %) significantly increase in the Euro Area. The increase was relatively modest in countries that had already a considerable share of OFIs' holdings at the beginning of the sample period, such as the Netherlands (+7.80%). This might signal that, given current legislation and incentive structure, the share of holdings is close to what is privately efficient for the investors falling under such category.

¹²⁵ Michelle M Harner, 'The Corporate Governance and Public Policy Implications of Activist Distressed Debt Investing' (2008) 77 Fordham L. Rev. 703.

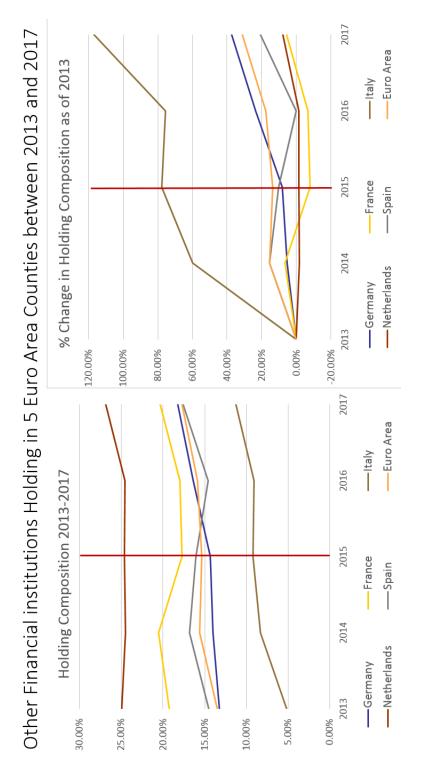


Figure 24 - Other Financial Institution holdings trend between 2013 and 2017. Own calculations.

On the contrary, the increase is higher in countries where the initial amount of OFIs' holdings was below the Euro Average, such as Germany (+37.34%). Again, Italy (+116.73%) represents a somehow unique case of adjustment toward more sophisticated investors holding bail-inable securities, even though the share of OFIs' holdings is still below the Euro Average.

Overall, cross-country heterogeneity and path dependence play a significant role also for this category of investors. However, a clear route toward more convergence in the Euro Area has started and it is in its early stage.

6. A Way Forward?

Before moving to the discussion of what a balanced mix of bail-inable investor might look like, it is worthwhile summing up the main findings of Section 5. Figure 25 summarises the impact of different kind of investors in terms of both governance and spillovers. Upward arrows indicate a positive effect or, in the case of spillovers, the minimisation of negative effects. Given the impact on governance and negative spillovers, Figure 25 indicates the seniority of the instruments that investors should hold.

As argued throughout the analysis, households are the worst performer both in terms of financial and economic stability, closely followed by credit institutions. The residual amount of households' holdings is better allocated to more senior positions. A similar argument goes for banks, with the difference that banks should continue to invest in senior bail-inable securities so to fulfil the "existence constraint".

Moving to "institutional investors", insurance firms, mutual funds and hedge funds, all for different reasons and with different specifications, pose relative low concerns in terms of adverse spillovers and are well-positioned to play a positive role in corporate governance. It is therefore desirable that they invest in junior, high yield, bail-inable positions. A somehow different story can be told for pension funds, since the crucial social and economic function they perform might encourage the regulator to grant them special protection, shielding them from losses even beyond the letter of the BRRD. It is therefore advisable they only undertake senior bail-inable position, helping to fulfil the existence constraint.

Bearing these conclusions in mind, the proceeding of this section attempts to generalise the arguments that have been proposed so far and suggests what a mix of bailinable investor should look like. In so doing, the analysis shifts from an approach focused on the labels of investor's categories as provided by the SHS dataset, to a more functional approach, discussing the salient feature of investors building up the best possible mix of investors.¹²⁶

Investor's category	Governance	Economic Stability	Seniority
Households	↓ ↓	t t	Senior
Crossholdings	ŧ	$\downarrow \downarrow$	Senior
Insurance Firms	t	t	Junior and Senior
Pension Funds	↑↓	t	Senior
Mutual Funds (active and passive)	Ť	†	Junior and Senior
Hedge Funds	1	1	Junior

Figure 25 - Summary of the impact of different investors' category

Bail-inable instruments are grossly divided into "junior" and "senior" positions. For explanatory purposes, one can take as a reference point the 8% threshold of shareholders and bail-inable creditors that have to suffer losses before any state intervention can be allowed according to the State aid framework.¹²⁷

A. Junior positions. Junior bail-inable instruments, i.e.: instruments that are the more likely to suffer losses in case of distress, should be held by investors that are both sophisticated and pose low risks of adverse spillovers if losses materialise. This way, the

¹²⁶ The analysis that follows is mainly based on social optimal outcome, while privately optimal investment strategies, and therefore market willingness to adjust to social optimum is not here considered. As I will argue in Chapter 8, investors can be incentivised toward socially optimal outcome through corporate governance adjustments granting them some ex ante governance role.

¹²⁷ See Banking Communication (2013), cit., para 9; Articles 37(10)(a) and 44(5)(a) BRRD. Note that this differentiation is theoretical as it is ex ante unclear who the marginal creditor below the 8% threshold is. For an in-depth analysis of this matter, see back Chapter 4, Section 4.4

positive impact on corporate governance would be maximised while the risk of adverse spillovers minimised.

Throughout this study, both theoretical arguments and data showed that there is no bulletproof investor; i.e.: there is no investor (or investors category) that, at the same time fulfils three conditions. Namely:

(1) investors raising no risks of adverse spillovers;

(2) investors capable and willing to influence the risk-taking incentives of the borrowing bank toward social optimality;

(3) investors with such a deep pocket for satisfying herself the "existence constraint".¹²⁸

The limited literature on the topic has proposed valid arguments against the investment in bail-inable securities for almost all the possible categories of investors. however, at a closer scrutiny, two salient elements arose: some investors can perform the task better than others and a mix of investors, combining their business models, investment strategies and risk preferences, have the potential to positively interplay with each other.

Building on the description of various categories of investors in Section 5, that provided some glimpse on such smart mix, from a functional perspective three types of investors can positively interact with each other and yield good results in terms of corporate governance impact while adding few adverse spillovers.

1) <u>Targeted Investment</u>: highly sophisticated and specialised investors screen the market and detect undervalued and poorly managed firms. These investors invest in companies to reverse the trend and have a big premia in the resell price once the resilience and profitability of borrowing bank have been enhanced. This function is usually undertaken by the so-called active investors, especially activist hedge funds;

2) <u>Specialised active funds</u>: investment funds (e.g.: mutual funds) that are specialised and actively invest in a vast array of bail-inable securities. This has two main advantage as

¹²⁸ See Sections 3 and 5 in this Chapter.

compared with an atomistic investor: first, the fund is specialised in bail-inable securities, being able to pick them in the market and to have the ability to influence the management while they are holding these securities. Second, the risk to bear losses is two-way pooled: among the clients of the funds and along the securities issued by a diversified sample of banks held by the fund;

3) <u>Indexed investing</u>: funds that invest horizontally in all the outstanding (listed) bailinable securities¹²⁹. This type of investment enjoys the same pooling characteristic of the specialised funds described above. Moreover, indexed, passive, funds do not usually engage directly and officially in the governance of the corporations they invest in, but rather privately engage the management (closed-door pressure) and/or can support the claim of more active investors, playing the role of an arbiter.

B. Senior Positions. One of the pillars of the new resolution framework is to establish a sufficient buffer of bail-in eligible liabilities (MREL) so to allow the Resolution Authority to ordinarily resolve institutions in case of distress and, ex-ante, to reinforce the resilience of institutions in good times. In so doing, an enormous amount of eligible liabilities needs to issued, generating the "existence constraint" as defined in Section 2. Therefore, it is likely that not enough "good" investors are willing to buy bail-inable securities so that some other categories with deep pockets have to step in.

In this scenario, an optimal mix of investors in bail-inable instruments requires that such investors hold senior positions. Holding senior position, such investors are shielded by more junior ones and probably also by the State that can, at least partially, step in after the burden-sharing of at least 8% of nRWA.¹³⁰ This minimises both the negative economic

¹²⁹ There is a growing U.S. based literature showing that passive investors that horizontally invest in corporations listed in one index have incentive to horizontally maximise their investment, meaning that they do not have profit maximizing incentives in each and every corporation they invest in but rather profit maximizing incentive of the network of investment they have. It is easy to raise a suggestive argument in the banking industry, since the case for horizontal maximization implies stability and resilience way more than the case for individual profit maximization. Although, this still represent nothing more than a suggestive idea, future research should focus on the positive potential of horizontal investment in specific industries such as the banking one. On costs and benefits of horizontal shareholders, see Alessandro Romano, 'Horizontal Shareholding: The End of Markets and the Rise of Networks' (2018) Available at SSRN 3255948.

¹³⁰ See Banking Communication (2013), cit., para 9; Articles 37(10)(a) and 44(5)(a) BRRD.

spillovers of them bearing losses and the negative effect of their inability/unwillingness to engage in corporate governance.

Therefore, in a smart mixed composition of bail-inable instrument holders, senior positions should be covered with the "good" investors described in Panel A to the extent this is possible. Then, other investors posing considerable contagion risk (such as other banks) or that generate the risk of considerable adverse consequences for the real economy (such as pension funds and retail investors) should step in, so long as the existence constraint is not satisfied yet.

For this reason, the deduction of crossholdings from TLAC/MREL should be contingent on seniority, i.e.: for banks should be cheaper investing in senior positions in other banks' bail-inable debt as compared with more junior positions.

7. Conclusions

The chapter discusses the optimal composition of bail-inable securities holders, highlights the lack of a bulletproof category of investors, shows the relevant trends pinpointing how investors are adjusting to the new resolution framework and, eventually, suggests some functional characteristics of optimal mixed composition of investors in bail-inable securities.

In building the benchmark of an ideal investor in bail-inable securities, I argue that an ideal holder should maximise the positive corporate governance impact in terms of reducing excessive risk-taking behaviours as well as minimise the adverse impact on the economy, in terms of both financial stability and other spillovers. On top of these two dimensions, also an "existence constraint" has to be satisfied, i.e.: since the required amount of outstanding eligible securities had been estimated to be around 26% of banks' RWA, an enormous amount of securities has to be issued, thus held. This constraint, tough frequently neglected, play a crucial role in seeking for an optimal composition.

The analysis showed that no category of investors matches such an ideal benchmark, i.e.: there is no bulletproof investor that can yield efficient outcomes both in terms of corporate governance and stability as well as having a sufficiently deep pocket to fulfil the "existence constraint". Thereupon, the rest of the analysis seeks for a mix of holders whose combined impact mimic as close as possible the benchmark. In so doing, I first investigate the current composition of bail-inable debtholders in the EA and its evolution from 2013 to 2018, relying on aggregated data published in the Security Holding Statistics Dataset. Such an exercise showed that investors are adjusting to the new resolution framework, with an increasing share of institutional investors, a rather stable involvement of other banks and a sharp decline in retail investors' holdings. Nonetheless, data show a considerable crosscountry heterogeneity where path dependency hinder the creation of a level playing field among European banks.

Finally, the chapter attempts to generalise its findings and highlights some functional characteristics of investors that should compose the optimal mix. In so doing, bail-inable securities are grouped according to the seniority of the claim: senior claims can be held by categories with deep-pocket even though they might pose considerable stability concerns (such as banks). In contrast, junior positions should be held by investors that are able and willing to influence bank management and pose relatively low stability concerns.

This research highlights how the composition of bail-inable debtholders affects the outcome of any possible resolution decision and is, therefore, dense of policy relevant implications. Even more so from an ex-ante perspective: a composition of bail-inable debtholders that would yield suboptimal outcomes in case of a resolution would make the decision of resolving a failing bank particularly difficult, endangering the overall credibility of the entire resolution framework.

As the functional argument of this chapter suggests, granting (some) ex-ante governance rights to (some) bail-inable debtholders might provide the correct incentives toward an optimal mix. Therefore, future research should critically scrutinise the desirability and feasibility of explicitly linking bail-in and corporate governance.¹³¹

¹³¹ This is consistent with the argument proposed by Iris HY Chiu, 'Corporate Governance: The Missing Paradigm in the Mandatory Bail-in Regime for Creditors of Banks and Financial Institutions' [2014] Journal of business law 611; John Armour and Jeffrey N Gordon, 'Systemic Harms and Shareholder Value' (2014) 6 Journal of Legal Analysis 35.

8. Appendix

	Sector	AT	BE	DE	FI	FR	IE	IT	LU	NL	PT	ES	EA
2013	нн	24,45%	35,96%	14,96%	10,47%	8,28%	8,11%	41,19%	13,34%	5,67%	9,66%	5,09%	19,09%
	Gov	2,77%	0,93%	1,43%	5,26%	1,10%	1,60%	0,34%	0,56%	1,56%	6,75%	4,42%	1,68%
	IF&PF	13,12%	16,09%	6,54%	14,69%	35,36%	11,45%	5,88%	13,50%	30,22%	12,37%	15,38%	15,70%
	MFI	44,42%	19,27%	61,83%	43,98%	33,68%	41,47%	45,05%	49,37%	36,23%	66,50%	59,25%	48,00%
	Non-Fin	3,03%	2,22%	1,97%	1,59%	2,32%	2,16%	2,33%	2,30%	1,38%	0,46%	1,32%	2,03%
	OFI	12,11%	25,52%	13,27%	23,93%	19,25%	35,19%	5,19%	20,92%	24,94%	4,25%	14,55%	13,50%
4	нн	26,32%	24,48%	13,63%	8,45%	7,57%	7,63%	40,11%	9,94%	6,68%	12,18%	3,73%	17,58%
	Gov	2,56%	0,77%	1,46%	5,38%	1,66%	1,13%	0,40%	0,78%	1,96%	3,42%	0,54%	1,31%
)1	IF&PF	14,18%	14,76%	6,54%	15,04%	36,45%	11,38%	7,67%	13,47%	29,75%	12,66%	17,44%	17,42%
201.	MFI	41,46%	30,15%	62,38%	47,46%	31,54%	41,59%	41,33%	50,38%	35,51%	62,61%	60,29%	46,07%
	Non-Fin	3,56%	1,46%	1,98%	1,50%	2,22%	2,13%	2,18%	1,55%	1,47%	0,55%	1,19%	1,99%
	OFI	11,92%	28,38%	14,00%	22,02%	20,52%	36,13%	8,30%	23,80%	24,53%	8,58%	16,80%	15,61%
	нн	25,62%	18,99%	14,19%	6,97%	6,96%	5,34%	38,38%	9,58%	5,39%	5,19%	3,58%	16,25%
ß	Gov	3,50%	1,83%	1,78%	5,60%	1,77%	1,02%	0,28%	1,25%	2,31%	4,02%	0,67%	1,50%
-	IF&PF	15,53%	15,74%	7,07%	15,16%	38,07%	9,63%	9,51%	15,26%	29,59%	13,14%	16,83%	19,03%
20	MFI	39,10%	35,46%	59,91%	48,34%	33,11%	44,94%	40,19%	49,36%	36,55%	72,57%	61,79%	45,62%
	Non-Fin	3,86%	1,21%	2,68%	1,46%	2,37	1,72%	2,39%	2,09%	1,55%	0,25%	1,1%	2,22%
	OFI	12,39%	26,77%	14,37%	22,47%	17,72%	37,34%	9,23%	22,46%	24,61%	4,83%	16,03%	15,37%
	НН	27,70%	11,94%	13,99%	3,09%	6,42%	4,71%	32,16%	7,13%	4,98%	3,54%	3,69%	14,23%
9	Gov	3,80%	2,58%	1,84%	5,98%	1,69%	0,90%	0,30%	1,81%	2,70%	4,20%	0,76%	1,60%
Η	IF&PF	16,68%	16,77%	7,43%	15,83%	39,56%	10,96%	10,06%	14,35%	31,33%	10,20%	16,09%	20,07%
20	MFI	32,95%	37,95%	57,85%	52,62%	32,35%	47,27%	45,86%	57,19%	34,93%	78,28%	63,73%	46,08%
	Non-Fin	4,13%	3,36%	2,50%	0,96%	2,00%	1,43%	2,48%	1,19%	1,51%	0,21%	1,16%	2,13%
	OFI	14,75%	27,40%	16,39%	21,52%	17,97%	34,73%	9,12%	18,32%	24,55%	3,58%	14,57%	15,89%
	НН	27,34%	8,03%	14,26%	2,94%	5,91%	3,35%	25,30%	4,77%	4,89%	4,63%	3,08%	12,96%
2	Gov	4,07%	3,43%	2,24%	6,56%	1,61%	0,85%	0,34%	1,87%	3,06%	0,25%	0,73%	1,57%
17	IF&PF	16,77%	11,97%	8,61%	14,70%	38,90%	10,95%	10,62%	11,93%	32,16%	8,30%	17,01%	19,47%
20	MFI	31,84%	32,57%	54,46%	52,97%	31,38%	46,00%	50,21%	55,94%	31,35%	78,85%	60,60%	46,26%
	Non-Fin	4,05%	2,62%	2,20%	0,81%	1,87%	1,12%	2,26%	1,78%	1,65%	0,34%	1,01%	2,00%
	OFI	15,94%d	41,37%	18,23%	22,01%	20,33%	37,73%	11,25%	23,71%	26,89%	7,64%	17,57%	17,73%

Figure 26 - Sector-by-sector non-covered debt holding in 11 EA countries

HH: Households

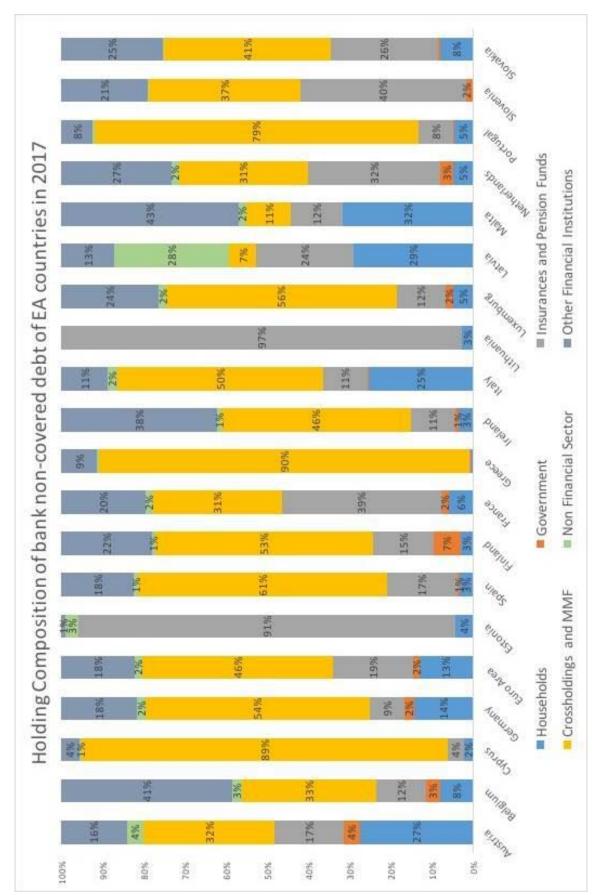
Gov: Government

IF&PF: Insurance Firms and Pension Funds

MFI: Monetary Financial Institutions (Crossholdings and MMF)

Non-Fin: Non-Financial Sector

OFI: Other Financial Institutions



Chapter 6 - Toward an Optimal Composition of Bail-Inable Debtholders?

Figure 27- Sector composition of non-covered debt held by EA investors 2017Q4 foe each EA country

PART III

Fine-tuning Bank Governance and Regulation

Part III – Finetuning Bank Governance and Regulation

Chapter 7 – The Case for Remunerating Bankers Through Bail-Inable Debt

Abstract

This chapter proposes a mandatory regulation of the cash flow rights of bank managers, as a channel to fine-tune bank governance and the resolution framework and, thence, enhance the resilience and the resolvability of financial institutions.

Remuneration of bank managers represents a highly contentious matter that has attracted the attention of academics and policymakers and the rage of the media and public in the aftermath of the financial crisis. This chapter proposes a radical change in the current remuneration practices, including bail-inable debt within the variable component of remuneration packages.

The current regulatory framework and resulting practices in the EU are heavily unsatisfactory since they decrease the link between pay and performance. Moreover, it does not consider the specificities of bank corporate governance; consequently, the negative externalities it generates are still not accounted for.

In supporting the apparently naïve claim of remunerating bank managers through debt, the chapter set the economic rationale for remuneration, highlighting the special case of the banking industry and explaining why debt can be particularly useful in such framework. Against the theoretical framework resulting from such analysis, the second part of the chapter critically assesses the existing EU regulation on the structure of remuneration packages. This highlights how the policy goal of optimising risk-taking incentives of bank managers is far from being achieved and, more importantly, that a radical change in the regulatory paradigm is necessary to achieve this goal.

The chapter innovates why such a shift necessarily implies to include bail-inable debt in remuneration packages. The chapter shows how it would tighten the link between pay and performance, would address the specificities of bank governance and, as an additional positive spillover, would enhance the resolvability of the institution. The final part of the research develops a detailed policy proposal that focuses both on the content of the regulation and on the possible implementation strategies.

Keywords: Remuneration, Capital Requirement Directive, Resolvability, Managerial Incentives; Material Risk-Takers.

1. Introduction

Executives remuneration represents one of the most debated and divisive topics in the corporate governance literature and especially in financial institutions given its political sensitivity. Indeed, it comes as no surprise that the spectacular magnitude of remuneration of many bank managers attracted media commotion and public rage during the latest crisis. This was even truer in the not uncommon cases of spectacular remunerations awarded to bank managers whose bank went underwater only a few months later.

The former CEO of Lehman Brothers, Mr. Richard Fuld, provides the most prominent example on the matter: Lehman filed for bankruptcy in September 2008. However, in 2007 Mr. Fuld received total compensation of over 22 million dollars, of which almost 17 million awarded in stocks.¹

Hence, unsurprisingly, regulating bank managers' remuneration became a politically sensitive matter in the aftermath of the global financial crisis.² This, on the one hand, gave stimulus to policy innovation. On the other hand, political calculus often drove the, rather than efficiency and effectiveness considerations. Therefore, one decade later, the regulation on bankers' pay not only failed to achieve the desired objectives but even created unintended negative consequences.

Intending to fix such shortcomings, this chapter proposes to award part of bank managers' remuneration in the form of bail-inable debt, so to exploit the potential for positive synergies between bank governance and the resolution framework.

The idea of remunerating executives and high-profile employees with debt is, to say the very least, controversial and might seem naïve. In standard corporate governance models for non-financial firms, remuneration packages represent a reward strategy to align managerial and shareholders' incentives and ultimately fostering social welfare,³ so that

¹ Lucian A Bebchuk, Alma Cohen and Holger Spamann, 'The Wages of Failure: Executive Compensation at Bear Stearns and Lehman 2000-2008' (2010) 27 Yale J. on Reg. 257. It has been estimated that between 1993 and 2007, while serving as CEO, Mr. Fuld received almost half a billion dollars.

² In this chapter, the expression "bank managers" and "bankers" will both indicate the identified staff subject to the CRD pay regulation. For a more precise definition, see fn n. 128.

³ John Armour and others, *Principles of Financial Regulation* (Oxford University Press 2016) 139.

the role played by debt is by definition very limited.⁴ However, as widely discussed in Chapter 2, bank governance is rather special and substantive adjustments might be warranted.

To this end, the intertwine between bank governance, pay regulation, and the resolution framework for failing bank represents the focus of the chapter. Indeed, the latter establishes the category of "bail-inable debt", i.e.: debt instruments that can be wiped-out or converted into equity in case of bank distress, before bankruptcy. Therefore, if managers received bail-inable instruments; they would be the first in line to bear losses in case of distress. Consequently, managers would have ex-ante incentives not to take on excessive risk in order to preserve the value of the awarded instruments.

This chapter adds to the extensive literature on bank managers' remuneration. The proposal for mandatory regulation of bank managers' remuneration stems from the necessity to fine-tune bank governance and the resolution framework. This represents the originality of the research.

In this view, regulating cash flow rights of managers is not an end in itself. Rather, it represents a mean to adjust the governance of financial institutions to the specificities of bank governance⁵ and, at the same time, to enhance the credibility of the resolution framework and the resolvability of individual banks. Hence, using also bail-inable debt in bank managers' remuneration packages would prove beneficial for both financial stability and corporate governance and, besides, would generate positive spillovers on bank resolvability.

The chapter proceeds as follows. Section 2 scrutinises the theoretical arguments on remuneration in both financial and non-financial firms. It highlights the elements of specificity of bank governance that justify the departure from the conventional wisdom on bankers' remuneration (2.1); discusses the theoretical justification and empirical evidence on remuneration through debt (2.2); and analyses early experiences of remuneration

⁴ Nevertheless, it shall be noted that debt-like elements of remuneration are a long-lasting overlooked practice, especially in the form of pension schemes. Only recently, the effect of remuneration through debt has started to be taken into account, see Section 2.2.

⁵ Marco Becht, Patrick Bolton and Ailsa Röell, 'Why Bank Governance Is Different' (2011) 27 Oxford Review of Economic Policy 437.

through debt in banking (2.3). Section 3 introduces the main policy proposals put forward in the aftermath of the financial crisis as well as the main international documents discussing regulatory standards and good practices on remuneration in banking. Subsequently, Section 4 focuses on the regulation on bank managers' remuneration in the EU, critically discussing the structural regulation imposed at European level pointing out the extent to which such regulation departs from the theoretical background set earlier, failing to achieve its policy objectives. Section 5 discusses specifically the case for remuneration through bail-inable debt in the European Union, describing the current regulatory environment (5.1) and proposing a detailed modification to fine-tune regulation on remuneration and bank regulation with the specificities of bank governance (5.2). Eventually, Section 6 discusses two possible strategies for implementing the proposal of remunerating high-profile employees with bail-inable debt. Section 7 concludes.

2. Remuneration of Executives and Risk takers in Banking: Theory and Evidence

2.1 Agency Theory, Remuneration and the Special case of Bankers

The debate over executives' compensation has been one of the most vibrant and contentious in corporate governance for the last 40 years.⁶ This strand of research lies, preeminently, on the quintessential elements of modern corporations: the separation of ownership and control⁷ and the agency costs arising thereof.⁸

Once the agency theory of the firm reached a certain degree of consensus, studying the optimal compensation structure to handle the agency conflict between shareholders

⁶ The load of academic research in the field of law, economics, finance and business management arose in the early 1980s; nonetheless there were previous pioneering studies on the matter. See, notably, David R Roberts, 'A General Theory of Executive Compensation Based on Statistically Tested Propositions' (1956) 70 The Quarterly Journal of Economics 270. (the paper already recognise the role of executive compensation in incentivizing managers as a response to the separation of ownership and control, advocating for variable remuneration tailored on the specificities of each firm). For a review of the early studies on executives compensation, see Kevin J Murphy, 'Executive Compensation' (1999) 3 Handbook of labor economics 2485.

⁷ Adolf Augustus Berle and Gardiner Coit Means, *Modern Corporation and Private Property* (Transaction Publishers 1932).

⁸ Michael C Jensen and William H Meckling, 'Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure' (1976) 3 Journal of financial economics 305.

and managers represented a natural step forward.⁹ The standard setting of the mainstream theory on executive compensation assumes an all-equity, widely held corporation with weak shareholders and aims to align the CEO's long-term objectives with shareholders' ones. In such a setting, rewarding executives with stock-based compensation can provide managers with the correct incentives.¹⁰

Therefore, the idea of aligning executives' incentives with shareholders' interests became one of the foundations of the compensation practice for modern corporations.¹¹ This allows, in theory, to tackle two critical issues. First, remuneration should incentivize executives to seek all the positive net present value opportunities. Executives tend to be risk-averse since their capital, monetary as well as human, is disproportionally invested in the company.¹² Second, well-designed compensation packages that align the remuneration of executives with long-term interests of shareholders would limit the rent extraction of entrenched managers.¹³ In order to limit rent extraction, academic research and corporate practice have enucleated a series of new tools for controlling the quality of pay packages, such as the remuneration committee¹⁴ and "say on pay" procedures.¹⁵

The idea of rewarding good managerial performances through compensation packages composed of a fixed part and a stock-based part is soundly grounded on financial

⁹ Murphy (n 5).

¹⁰ Bengt Holmström and Jean Tirole, 'Market Liquidity and Performance Monitoring' (1993) 101 Journal of Political Economy 678.

¹¹ For early empirical evidence on CEO sensitivity to share prices, see Michael C Jensen and Kevin J Murphy, 'Performance Pay and Top-Management Incentives' (1990) 98 Journal of political economy 225.

¹² Michael C Jensen and Kevin J Murphy, 'Remuneration: Where We've Been, How We Got to Here, What Are the Problems, and How to Fix Them' (2004) ECGI Finance Working Paper N°. 44/2004.

¹³ Lucian Arye Bebchuk, Jesse M Fried and David I Walker, 'Managerial Power and Rent Extraction in the Design of Executive Compensation' (National bureau of economic research 2002). (the paper highlights the risk that powerful executives might capture the design of compensation packages).

¹⁴ Brian GM Main and James Johnston, 'Remuneration Committees and Corporate Governance' (1993) 23 Accounting and Business Research 351. The Cadbury Code already suggested to let a remuneration committee deal with executives compensation packages: "Executive directors' pay should be subject to the recommendations of a remuneration committee made up wholly or mainly of non-executive directors", Adrian Cadbury, 'Cadbury Report: The Financial Aspects of Corporate Governance' [1992] Tech report, HMG, London.

¹⁵ Jeffrey N Gordon, 'Say on Pay: Cautionary Notes on the UK Experience and the Case for Shareholder Opt-In' (2009) 46 Harv. J. on Legis. 323; Randall S Thomas and Christoph Van der Elst, 'Say on Pay around the World' (2014) 92 Wash. UL Rev. 653.

theory. Following the efficient capital market hypothesis,¹⁶ stock prices can be conceptualised as an unbiased estimate of the fundamental value of the firm. Therefore, tying managerial incentives to stock prices means fostering long-term value creation of the company.¹⁷ In this sense, in an influential review on managerial compensation, Murphy stated that: "Stock ownership provides the most direct link between shareholder and CEO wealth".¹⁸

After this brief and necessarily incomplete review of the main economic arguments behind the current practices on executive compensation,¹⁹ one might wonder whether and to what extent this plainly applies in banking.

Indeed, the idea that bank governance is special reached a fair degree of consensus in the aftermath of the Global Financial Crisis.²⁰ However, the implications of such a specialty remain somehow nebulous insofar as the approach to the corporate governance of banks resembles the mainstream paradigm used for the corporate governance of non-financial firms.²¹ In other words, the specialty of banks is accounted for by embedding some adjustments of specific governance tools and stricter regulations²² and not by adjusting the corporate governance paradigm to the specific nature of banks.

¹⁶ Eugene F Fama, 'Efficient Capital Markets: A Review of Theory and Empirical Work' (1970) 25 The journal of Finance 383.

¹⁷ This represent the baseline to advocate a strong sensitivity of pay to corporate performance. On this issue see the early study by Jensen and Murphy (n 6). See also Lucian A Bebchuk and Jesse Fried, *Pay without Performance* (Harvard University Press Cambridge, MA 2006)., where the authors critique the remuneration packages of bankers showing the lack of sensitivity of pay and performance.

¹⁸ Murphy (n 5) 2532.

¹⁹ For a recent review of the theory and current challenges on the matter, see Guido Ferrarini and Maria Cristina Ungureanu, 'Executive Remuneration. A Comparative Overview' in Wolf-Georg Ringe and Jeffrey N Gordon (eds), *Oxford Handbook of Corporate Law and Governance* (Oxford University Press Oxford, UK 2018).

²⁰ See, among many others, John Armour and others, 'Bank Governance' (2016) ECGI Law Working Paper 316/2016; Becht, Bolton and Röell (n 4); Jonathan R Macey and Maureen O'Hara, 'The Corporate Governance of Banks' [2003] FRBNY Economic Policy Review 91.

²¹ See, for instance, BCBS, 'Principles for Enhancing Corporate Governance' [2010] Basel Committee; European Commission, 'Corporate Governance in Financial Institutions and Remuneration Policies'. In these policy documents both the Basel Committee and the European Commission insights mainly rely on the standard corporate governance best practices already established in other governance codes. In addition, acknowledging the specialty of banks, they suggest adopting sophisticated monitoring mechanisms especially for remuneration packages and risk governance.

²² Christoph van der Elst, 'Corporate Governance and Banks: How Justified Is the Match?' (2015) ECGI-Law Working Paper 284/2015.

Especially in the last decade, both the legal and economic literature have highlighted the peculiar shape of incentives that banks and, for what here matters, bank managers face.²³ This is mainly due to three elements: bank leverage, moral hazard and systemic externalities. Banks are more leveraged than any other non-financial institution so that the problem of risk-shifting²⁴ from equity to debt holders is more acute, especially in good times, piling up risks that might abruptly explode once the credit cycle moves downturn,²⁵ as it happened during the latest financial crisis. Moreover, highly leveraged institutions have to face the debt-overhang problem,²⁶ where bank shareholders are not willing to finance positive net present value projects since the benefit of these would mainly go to credit cycle is weak.²⁷ Therefore, if the compensation packages are perfectly aligned with shareholders' interests, bank managers will be particularly sensitive to risk shifting and debt-overhang too.

On top of the incentive effects of bank leverage, moral hazard exacerbates the problems of tying managerial incentives to shareholders interests because of implicit state guarantee on banks' solvency. Despite one of the cornerstones of the new resolution framework is to end the too-big-to-fail policy, there are reasons to argue that bailout has not been permanently and rigidly ruled out. Thus, the moral hazard problem might have been partially alleviated, but for sure not entirely handled.

Finally, and tightly related to the former argument, shareholders do not internalise all social costs of their decisions: the failure of a bank might mean relatively little to a diversified shareholder whereas it has disruptive consequences for the economy as a whole, sometimes even of global scope.²⁸

²³ Jeffrey N Gordon, 'Executive Compensation and Corporate Governance in Financial Firms: The Case for Convertible Equity-Based Pay' [2010] Columbia Law and Economics Working Paper; Lucian A Bebchuk and Holger Spamann, 'Regulating Bankers' Pay' (2009) 98 Geo. LJ 247.

²⁴ Jensen and Meckling (n 7).

²⁵ David Aikman, Andrew G Haldane and Benjamin D Nelson, 'Curbing the Credit Cycle' (2015) 125 The Economic Journal 1072.

²⁶ Stewart C Myers, 'Determinants of Corporate Borrowing' (1977) 5 Journal of financial economics 147.

²⁷ Filippo Occhino, 'Debt-Overhang Banking Crises: Detecting and Preventing Systemic Risk' (2017) 30 Journal of Financial Stability 192.

²⁸ Steven L Schwarcz, 'Systemic Risk' (2008) 97 Geo. LJ 193.

So far, the discussion has converged on the theoretical arguments showing the link between management incentives, executive pay and excessive risk-taking in banking. However, the role of allegedly flawed pay packages in causing of bolstering the global financial crisis is, in the end, an empirical matter. Thus, it is worth reviewing and critically commenting on the main pieces of empirical literature linking remuneration of bank managers and risk-taking incentives.

Beltratti and Stultz²⁹ investigate the determinants of bank performances during the crisis using a worldwide sample of large banks. The authors found no evidence that corporate governance failures caused the crisis. However, they found that banks that, by the traditional definition, had a better corporate governance perform worse during the crisis: "Our results show that no evidence exists that banks with a better alignment of the CEO's interests with those of the shareholders had higher stock returns during the crisis. Some evidence shows that banks led by CEOs whose interests were better aligned with those of their shareholders had worse stock returns and a worse return on equity".³⁰

Fahlenbrach and Stultz³¹ looked more closely to CEO incentives and bank performance during the crisis. They found no evidence that CEO whose incentives were better aligned with shareholders' interests performed better whereas the contrary might be true: "Our results show that no evidence exists that banks with a better alignment of the CEO's interests with those of the shareholders had higher stock returns during the crisis. Some evidence shows that banks led by CEOs whose interests were better aligned with those of their shareholders had worse stock returns and a worse return on equity".³²

Finally, Tung and Wang³³ analysed the compensation structure of 83 bank CEOs looking at their debt-equity ratio. The author found evidence supporting the hypothesis that CEO's

²⁹ Andrea Beltratti and René M Stulz, 'The Credit Crisis around the Globe: Why Did Some Banks Perform Better?' (2012) 105 Journal of Financial Economics 1.

³⁰ ibid 16.

³¹ Rüdiger Fahlenbrach and René M Stulz, 'Bank CEO Incentives and the Credit Crisis' (2011) 99 Journal of Financial Economics 11.

³² ibid.

³³ Frederick Tung and Xue Wang, 'Bank CEOs, inside Debt Compensation, and the Global Financial Crisis' [2012] Boston Univ. School of Law Working Paper.

inside debt³⁴ decrease risk-taking incentives, highlighting how the magnitude of inside-debt in director remuneration has potential to enrich the standard literature whose focus has almost exclusively been on equity compensation.

These pieces of evidence are not conclusive, though they clearly show an unsurprising wedge between the common wisdom on executives' compensation in non-financial firms and what happened in banking. This might have two interpretations, not necessarily mutually exclusive. First, the traditional wisdom is wrong, and what is good governance for non-financial corporations is not good governance for banks.³⁵ Second, factors other than governance better explains risk-taking incentives and banks performances during the crisis.³⁶

Given the theoretical arguments and the empirical hints provided, it is difficult to rule out the role of governance and managers' incentives in piling up risk in the period before the financial crisis erupted. Therefore, the overarching objective of using compensation packages for achieving socially optimal outcomes will stay the same. However, the peculiarities of incentives in banking need to be acknowledged and taken into account in the policy proposals.

Indeed, nowadays there is a fair degree of consensus on the fact that tying too tightly remuneration packages with stock prices incentivised to engage in excessively risky activities so that the compensation in banking must be somehow different from non-financial firms. There is also a widespread consensus on the fact that, given banks' specialties, there is a serious case for regulation, since the market forces are unable to reach an efficient output themselves.³⁷

³⁴ In the form of pension schemes. For more extensive discussion of inside debt, its possible forms and implications, see Section 2.2.

³⁵ As suggested by Renée Birgit Adams, 'Governance and the Financial Crisis' (2012) 12 International Review of Finance 7.

³⁶ In this sense, the claims of many policy reports blaming flawed corporate governance as a primary causing factor of the Global Financial Crisis might be seen as exaggerated. For instance Kirkpatrick and the OECD claimed that: "the financial crisis can be to an important extent attributed to failures and weaknesses in corporate governance arrangements", see Grant Kirkpatrick, 'The Corporate Governance Lessons from the Financial Crisis' (2009) 2009 OECD Journal: Financial Market Trends 61.

³⁷ Bebchuk and Spamann (n 22). On the contrary, professor Ferrarini argues against regulating bankers pays, especially when it comes to pay structure. See Ferrarini and Ungureanu (n 18).

Nonetheless, the proposals for regulating bank managers' pay are countless, sharply divergent and often focuses on different aspects. Among many possible approaches, the proceeding of the analysis considers four crucial issues in addressing compensation structures and regulation.

First, in banking, it is not sufficient to talk about executive remunerations. Indeed, executives do not determine themselves the risk-taking appetite of their bank since many middle-to-high-level employees a with special responsibilities (e.g.: traders, loan officers, etc.) have a considerable impact on that.³⁸ Therefore, talking about remuneration and incentives in banking means to talk both about executives' and, more broadly, of risk-takers' remuneration.

Second, this chapter focuses on ex-ante incentives provided by remuneration packages rather than on an ex-post assessment of actual losses born by bank's directors. Indeed, if the overarching goal is to induce a correct risk-taking attitude through remuneration, the only sensible approach is to analyse the incentives that remuneration packages provide to bank managers. This goes to an opposite direction compared to some commentator that pointed out how many executives suffer tremendous losses after their bank got bankrupt, arguing against the fact that compensation packages were flawed³⁹. The fact that ex-post losses happened says very little about the decision that those managers took and that lead to bankruptcy. It only means that, in expected terms, managers were willing to take on excessive risk, bearing the risk of suffering losses in case of default.

Third, related to the latter point, it is essential to consider the overall portfolio of a manager and not only on the structure and amount of yearly compensation. Professor Bebchuck and co-authors showed how executives at Bearn Stern and Lehman Brothers were able to cash out over two billion dollars in the period between 2000 and 2008⁴⁰. This

³⁸ See Article 92(2) Capital Requirement Directive - Directive 2013/36/EU of the European Parliament and of the Council of 26 June 2013 on access to the activity of and the prudential supervision of credit institutions and investment firms [2013] OJ L 176.

³⁹ Bebchuk and Spamann (n 22) 268.

⁴⁰ Bebchuk, Cohen and Spamann (n 1). The authors estimate that "top executive teams of Bear Stearns and Lehman Brothers derived cash flows of about \$1.4 billion and \$1 billion, respectively, from cash bonuses and equity sales during 2000-2008".

makes clear that focusing only on yearly remuneration and clawbacks in case of distress is insufficient to rule out the role of compensation packages in piling-up systemic risk.

Fourth, in case of substantial equity investment of the CEO and the top management of a distressed bank, there might be a disincentive toward prompt recapitalisation since that would severely dilute their position. A CEO with substantial equity investment would suffer a greater net wealth loss compared with a diversified shareholder. Therefore, being absent mechanisms to force early recapitalisation, high equity stakes in the bank might induce top management to pass on recapitalisation opportunities, making the position of their bank less sound. Professor Gordon has first highlighted this set of incentives. In its study, the disincentives toward early recapitalisation are labelled as the "Fuld problem" from the name of the last CEO of Lehman Brothers and speculating about the fact that he might have unduly retarded any attempt to recapitalise to avoid any dilution of his equity position.⁴¹

The present study lies in this stream of literature and attempts to link optimal remuneration with the new resolution framework, proposing to use bail-inable securities for remunerating bank managers. This would have two main benefits: on the one hand, it is important to build a coherent financial regulation framework; on the other hand, the present proposal aims at directly tackling the specificity of banks. To substantiate such a proposal, the following section reviews the theoretical arguments in favour and against remuneration through debt.

2.2 Debt-based Remuneration of Executives and Risk Takers in Banking

The idea of remuneration through debt is, at least, as old as the agency theory of the firm. Indeed, its first formulation dates back to the seminal paper by Jensen and Meckling itself.⁴² Back then, the authors admitted that remuneration through inside debt⁴³ would allow to "eliminate to a large part (perhaps all) of the agency costs of debt". Nonetheless, as shown in the previous section, the academic debate almost exclusively focused on remuneration through stock, stock-like instruments and cash payments. One of the potential reasons for

⁴¹ Gordon (n 22).

⁴² Jensen and Meckling (n 7) 353.

⁴³ For inside debt is meant the debt or debt-like instrument owned by executives and high-profile employees.

such gap in legal, economic and financial scholarship is that, as Jensen and Meckling pointed out, "for large diffuse owner corporations the practice [of remuneration through debt] does not seem to be common".⁴⁴ On the contrary, as recent more recent scholarship has started to show,⁴⁵ the practice of remunerating through debt-like instruments is more common than we thought, primarily through pension schemes.

The situation drastically changed when by the Security Exchange Commission (SEC) reformed the disclosure regime applicable to executive compensation, including pension plans among the information that must be publicly available.⁴⁶ Data availability and increased awareness of the significance of inside debt remuneration is leading to a growing body of both legal and economic literature on the role and the efficiency of remuneration through debt-like instruments.

Edmans and Liu,⁴⁷ in their seminal contribution, provide a sound theoretical framework for the analysis demonstrating that inside debt (i.e.: remuneration through debt-like instruments) is a superior solution than bonuses and salaries in handling the agency cost of debt. Inside debt makes managers not only willing to avoid bankruptcy but also sensitive to liquidation value.

The authors proved that inside debt, as long as it is not secured, hamper the incentives to gamble for resurrect close to insolvency since managers are sensitive to the liquidation value of the firm.⁴⁸ This argument is particularly attractive in the domain of financial regulation. Making managers more sensitive to liquidation value and effectively dis-

⁴⁴ Jensen and Meckling (n 7) 354.

⁴⁵ See, among the firsts, Lucian A Bebchuk and Robert J Jackson Jr, 'Executive Pensions' (2005) 30 Journal of Corporation Law 823.

⁴⁶ Security Exchange Commission (SEC), Regulation S-K, Item 402. Nonetheless, Bebchuk and Robert advocated for more transparency based on anecdotal evidence and hand-collected financial data.

⁴⁷ Alex Edmans and Qi Liu, 'Inside Debt' (2011) 15 Review of finance 75. The published paper is based on a previous influential working paper that was already widely cited in the related growing empirical literature. See Alex Edmans, 'Inside Debt' (2006).

⁴⁸ Following this intuition Yiar Listokin proposed to compensate CEOs with debt in bankruptcy, since – in his view – only compensation though debt would tie compensation to executive's performance in bankruptcy. See, Yair Listokin, 'Paying for Performance in Bankruptcy: Why CEOs Should Be Compensated with Debt' [2007] University of Pennsylvania Law Review 777. The proposal has been heavily criticised since it would bring about more costs than benefits. The agency costs of debt in bankruptcy can be quite low, whereas structuring incentive compatible pay structure through debt.

incentivising them to gamble for solvency, not only better protects creditors but has also positive spillovers on financial stability.

Finally, the authors highlight that the structure of remuneration matters so that the optimal remuneration consists of a mix of fix salary, equity and debt. The optimal mix is firm- and industry-specific; yet, there should always be a bias toward equity to incentivise managers to maximise the value of the corporation adequately.

A growing body of empirical literature seems to support these theoretical predictions. Sundaram and Yermack⁴⁹ analysed CEO compensations in 237 large corporations from 1996 to 2002 and showed that *ceteris paribus* the higher debt-based compensation the lower, the incentives toward risk-shifting.⁵⁰ Consistently, Anantharaman and co-authors⁵¹ found that, as long as inside debt is not secured, higher debt-like compensation lead creditors to require lower yield and impose fewer covenants, i.e.: decrease the cost of capital. This additional finding stresses a crucial issue: compensation through debt can handle the agency cost of debt only if the debt-like instruments are concretely prone to bear losses in the same way of other unsecured creditors.

Within this theoretical and empirical framework, the special set of incentives discussed in Section 2.1 should shape the proposal of remunerating bankers with bail-inable securities. Indeed, such proposal aims at aligning the incentives of managers and unsecured creditors with the long-term viability of the institution.⁵²

To this end, the perverse incentives provided by aligning managers' and bank shareholders' interests should be limited; and, managerial incentives should be re-aligned with financial stability goals when the situation of the banks deteriorates. This latter feature

⁴⁹ Rangarajan K Sundaram and David L Yermack, 'Pay Me Later: Inside Debt and Its Role in Managerial Compensation' (2007) 62 The Journal of Finance 1551.

⁵⁰ The authors test for this implication using firm's "distance-to-default", i.e.: the number of standard deviations decreases in the firm's value that are required for the firm to default so that a higher distance-to-default indicates a lower likelihood of default. The empirical results show that as the CEO's pension value increases relative to his equity value, risk-taking as measured by distance-to-default declines. Specifically, a firm's distance-to-default is 0.3 to 0.4 standard deviations higher when the CEO's personal debt-to-equity ratio exceeds his company's debt-to-equity ratio.

⁵¹ Divya Anantharaman, Vivian W Fang and Guojin Gong, 'Inside Debt and the Design of Corporate Debt Contracts' (2014) 60 Management Science 1260.

⁵² With similar arguments, see Gordon (n 22); Frederick Tung, 'Pay for Banker Performance: Structuring Executive Compensation for Risk Regulation' (2011) 105 Nw. UL Rev. 1205.

can be further disentangled: first, incentivising managers to maximise liquidation value reduces the room for contagion in case of bank distress. Moreover, as noted in the previous section, more inside debt decreases the dilution effect of early recapitalisation, handling at least partially the "Fuld Problem".⁵³ Besides, so far research prominently focused on executive pensions as the only form of inside debt, whereas this proposal goes beyond pensions plans and suggest including bail-inable securities in remuneration packages as part of variable remuneration.

On top of a generic scepticism due to the traditional wisdom on executive compensation, inside debt faces some specific critiques. In a pioneering study on executive pensions, Bebchuk and Jackson⁵⁴ strongly attack the praxis of granting generous pension packages to executives of large U.S. corporations arguing that it substantially weakened the link between pay and performance. The authors rebut any possible efficiency arguments in favour of inside debt, claiming that the main and almost exclusive purpose of such retirement benefits was to hide a conspicuous amount of resources to executives in a way that is not transparent to shareholders.⁵⁵

Bebchuk and Jackson examine the alignment of managers and creditors as a possible efficiency rationale behind inside debt. However, for the purpose of their argument, they reject such possibility focusing on three main points. First, making managers too conservative implies efficiency losses; second, retirement benefits are often senior to unsecured debt in bankruptcy; third, the alignment of managers and creditors could be achieved "by providing executives with compensation made of a mix of equity and debt securities".⁵⁶ This first line of critique does not hamper the normative claim of this proposal and, if any, it even reinforces it. The importance of reducing risk-taking incentives in banking has been already widely discussed. As for the second and third critiques, the

 $^{^{53}}$ As labelled by Gordon (n 22).

⁵⁴ Bebchuk and Jackson Jr (n 44). The underlying argument derives from Lucian Bebchuk and Jesse Fried, *Pay without Performance*, vol 29 (Cambridge, MA: Harvard University Press 2004).

⁵⁵ Therefore, their main policy proposal, that has been implemented by the SEC in 2007, was to increase transparency and disclosure duties.

⁵⁶ Bebchuk and Jackson Jr (n 44). This idea has been, later, developed specifically for the financial sector in Bebchuk and Spamann (n 22).

present proposal expressly aims at providing executives with a mix of equity and debt securities that rank as other bail-inable securities in resolution.

Alces and Galle put forward a more radical set of critiques.⁵⁷ The authors argue that designing executive's compensation to reduce risk incentives is a false promise, stressing the role of bounded rationality both on the side of executives and investors that are unable to fully operationalise and discount the incentive structure of complex pay packages.

First, the authors criticise the use of inside debt for aligning managers' interests with creditors, arguing that imposing covenants on debt contract represents a more efficient solution. However, at least in the context of EU banking regulation, such a criticism does not apply. Indeed, even accepting that covenants represent a more efficient way to handle agency cost of debt in non-financial firms,⁵⁸ previous research showed that given existing regulation, standard covenants are largely unavailable for instruments that qualify as capital or bail-inable instruments.⁵⁹

Second, the authors argue that inside debt excessively misaligns the incentives of the management, shielding them from the cost of their decisions, since equity bear losses first and hence would protect managers from losses. Leaving aside potential problems of seniority in the bankruptcy waterfall, this critique still represents a contentious matter. Nonetheless, as previously specified, the purpose of this chapter is to provide ex-ante incentives toward optimal risk-taking whereas the amount of losses that materialises expost is not decisive, as long as they are in line with ex-ante expectations. The extreme losses that bank executives of troubled banks suffered during the Global Financial Crisis did not prevent those from taking hazardous decisions that, in expected terms, were profitable for them.

Finally, Alces and Galle highlight that the calibration of the remuneration package with inside debt would be overly complex to design. On this final point, one must agree with the critique. Yet, Section 3 and 4 will outline how many other policy proposals and existing

⁵⁷ Kelli A Alces and Brian D Galle, 'The False Promise of Risk-Reducing Incentive Pay: Evidence from Executive Pensions and Deferred Compensation' (2012) 38 J. Corp. L. 53.

⁵⁸ Such argument is at odds with the empirical findings by Anantharaman, Fang and Gong (n 50).

⁵⁹ See Chapter 5, Section 3.2. With a similar argument, see also Fiona Mann and others, 'Market Discipline and UK Bank Bondholders' (2017) 57 Bank of England Quarterly Bulletin 26.

regulation present a high degree of complexity. Therefore, for the purpose of this study, this does not represent an insurmountable critique but rather a warning: designing a policy proposal that, at the very least, does not complicate the situation even more and, ideally, marginally simplifies it.

2.3 Early Cases of Remuneration through Debt

The previous section showed how debt has always been an important aspect of pay packages even though it received no policy and scientific prominence until recently. Such inattention is rooted on the lack of disclosure of the debt component of remuneration and, perhaps, on some inattention of the academic community, disproportionately focused on equity and cash as the only two components of pay packages.

The debt component of remuneration in both financial and non-financial institutions before the crisis was mainly composed of pension schemes. Nonetheless, some early examples of remuneration through debt other than pension schemes exist and it is worth to briefly review those before moving on. There are two groups of cases: the cases of temporary remuneration through debt because of legacy issues and the case of permanent and structural remuneration through debt implemented, to the best of my knowledge, so far only by UBS AG.

In the aftermath of the Global Financial Crisis, some of the banks more harshly harmed engineered forms of remuneration through debt for handling the severe losses experienced in previous years. For instance, in 2009 Lloyd and Royal Bank of Scotland, that at the time were nationalised, offered their top employees subordinated debt to pay the deferred part of the bonus.⁶⁰ Both banks offered a commercial loan scheme so that employees could borrow against the deferred portion of compensation in subordinated debt. This, *de facto*, heavily weakened the effectiveness of such deferral. This subordinated debt scheme was reverted to more traditional pay packages shortly after, once the banks went back to the market.

⁶⁰ See "RBS to pay bonuses worth up to £950m", Financial Times, 17 February 2009, retrievable at https://www.ft.com/content/81d2f4b8-fd08-11dd-a103-000077b07658; "Lloyds and RBS to offer loans as staff bonuses", Financial Times, 16 April 2009. Retrievable at https://www.ft.com/content/7b932404-2ab4-11de-8415-00144feabdc0.

A more interesting case, still within the cases of remuneration through debt to handle legacy issues, is provided by Credit Suisse Group. In 2008 Credit Suisse designed a radical bonus scheme called PAF (Partner Asset Facility) to transfer some risks from the bank to employees. This constituted an internal employee fund where the parent undertaking transferred junk-grade loans and commercial-mortgage-backed bonds. The bank moved the risks off its books and allowed employees to benefit from the recovery on those instruments.⁶¹ The experiment demonstrated to be an enormous success and the bank decided to launch the PAF2 program in 2012. For what is here of interest, the main shortcoming of schemes such as PAF is their scope of application. Indeed, these schemes are mainly thought for, and sometimes reserved to, high-profile investment bankers.⁶² After the CRD III entered into force, the program ended as it became non-compliant with the European regulation on remuneration through instruments other than shares. More details on these points are provided later on in the chapter (Section 5).

Finally, UBS AG, the largest Swiss banks, provides the most interesting and structural example of remuneration through debt in the financial industry. Since 2012, UBS pays a significant part of its bonuses through Additional Tier 1 instruments.⁶³ The initiative was strongly proposed by Mr. Alex Weber, the former president of the Bundesbank who became the chairperson of UBS in 2012.

The original Deferred Contingent Capital Plan (DCCP)⁶⁴ counted for 50% of variable compensation. Managers were awarded Additional Tier 1 (AT1) instruments that paid market-based coupons; moreover, such instruments embed a contractual clause for writing down their principal amount to zero in case the capital ratio (CET1/RWAs)⁶⁵ fell below 7%. The year after, the scheme was revised, and the Deferred Contingent Capital

⁶¹ See "At Credit Suisse, Toxic Bonuses Turn into Gold", Bloomberg, 27 January 2012, retrievable at https://www.bloomberg.com/news/articles/2012-01-26/at-credit-suisse-toxic-bonuses-turn-into-gold.

⁶² See "Credit Suisse plans new asset-backed bonus scheme", Reuters, 4 January 2013, retrievable at https://www.worldfinance.com/contributors/want-your-bonus-youll-have-to-wait-says-credit-suisse.

⁶³ See "Credit Suisse replaces radical bonus scheme", Financial Times, 5 February 2013, retrievable at https://www.ft.com/content/47d6e2ae-6ee9-11e2-9ded-00144feab49a.

⁶⁴ Moritz Seiler and Damian Fischer, "Bonus Bonds" for Bankers: A New Type of Debt-Based Remuneration in the Financial Industry' (2015) 425 ECFR 461.

⁶⁵ The Ration between Common Equity (CET1) and Risk Weighted Asset (RWA) represents the standard ratio in all Basel Accord for Minimum Capital Requirements.

Plan counted for 37.5% of the deferred compensation whereas equity-based bonus increased to 62.5%.⁶⁶ The threshold for writing down Awarded AT1 instruments increased from 7% to 10%, making the write-down much more likely and, consequently, impacting incentives more effectively.⁶⁷ Figure 28 reports the structure of remuneration packages for 2012 and 2013.

Total compensation for GEB members	for the performance y	ears 2013 and 2012

CHF, except where indicated ¹								
Name, function	For the year	Base salary	Immediate cash²	Annual performance award under EOP ³	Annual performance award under DCCP ⁴	Benefits⁵	Contributions to retirement benefit plans ⁶	Total
Sergio P. Ermotti, Group CEO	2013	2,500,000	1,000,000	4,530,000	2,370,000	127,300	202,822	10,730,122
Sergio P. Ermotti, Group CEO (highest-paid)	2012	2,500,000	0	3,660,000	2,440,000	69,500	201,088	8,870,588
Andrea Orcel (highest-paid)	2013	1,500,000	1,000,000	5,300,000	2,700,000	727,048	202,822	11,429,870
Aggregate of all GEB members who were in office at the end of the year ⁷	2013	16,873,360	9,949,062	33,894,646	18,790,161	1,548,784	1,347,784	82,403,796
	2012	16,273,460	0	31,355,592	20,903,728	640,683	1,233,719	70,407,181
Aggregate of all GEB members who stepped down during the year ^s	2013	0	0	0	0	0	0	0
	2012	1,593,288	0	0	0	105,865	14,799	1,713,952

Figure 28 - UBS Remuneration Structure for 2012 and 2013

The vesting period of the DCCP Program is five years; instruments only vest if CET1 remains higher than the write-down threshold, and the bank delivers a before-tax profit. Likewise, annual interests are paid only if the bank delivers a before-tax profit. Moreover, employees forfeit 20% of the contingent instruments awarded for each loss-making year, which means that in case of five years straight of losses no instruments will vest, this represents a further risk of losses for high-level employees, on top of the risk of write-down.

Currently, the structure of remuneration packages closely resembles the one of 2013, showing the satisfaction for such remuneration practice. In the 2018 Remuneration Report, UBS officials state: "Over the last five years, USD 2.0 billion of DCCP was issued, contributing to the Group's total loss-absorbing capacity (TLAC). Therefore, DCCP awards not only support competitive pay but also provide a loss absorption buffer that protects

⁶⁶ An equity bias when remuneration (also) through debt is consistent with the theoretical findings in Edmans and Liu (n 46).

⁶⁷ See UBS, 2013 compensation highlights and key changes. Retrievable at https://www.ubs.com/global/en/investor-relations/financial-information/annual-reporting/ar-archive/2013.html.

the firm's capital position".⁶⁸ Given such a success, one might wonder the reason why nobody followed the virtuous example provided by UBS AG. The remainder of the analysis will show the regulatory obstacles to such a paradigm shift and why a regulatory intervention is warranted for spreading the remuneration through bail-inable securities through the European banking industry.

2.4 A simple Numerical Example

This section provides a simple numerical example to substantiate the claim of remuneration trough debt and link systemic externalities to bankers' moral hazard. For the sake of simplicity, the example assumes that the required rate of return on both debt and equity are zero and that the market value of assets and liabilities equals accounting values.

The example highlights a case of risk-shifting, where the risks of a negative NPV project are shifted from shareholders to bail-inable creditors. In this setting, different remuneration arrangements matter for the final decision of the bank management on the risky project.

Consider "Bank A" with a balance sheet as shown in Figure 29. Depositors are covered by deposit guarantee.

Bank A					
Asset Liabilities					
90	Deposits	90			
10	Bail-inable debt	5			
	Equity	5			
	90	Liabilities 90 Deposits 10 Bail-inable debt			

Figure 29 – "Bank A" Balance Sheet

An investment opportunity materialises. It costs 10 and yields 90 in case of success and 0 in case of default. The project will succeed with 10% probability whereas with 90% probability it will default. The project has negative Net Present Value, since in expected terms, its value is -1, as shown in Figure 30.

⁶⁸ UBS Compensation Report for 2013, 14. Retrievable at https://www.ubs.com/content/dam/assets/cc/investor-relations/annualreport/2018/epaper/comp/en/index.html.

Project					
Cost 10					
Probability of					
success	0,1	Value if success	90		
Probability of					
Default	0,9	Value if default	0		
NPV -1 Project should not be undertaken					
Figure 30 - Project Opportunity					

Shareholders are willing to undertake the projects since they have limited liability, and shift part of the risk of the investment to creditors, in this case bail-inable creditors. Therefore, the bank decides to deplete its cash component of assets and undertake the project.

If the investment succeeds the value of assets becomes 180, which means that the value of equity (Assets – Debt) increases to 85. On the other hand, if the investment defaults, the value of assets becomes 90, which is barely able to repay depositors so that losses are born by equity as well as bail-inable debt holders. In expected terms, given the probability of success and default, the expected value of equity increases from 5 to 8,5. This represents the typical situation of risk-shifting in highly leveraged institutions.

Risk-shifting Incentives							
	Success	Failure	E(V)				
E(V) of equity	85	0	8,5				
E(V) of bail-inable debt	5	0	0,5				

Figure 31 - Risk Shifting Incentives

Now suppose that a "decision maker" decides whether to undertake the investment". Such "decision maker" is an agent of shareholders and can be rewarded for her services in two different ways:

- (1) Awarding to her 2 in equity;
- (2) Awarding to her 2 of which 1,1 in equity and 0,9 in bail-inable debt.

In the first scenario, the incentives of the decision maker are aligned with the other equity holders (Figure 32): her welfare increases with undertaking the risky project and,

therefore, the decision will still shift the risk to bail-inable creditors. In case of success, the value of equity increases to 32. In the case of failure, the value goes to 0 and also bail-inable debtholders bear losses.

Two remuneration scenarios						
scenario 1 : the decision maker, as a result of remuneration policy, holds 2 in equity						
	Success	Failure	E(V)			
E(V) for the decision maker	32	0	3,2			
Comment: the welfare of the decision maker increases in expected						
terms. The project will be undertaken, and the risk will be shifted to						
bail-inable creditors						

Figure 32 - Remuneration through equity

In the second scenario, the mix of instruments awarded changes the incentives of the "decision maker". She enjoys the upside of her risk-taking through the equity component of remuneration but also the downside, through debt. In particular, in case of success, the value of her equity goes to 17,6 and to 0 in case of failure. Whereas, the debt component remains 0,9 in case of success and goes to 0 in case of default. Unlike equity, debt is a fixed claim against the institution that does not change with the value of assets. As shown in Figure 33, the welfare of the decision maker decreases, in expected terms, under this type of reward mechanisms. Therefore, the negative NPV project would not be undertaken.

Two remuneration scenarios						
scenario 2 : the decision maker, as a result of remuneration policy, holds 1,1 in equity and 0,9 in bail-inable debt						
	Success	Failure	E(V)			
E(V) for the decision maker (equity part)	17,6	0	1,76			
E(V) for the decision maker (debt part)	0,9	0	0,09			
Comment: the welfare of the decision maker decreases in expected terms (1,85 < 2). The project will not be undertaken						

Figure 33 - Remuneration (also) through bail-inable debt

Finally, it is worth noting that equity holders would choose the first remuneration scenario since it is potentially welfare-enhancing for them. Therefore, the second scenario

in which the negative NPV project is not undertaken can be reached only through regulation.

3. The Regulation of Bankers Pay: International Standards and Policy Proposals

As widely discussed beforehand, the negative externalities stemming from pay packages provide a strong argument for regulation.⁶⁹ Indeed, in the aftermath of the Global Financial Crisis, new international standards, guidelines and regulation were issued under substantial political pressure. Thus, these not always responded to the economic rationale underpinning bank managers' remuneration but often compromised efficiency with political rent-seeking of the policymakers.

The proceeding of this section briefly analyses the international standards and the main policy proposals on remuneration. The analysis will be, to the larger extent possible, functional to our main claim, i.e.: remunerating banks' material risk-takers (also) with bail-inable securities. Consequently, this cannot be considered a comprehensive analysis of the legal implications related to the regulation on bank managers' remuneration.

Financial Stability Forum drafted the leading policy document that informed the postcrisis discussion in 2009.⁷⁰ The document highlights the crucial principle of long-term orientation in remuneration policy as the primary tool to ensure sound practices.⁷¹ In so doing, it poses three general principles of effectiveness in regulating pay:⁷² effective

⁶⁹ Bebchuk and Spamann (n 22).

⁷⁰ Financial Stability Board, 'Principles for Sound Compensation Practices' (2009).

⁷¹ This is closely mirrored by the position taken OECD on which see Kirkpatrick (n 35) 13–15. If any, the OECD position is even more conservative, making clear that the main objective should be to align managers' and long term shareholders' interests, grounding the fallacies of previous remuneration packages only on the wedge between pay and performance.

⁷² The choice of the dimension of effectiveness instead of efficiency or soundness is, in itself, indicative of the new approach of regulators toward bankers' compensation, looking for an intrusive and interventionist role despite any possible efficiency argument, which is consistent with an attitude of political rent seeking.

governance of compensation,⁷³ effective supervisory oversight,⁷⁴ and effective alignment with prudent risk-taking.

The principles regarding the "effective alignment with prudent risk-taking" (Principles 4-7) are of particular interests since they pertain to the regulation of the structure of bankers' pay. Principles 4 and 5 focus on the alignment of compensation outcomes and risk, enriching the concept of "performance" in the financial sector. Reaching the same outcome in term of short-term profit engaging in less risky activities represents a superior performance and must be rewarded accordingly. Eventually, principles 6 and 7 go to the core of regulating the pay suggesting to make pay-out schedules more and more sensitive to time horizons⁷⁵ and to align the mix of cash, equity and "other forms of compensation" with risk-taking.⁷⁶

A broad academic consensus on regulating pay structure arose in the aftermath of the Global Financial Crisis. Nonetheless, the proposals on the type of structural regulation have been numerous and so different from one another that it is impossible to reconcile them in a "consensus view" on pay structure. For instance,⁷⁷ in Romano and Bhagat⁷⁸ the main policy proposal is here to design compensation packages made of only restricted stock and restricted stock option that can be sold or exercised by managers only a considerable period after their last day of office. Bebchuk and Spamann⁷⁹ suggest tying bank managers' remuneration not only to share prices but to a basket of equity, hybrid and debt security

⁷³ Principles 1-3: Strengthening the stewardship role of the Board of Directors in designing, overseeing and reviewing the compensation system and assuring the independence of the staff engaged in financial and risk control.

⁷⁴ Principles 8-9: Strengthening the role of supervisors in reviewing compensation packages and increasing the disclosure duties of financial firms regarding their compensation policies.

⁷⁵ Following academic proposal and best practices on restricted stock option and deferred compensation. See, for instance, Sanjai Bhagat and Roberta Romano, 'Reforming Executive Compensation: Focusing and Committing to the Long-Term' (2009) 26 Yale J. on Reg. 359.

⁷⁶ As Section 4 will detail the EU went well beyond what suggested by this principle in regulating the mix of cash and equity in bankers' pay. For a critique of the EU approach, see Guido Ferrarini, 'CRD IV and the Mandatory Structure of Bankers' Pay' (2015) ECGI-Law Working Paper 289.

⁷⁷ This list has the only aim to provide prominent examples of sharply different policy proposals on regulation of pay structure and has not intent of being complete and comprehensive. For a recent survey see Raghavendra Rau, 'Executive Compensation' (2017) 10 Foundations and Trends[®] in Finance 181.

⁷⁸ Bhagat and Romano (n 74).

⁷⁹ Bebchuk and Spamann (n 22).

so to decrease risk-taking incentives. Again, Bolton and his co-authors⁸⁰ suggest tying executive remunerations to CDS spread. This represents the only proposal expressly including debt in the remuneration package. Compared to CDS spreads, the proposal put forward in this Chapter has two key advantages. First, CDS tend to be procyclical and are not thought to provide early signals of distress.⁸¹ Therefore, tying remuneration to CDS spreads would not alleviate the problem of excessive risk-taking in good times. Second, tying remuneration to CDS spread would have no positive spillovers on the resolvability of the institution and the credibility of resolution.

On the contrary, professor Ferrarini argued against any kind of structural regulation⁸² arguing that governance and disclosure regulation would suffice to align managerial incentives with optimal risk-taking. However, structural regulation quite often implies translating current best practices into law, creating a rigid framework that does not fit each and every financial institution. I will come back to this important aspect in Section 5, arguing why and how the proposal of remuneration through bail-inable debt circumvent such critique.

4. Regulation on Remuneration in the EU

In the aftermath of the Global Financial Crisis, the EU firstly adopted a supervisory approach to remuneration⁸³ mirroring to a large extent the direction laid down by the FSB via the principles on remuneration policy issued by the Committee of European Banking Supervisors (CEBS).⁸⁴ However, specific shortcomings due to fragmented implementation

⁸² See Guido Ferrarini and Maria Cristina Ungureanu, 'Economics, Politics, and the International Principles for Sound Compensation Practices: An Analysis of Executive Pay at European Banks' (2011) 64 Vand. L. Rev. 429.

⁸⁰ Patrick Bolton, Hamid Mehran and Joel Shapiro, 'Executive Compensation and Risk-taking' (2015) 19 Review of Finance 2139.

⁸¹ On the procyclicality of CDS spreads and their inability to provide early warnings of distress, see Hyun Song Shin, *Procyclicality and the Search for Early Warning Indicators* (International Monetary Fund 2013) 5.

⁸³ Commission Recommendation on remuneration policies in the financial sector, C (2009) 3159, (April 2009).
⁸⁴ Committee of European Banking Supervisors (CEBS), High-Level Principles for Remuneration Policies (April 2009). This committee no longer exist and, functionally, can be considered the predecessor of the European Banking Authority and (partly) of the Single Supervisory Board before the Banking Union was implemented. Yet, the committee had limited powers and mainly focused on cooperation and coordination of national policies on supervision.

and a growing pressure from media and politicians steered the debate toward a new regulatory approach, more focused on direct regulation than on supervisory oversight.

Such a change in the approach of the EU policymaker emerged in 2010 with the enactment of the Capital Requirement Directive III (CRD III).⁸⁵ It is not here possible to review all relevant norms on remuneration policy included in the CRD III.⁸⁶ To provide the reader with a flavour of the new attitude toward remuneration. It suffices to mention that the Directive required that at least 50% of variable remuneration in the form of shares or equivalent ownership interests and to defer at least 40% of the variable remuneration for a period no shorter than three years.

This intrusive regulatory trend continued and reached a new peak with the reform package of 2014 and the new version of the Capital Requirement Regulation (CRD IV). The proceeding of the section critically analyses the provisions, embedding the limited innovation provided by the fifth version of the CRD. Section 4.1 introduces the rules on governance, supervision and disclosure of remuneration policies, whereas Section 4.2 provides an in-depth analysis of the substantive rule pertaining to the structure of remuneration packages. Eventually, Section 4.3 critically assess the current regulation focusing on whether and to what extent it addresses the specific of bank governance and the other economic considerations carried out in Section 2.

4.1 Governance, Supervision and Disclosure of Bankers' Remuneration

Article 92 of the CRD mainly deals with governance provisions on remuneration policies; these provisions can be divided into two groups. The first group comprises general principles that should inform remuneration policies, whereas the second group comprises more stringent norms on the governance of remuneration.

⁸⁵ Directive 2010/76/EU of the European Parliament and of the Council of 24 November 2010 Amending Directives 2006/48/EC and 2006/49/EC As Regards Capital Requirements for the Trading Book and for ReSecuritisations, and the Supervisory Review of Remuneration Policies, Official Journal of the European Union 2010, L329/3.

⁸⁶ For a comprehensive overview, see Eilís Ferran, 'New Regulation of Remuneration in the Financial Sector in the EU' (2012) 9 European Company and Financial Law Review 1.

Starting from the general principles, the remuneration policy should promote sound and effective risk management and do not encourage excessive risk-taking.⁸⁷ Moreover, such policy should be in line with the long-term interests of the institution, taking into consideration its business strategy, objectives and values.⁸⁸

The truthful application of such principle, in the CRD architecture, must necessarily pass through the implementation of some governance best standards. Therefore, the Directive entrusts the management body of each institution to adopt, yearly review, and oversee the implementation of general principles of the institutions' remuneration policy.⁸⁹ On top of the overseeing of the management body, the implementation of such principles must be subject to independent internal review at least annually.⁹⁰ Finally, the Directive requires significant institutions to establish a remuneration committee.⁹¹ The committee must take responsibility for the preparation of all the decisions regarding remuneration⁹² as well as for directly overseeing the remuneration of senior officers employed in risk management and compliance functions.⁹³ Crucially, the Directive mandates that "when preparing such decisions, the remuneration committee must take into account the long-term interests of shareholders, investors and other stakeholders in the institution and the public interest",⁹⁴ widening the objective function of the committee beyond the mere shareholder interest approach.

The governance provisions discussed above are complemented by a wide mandate to the competent authority to supervise remuneration policies and their implementation. The competent authority shall supervise the application of all the relevant regulation in terms of remuneration policy.⁹⁵ The mandate is particularly wide and encompasses the level of the group, parent undertakings and subsidiaries, including branches and subsidiaries established in third countries. Moreover, and most importantly, in order to make effective

⁸⁷ Article 92(2)(a) CRDIV.

⁸⁸ Article 92(2)(b) CRDIV.

⁸⁹ Article 92(2)(c) CRDIV.

⁹⁰ Article 92(2)(d) CRDIV.

⁹¹ Article 95(1) CRDIV.

⁹² Article 95(2) CRDIV.

⁹³ Article 92(2)(f) CRDIV.

⁹⁴ Article 95(2) CRDIV.

⁹⁵ Recital 67 and Article 92(1) CRD IV.

the supervision over remuneration policy and compliance, as part of the supervisory review and evaluation process,⁹⁶ the competent authority can limit variable remuneration as a percentage of net revenues to assure the maintenance of a sound capital basis.⁹⁷ If the situation further deteriorates and distributions needs to be limited,⁹⁸ the payment of variable remuneration is among the types of distributions that must be limited or wholly voided.⁹⁹

Finally, the CRR requires strengthened disclosure requirements to assure both effective supervision and the enhancement of market oversight on remuneration policy. Specifically, a large set of disclosure duties intends to provide the competent authority with all the relevant information to carry out the evaluation process and to generally oversight the safety and soundness of the institutions' business model, strategies and goals.¹⁰⁰ For instance, institutions must disclose information on the link between pay and performance, the criteria used for risk adjustment, the ratio between fixed and variable remuneration, aggregate quantitative information on remuneration per each business area, the number of individuals earning significantly high amounts¹⁰¹, etc. Finally, significant institutions must disclose also to the public the quantitative information related to the members of the management body.¹⁰²

4.2 Substantive Rules on Remuneration Composition and Structure

The most significant innovation of the CRD IV in term of remuneration policy is the set of rules on the structure of remuneration for "identified staff".¹⁰³ This represents the more

⁹⁶ Articles 97-101 CRD IV.

⁹⁷ Article 104(1)(g) CRD IV.

⁹⁸ This happens if the Combined Buffer Requirement of Article 128 CRD IV is breached.

⁹⁹ Article 141(2)(b).

¹⁰⁰ Article 450(1) CRR.

¹⁰¹ On this see also Article 75 CRD IV on the cooperation between EBA and the Competent Authority. ¹⁰² Article 450(2) CRR.

¹⁰³ In the context of remuneration policy, identified staff "means staff whose professional activities have a material impact on the institution's risk profile in accordance with the criteria set out in the Commission Delegated Regulation (EU) 604/2014 and where appropriate in addition based on institutions' criteria". See, Guidelines on sound remuneration policies, EBA/GL/2015/22 para 10.

contentious aspect of the regulatory regime and attracted harsh critiques in many academic studies.¹⁰⁴

First, the Directive sets some general principles to set the variable part of remuneration. The evaluation of the performance must combine individual results and the results of the business unit. Moreover, the performance must be assessed with a multi-year horizon to capture the long-term component of the performance.

Besides, the Directive and the implementing Guidelines¹⁰⁵ extensively discipline all the aspects related to remuneration packages from their design to the pay-out phase. Figure 34 graphically shows the main building blocks of the "remuneration process", highlighting the main aspects of interests whose legal and economic rationale and implications will be detailed in the proceeding of this Section.

The first phase consists of the design of the package. The cornerstone of this phase and the whole structural regulation is the cap on variable remuneration. The Directive makes a sharp distinction between fixed and variable remuneration.¹⁰⁶ The former must reflect the professional experience and the organisational responsibility of the staff member, whereas the latter must reflect "sustainable and risk-adjusted" performance. The fixed and variable components of remuneration must be appropriately mixed.¹⁰⁷ In setting such an appropriate mix, the variable component of the remuneration cannot exceed the fixed component.¹⁰⁸ Thus, the Directive limits the possibility to design the pay packages of managers and mandate that the ratio between fixed and variable remuneration is at least 1:1.

The Directive provides two possibilities to deviate from this principle, pointing at opposite directions. On the one hand, individual Member States can further limit the room for awarding variable remuneration to bank managers, imposing a lower maximum

¹⁰⁴ Among many other, see notably Ferrarini (n 75); Luca Enriques and Dirk Zetzsche, 'Quack Corporate Governance, Round III? Bank Board Regulation Under the New European Capital Requirement Directive' (2015) 16 Theoretical Inquiries in Law 211.

 $^{^{105}}$ Guidelines on sound remuneration policies, EBA/GL/2015/22.

¹⁰⁶ Article 92(2)(g) CRD IV.

¹⁰⁷ Article 94(1)(f) CRD IV.

¹⁰⁸ Article 94(1)(g)(ii) CRD IV.

percentage.¹⁰⁹ On the other hand, shareholders can allow the institution to increase the maximum percentage up to 200%.

The following step consists in determining the composition of the variable elements needs. This aspect goes to the core of the matter of interest. For the time being, it suffices to say that the Directive.¹¹⁰distinguishes between cash and non-cash bonuses and at least 50% of the variable remuneration must consist in non-cash bonuses. Moreover, the Directive explicitly differentiates between shares and share-linked instruments¹¹¹ on the one hand, and "other instruments" on the other hand. Such differentiation and its implications are to be analysed in-depth in Section 5. However, it is worth anticipating that both the letter of the law and even more its implementation lean toward a marked equity bias, leaving the provision on "other instruments" being part of variable remuneration little more than dead letters.

As previously discussed, one of the key principles on variable remuneration is that it must reflect risk-adjusted performance, which represents the second phase of the process. Therefore, the Directive¹¹² requires that both the measurement of the performance and the allocation of variable remuneration should take into account all current and future risks and adjust accordingly.¹¹³

After the ex-ante risk-adjustment, the pay-out phase begins. Such phase consists of a complex set of tools and mainly focuses on deferral and retention policies. This provision wants to ensure the implementation of the long-term orientation principle for identified employees. The deferral and retention policies can shape the payment schedule so to reflect the long-term performance of employees. It is important to stress that the payment schedule has a twofold goal: on the one hand, it aims to influence risk-incentives of

¹⁰⁹ Belgium and the Netherlands took advantage of this possibility, setting the maximum percentage to 50% and 20% respectively.

¹¹⁰ Article 94(1)(I).

¹¹¹ CRD V allows both listed and non-listed banks to use share-linked instruments whereas, under CRD IV listed banks were only allowed to pay with shares, which was deemed too costly and burdensome. See the new Article 94(1)(I)(i) that now states that the variable part of remuneration can be paid out in : "shares or, subject to the legal structure of the institution concerned, equivalent ownership interests; or share-linked instruments or, subject to the legal structure of the institution concerned, equivalent non-cash instruments". ¹¹² Article 94(1)(j) and (k).

¹¹³ The procedures for performing such an adjustment are widely described and regulation in the Guidelines on sound remuneration policies (n 103) in para 217-232.

employees and push them toward long-term orientation; on the other hand, it wants to make ex-post adjustment possible and effective.

Preliminary, might be worth defining the difference between deferral and retention policies within the meaning of the Directive and the Guidelines. Deferral means the period between the award of the variable remuneration and the moment in which the employee legally becomes the owner of the remuneration awarded.¹¹⁴ Retention means the period during which the employee cannot sell or access the variable remuneration; although, it has already been awarded and is already legally owned by the employee.¹¹⁵ Hence, deferral policy applies both to cash and the non-cash component of variable remuneration, whereas retention policy can only apply to the part of variable remuneration paid in instruments. Besides, the retention policy applies to both the deferred and the nondeferred part of variable remuneration.

Deferral policies consist of three main characteristics: the ratio of the deferred variable remuneration, the length of the deferral period and the speed at which deferred remuneration vests.¹¹⁶

¹¹⁴ See Guidelines, para 10.

¹¹⁵ See Guidelines, para 10.

¹¹⁶ In this context, vesting "means the effect by which the staff member becomes the legal owner of the variable remuneration awarded, independent of the instrument which is used for the payment or if the payment is subject to additional retention periods or clawback arrangements." See Guidelines, para 10.

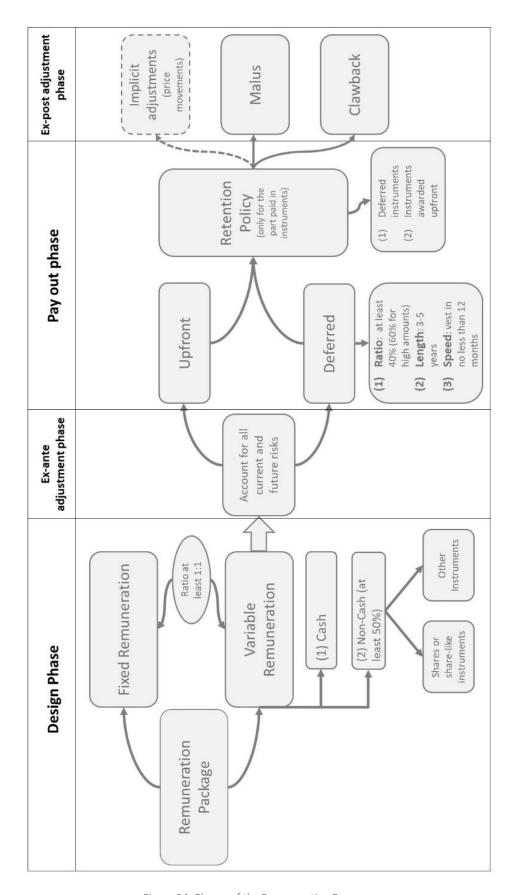


Figure 34- Phases of the Remuneration Process

The variable component of remuneration packages comprises a part to be paid upfront and a substantial part to be deferred.¹¹⁷ At least 40%¹¹⁸ of the variable remuneration must be deferred for a period between 3 and 5 years¹¹⁹ to align the risk incentives of the employee with its activities. However, the deferral period cannot be shorter than 5 years for the senior management and management bodies of significant institutions.¹²⁰ Finally, the deferred portion of remuneration can vest all at once, at the end of the deferral period, or through several payments throughout the deferral period. In this latter case, the first tranche cannot be paid out before 12 months from the award of the variable remuneration; moreover, vesting cannot take place more frequently than on a yearly basis.¹²¹

When it comes to the retention period, the Guidelines¹²² specify that variable remuneration instruments are subject to an appropriately long retention period, so to align employee incentives with the longer-term interests of the institution. Retention periods play a different role when applied to deferred or non-deferred instruments. In the first case, a retention period exceeding the time of deferral allows for considering the underlying risks of special activities whose effects can materialise after the deferral period. On the other hand, applying a retention period to the instruments paid upfront by the institutions limits the incentives toward excessive short-term orientation. Besides, it grants the possibility to apply ex-post adjustments effectively. Indeed, the Guidelines¹²³ require awarded instrument to be subject to retention for at least one year; whereas a longer period is warranted if the ex-post risk adjustment relies on the change in the value of the awarded instruments.

¹¹⁷ Article 94(1)(m) CRD IV.

¹¹⁸ The minimum ratio increases to 60% for employees with particularly high variable remuneration. Institutions should define themselves what constitutes "particularly high amount" taking into account the available benchmarks issued by the EBA. See Guidelines, para 241 and 242.

¹¹⁹ The CRD V prolong the deferral period to a minimum of 4 years (instead of 3) and, in the case of senior management, the minimum deferral is 5 years. See the new Article 94(1)(m) stating that: "a substantial portion [...] is deferred over a period which is not less than four to five years [...]. For members of the management body and senior management of institutions that are significant in terms of their size, internal organisation and the nature, scope and complexity of their activities, the deferral period should not be less than five years."

¹²⁰ Guidelines, para 240.

¹²¹ Guidelines, para 245-248.

¹²² para 263.

¹²³ para 267.

Eventually, the remuneration process ends with the ex-post risk adjustment phase. This consists of two main mechanisms: explicit and implicit risk-adjustments. Malus and clawback arrangements are among the explicit risk-adjustment mechanisms. The Directive requires institutions to be able to apply such arrangements up to 100% of the variable remuneration. Each institution, in specifying the criteria for the application of malus and clawback should make sure that these cover the situations where the employee (i) participated in or was responsible for the conduct, which resulted in significant losses to the institution; (ii) failed to meet appropriate standards of fitness and propriety.¹²⁴ Such arrangements, if efficiently designed, partially permit the institution to take a portfolio approach to remuneration, making the employee's performance impact on the total amount of remuneration received throughout years and not only on a yearly basis.

Finally, when staff is paid in instruments whose value is sensitive to the performance of the institutions (such as shares), the value of the variable remuneration after the deferred or retention period might vary (increase or decrease) according to the movement of the underlying price of the awarded instruments. This represents an implicit ex-post adjustment since the final monetary value of the instruments awarded depends on the overall performance of the institutions. However, the guidelines expressly state that implicit risk-adjustments cannot be considered a substitute for malus and clawback arrangements.¹²⁵ Moreover, it is worth noting that explicit ex-post adjustment can only decrease the amount of variable remuneration initially awarded¹²⁶ whereas, naturally, implicit adjustment can both increase and decrease such amount, according to the institution's performance and price movements.

4.3 Critical Assessment

"Poorly designed remuneration policies and incentive schemes are capable of increasing to an unacceptable extent the risks to which credit institutions [...] are exposed".¹²⁷ This is

¹²⁴ Article 94(1)(n) CRD IV.

¹²⁵ para 277.

¹²⁶ para 275.

¹²⁷ Recital 68 CRDIV.

what the EU policymaker claimed as the rationale for the structural regulation of bankers pay and the specific powers granted to the competent authority on these issues.

It is now time to critically assess whether the new regulatory framework, as analysed in detail in the previous Sections, increased the quality of the design of remuneration policies and incentive schemes. In so doing, the proceeding of this Section will critically discuss the strengths and the weaknesses of the norms on structural regulation of managers' pay against the underlying economic arguments discussed in Section 2.1.

According to the theoretical framework proposed in Section 2.1, the main strength of the regulatory framework consists of its application not only to executives and senior management but also to the so-called "risk-takers".¹²⁸ Indeed, the aim to align the risk-taking incentives of a broader audience of high-profile employees represents an significant innovation as compared with the previous regime.¹²⁹

When it comes to the criticism of the regulatory framework, for the sake of good order, the relevant arguments are split into two categories. First, I discuss the arguments related to the standard economic wisdom on remuneration, to the extent they apply in banking. Second, I address the specific issues pertaining to bank governance and discuss whether the current regulation efficiently and effectively address them.

4.3.1 Pay regulation and the Economics of Remuneration

The regulatory cap on variable remuneration has attracted the major criticisms.¹³⁰ The European legislator was explicit in stating that such aims to avoid excessive risk-takin.¹³¹ However, this provision cannot reach the desired goal and, besides, it brings about unintended and value destructive consequences.¹³² In the early phase of its

¹²⁸ Article 92(2). Those are defined as: "staff whose professional activities have a material impact on the institution's risk profile in accordance with the criteria set out in the Commission Delegated Regulation (EU) 604/20147 and where appropriate in addition based on institutions' criteria", see Guidelines para 10.

 $^{^{\}rm 129}$ With the same argument, see Armour and others (n 2) 386.

¹³⁰ Ferrarini (n 75); Kevin J Murphy, 'Regulating Banking Bonuses in the European Union: A Case Study in Unintended Consequences' (2013) 19 European Financial Management 631.

¹³¹ Recital 65 CRD IV: "In any event, in order to avoid excessive risk-taking, a maximum ratio between the fixed and the variable component of the total remuneration should be set".

¹³² Murphy (n 129) 648. Such consequences are even worse for investment bankers given the business model and the standard remuneration practice; i.e.: below average fixed salary and above average performance-related bonuses.

implementation, the UK challenged the regulatory cap, as it was particularly hit by this reform. The Advocate General Jääskinen found the UK plea ungrounded, stating that EU legislation was fully proportionate and abode by the subsidiary principle.¹³³ In substantiating its opinion, the Advocate General stated:

"To my mind this means that there was a danger of regulatory competition downwards and a risk that self-regulation by the financial institutions would not suffice to create the remuneration policies necessary for preventing excessive risk-taking. Moreover, it is evident that the goal of creating a uniform regulatory framework for risk management of relevant parts of remuneration policies of financial institutions could not have been better achieved by measures taken at the national level".¹³⁴

Additionally, one might question even its effectiveness. The practice shows that in order to comply with the cap there is a tendency to increase the volume of fixed remuneration, so to keep variable remuneration high enough. Moreover, the cap is constantly circumvented by several banks via the so-called "role-based allowances" that are considered as additional pay to the basic salary and therefore part of the fixed component of remuneration¹³⁵ even though they work, *de facto*, as variable remuneration.¹³⁶

Such a bias against variable remuneration springs from the pressure of political constituencies and media and not by efficiency and stability considerations.¹³⁷ The regulatory cap severs the link between pay and performance that is the very basic elements of good remuneration packages. As already mentioned, limiting variable remuneration incentivises banks to increase the fixed component of remuneration. This latter component

 ¹³³ Opinion of Advocate General Jääskinen delivered on 20 November 2014, Case C-507/13 United Kingdom of Great Britain and Northern Ireland v. European Parliament and Council of the European Union.
 ¹³⁴ Ibid, para 102.

¹³⁵ See Opinion of the European Banking Authority on the application of Directive 2013/36/EU (Capital Requirements Directive) regarding the principles on remuneration policies of credit institutions and investment firms and the use of allowances, EBA/Op/2014/10, 15 October 2014, 2. See Also, EBA Guidelines, para 120 and followings.

¹³⁶ Andreas Kokkinis, 'Exploring the Effects of the 'Bonus Cap'Rule: The Impact of Remuneration Structure on Risk-Taking by Bank Managers' (2019) 19 Journal of Corporate Law Studies 167.

¹³⁷ The initial proposal of the Commission for the CRD IV did not comprise the cap on variable remuneration. The proposal was amended later by the European Parliament embedding the cap.

cannot be tied to performance but "should primarily reflect relevant professional experience and organisational responsibility".¹³⁸ The EBA Guidelines further specify that a component of remuneration is fixed if it is based on predetermined criteria, reflects the level of professional experience, is permanent and non-revocable and, of utmost importance, does not depend on performance.¹³⁹

Therefore, fixed components of remuneration must be paid upfront, cannot be deferred or retained, are not subject to *ex-post* adjustment. This means that none of the onerous and burdensome mechanism of control over the remuneration structure applies to fixed remuneration.

To provide anecdotal justification of such an argument, it is instructive to look at the remuneration policy of the UniCredit group.¹⁴⁰ Figure 35 shows data on the amount and structure of remuneration of identified staff for 2017. The compensation of the CEO, the other Directors and the General Manager only or pre-eminently derive from fixed compensation. The remuneration packages of other executives have a higher variable component, slightly above 50% of fixed remuneration. The variable remuneration is paid mainly through deferred compensation, the upfront variable pay is mainly awarded in cash, whereas the deferred component is mainly awarded in shares. No other instruments are used for variable payments. Finally, the ratio of forward-looking¹⁴¹ part of remuneration is between 46% (senior executive vice-presidents) and 26% (other identified staff).¹⁴²

This brief yet informative overview of the remuneration policy of one of the biggest European banking group clearly shows that the link between pay and performance is particularly weak, especially at the apex of the group structure.

¹³⁸ Article 92(2)(g)

¹³⁹ EBA Guidelines, para 117.

¹⁴⁰ The remuneration policy of the group for 2018 is retrievable at https://compensationpolicy.unicredit.eu/assets/pdf/2018-group-compensation-policy.pdf.

¹⁴¹ Forward looking remuneration indicate the variable part of remuneration that is not awarded upfront in cash. That part is prone to change its value overtime, depending on the future performance of the issuing bank.

¹⁴² Here, among the forward-looking components is comprised the award in shares and also the cash components not paid upfront. Indeed, these components are subject to malus arrangements and implicit expost adjustment. Hence, variable remuneration paid upfront in cash is not considered forward-looking as it reflects only past performance and have little potential to incentivise toward prudent risk-taking for the future.

Another point attracting sharp criticism is the excessive complexity of the remuneration process and the burden for banks generated therein. In particular, the problems related to overcomplexity are crucial when it comes to deferral and retention policies that represent one of the pillars of the whole framework in aligning risk-taking incentives to long-term horizon. Correctly setting of those periods is one of the cornerstones of the current framework since it represents the channel to punish, implicitly and explicitly, the bad performances and excessive risk-taking.

Population (as at Dec 31, 2017) CEO			Variable 2017			
	Num.	Fīx ⁴	Upfront € Shares		Deferred € Shares [®]	
	1	1,200	0	0	0	0
Other executive Directors	0	0	0	0	0	0
Non executive Directors	17	3,606	0	0	0	0
General Manager	1	1,200	0	0	0	0
Deputy General Manager & SEVP	18	12,809	1,682	0	2,523	4,206
EVP	102	36,980	5,105	144	6,155	10,114
SVP	430	92,995	17,315	287	12,627	22,455
Other relevant staff	573	96,858	20,327	9	8,963	22,053

Data in k.

Figure 35 - UniCredit data on compensation structure for 2018¹⁴³

However, setting correctly the deferral and retention periods, i.e.: setting them in such a way that makes possible to correctly incentivise ex-ante and punish ex-post the performance of identified staff, is inherently problematic. To this end, Romano and Baghat¹⁴⁴ proposed to use only restricted stocks and restricted stock options in variable pay, restricted in the sense that the shares cannot be sold, or the option cannot be exercised for a period of at least two to four years after the executive's resignation or last

¹⁴³ See the Remuneration Policy report (n 140), 76.

¹⁴⁴ Bhagat and Romano (n 74).

day in office. The restriction to sell the shares or exercise the options lasts until 2 to 4 years after the last day in office of the employees. Such a proposal had two main goals: putting forward a simple and transparent regulation and fostering systemic stability incentivising high-profile employees to internalise all the risks of their activities, including tail risks. The idea is that prolonging the time horizon of executives to a considerable extent. Those would internalise all the risks that may materialize throughout this very long timeframe.¹⁴⁵

Even though the implementation of such a proposal would have been particularly costly and burdensome for the banking industry, the difference with the existing regulation is clear. The current EU framework engineers a complex mechanism where deferral and retention period interplays, provides some fixed minimum deferral period and asks banks to exactly determine it according to the specificity of their risk profiles, business models as well as the business cycle. On top of that, the competent authority has the power to supervise and to propose prompt corrective actions should the situation suddenly deteriorate.

The praiseworthy goals recommended by Romano and Bhagat are far from being reached. On the very contrary, the risk is to have a complex and somehow opaque system that is particularly difficult to supervise. Moreover, the current framework does not consider tail risk events in its incentive alignment process, as discussed in Section 4.2.

The current regulation loosens the link between pay and performance and creates an overly complex system, burdensome to build for the banks and difficult to supervise for the competent authority.

4.3.2 Pay Regulation and Bank Governance

The last step of this critical assessment is to understand whether the framework, despite its shortcomings, is able to tackle the specificities of bank governance. Again, the answer turns out to be negative, as in the current framework is still lacking a deep understanding of the specificities of bank governance. In particular, I will focus on three main elements:

¹⁴⁵ Notably, the restriction could last decades. For instance, Richard Fuld, former CEO of Lehman Brothers, was in charge since 1993.

risk-shifting incentives; moral hazard and systemic externalities and incentives for early recapitalisation.

Concerning risk-shifting incentives, the existing regulation does not improve the situation. Managers might pass on good risk-taking because of the cap¹⁴⁶ since they are not able to enjoy the upside of their good bets and have no incentives to do so. On the contrary, the regulation does not directly address risk-shifting incentives as the downside of bad bets are still massively externalised to creditors. As discussed above, it is extremely difficult to design malus and clawback arrangements and combine them with deferral and retention policies in such a way that employees are held fully accountable for the long-term consequences of their decisions,¹⁴⁷ including tail risk event.

The second point closely relates to the first one. The current pay regulation does not address the problem of ex-ante moral hazard either. Again, the combination of ex-post adjustment and deferral and retention policy is inherently unable to account for systemic externalities.

Finally, the existing regulation provides no incentives for prompt and early recapitalisation, which represents a crucial issue to timely address bank distress.

The outcome of this critical assessment is negative. The current regime does not efficiently address the general aspects related to the economics of remuneration nor the specific aspects related to bank corporate governance. If any, both have been worsened. The fifth round of revision of the Capital Requirement Directive¹⁴⁸ maintains the very same regulatory approach to pay packages and mainly attempts to increase the proportionality of the framework. Hence, the overall negative evaluation of the efficiency of the existing pay regulation in EU persists.

¹⁴⁶ Murphy (n 129) 647.

¹⁴⁷ ibid 652.

¹⁴⁸ DIRECTIVE (EU) 2019/878 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 20 May 2019 amending Directive 2013/36/EU as regards exempted entities, financial holding companies, mixed financial holding companies, remuneration, supervisory measures and powers and capital conservation measures.

5. Remuneration through Bail-inable Debt in European Banks?

Remuneration through bail-inable debt was already proposed at the highest policy levels in the so-called "Liikanen Report".¹⁴⁹ Nevertheless, the idea of remunerating managers also with bail-inable debt did not break into European best practices on remuneration.

The group, chaired by the former governor of the Bank of Finland Erkki Liikanen, had the main mandate to explore the feasibility of a structural reform of the European banking market. Among the many recommendations of the group, its final report included the use of bail-inable securities for remunerating high-profile employees.

In particular, the final report states: "Bail-in instruments should also be used in remuneration schemes for top management so as best to align decision-making with longer-term performance in banks. The Group suggests that this issue should be studied further";¹⁵⁰ and again "Building on existing requirements [...] a share of variable remuneration should be in the form of bail-in bonds".¹⁵¹ Nonetheless, such recommendation experienced the same faith of the structural reform and was quickly put aside. The CRD IV took a different regulatory direction, and the idea of remuneration through bail-inable debt was not explored any further.

The legal analysis of the complex and rigid existing regulation provides some insights on the reason why it has not been the case, given the several foreclosures and mandatory requirements that are already required. However, it cannot fully explain this phenomenon worldwide since, as discussed in Section 2.3, only UBS AG has implemented a similar policy. In this regard, it is worth remembering the traditional approach generates negative externalities. Consequently, banks and especially bank managers would not enjoy all the benefits of opting out the traditional approach, and this very fact provides a powerful case for an *ad hoc* regulatory intervention.

¹⁴⁹ Erkki Liikanen, 'High-Level Expert Group on Reforming the Structure of the EU Banking Sector' (2012) 2
¹⁵⁰ ibid 104.
¹⁵¹ ibid 106.

The rest of the section discusses why and how remuneration through bail-inable debt can promote financial stability and enhance resolvability, making remuneration packages less complex and more aligned with the long-term viability of the financial institutions. In so doing, the current situation of remuneration through debt needs to be analysed in detail, focusing on the regulatory elements that make it more difficult (Section 5.1). Subsequently, the proposal to remunerate bank managers (also) with bail-inable debt is discussed at length, focusing both on the general idea and the intertwining of the other elements of the pay regulation and the present proposal (Section 5.2). Finally, the analysis outlines the strengths and weaknesses of remuneration through debt, focusing on how whether it is able to address the shortcomings of the current regulatory framework (Section 5.3).

5.1 The State of the Art

As previously mentioned, the Capital Requirement Directive allows the possibility to remunerate identified staff with instruments other than cash, shares or share-like instruments.¹⁵² The letter of the law provides that "where possible" variable remuneration can be composed of instruments that qualify as Additional Tier 1 or Tier 2 capital. Moreover, variable remuneration can also consist of other instruments that can be fully converted in common equity or written down. These instruments shall "adequately reflect the credit quality of the institution as a going concern". This seems to hint to non-capital, bail-in eligible instruments but, as discussed later on in this section, this is not the case.

Here, the caveat "where possible" represents the crucial element to start explaining why such provision remains little more than dead letter. The EBA Guidelines on sound remuneration policies¹⁵³ and a Delegate Regulation¹⁵⁴ specify the requirement of the possibility of remuneration through "other instruments" *de facto* making it extremely expensive and unappealing.

¹⁵² Article 94(2)(I)(ii) CRD IV

¹⁵³ EBA Guidelines, para 249-259.

¹⁵⁴ COMMISSION DELEGATED REGULATION (EU) No 527/2014 of 12 March 2014 supplementing Directive (EU) No 2013/36/EU of the European Parliament and of the Council with regard to regulatory technical standards specifying the classes of instruments that adequately reflect the credit quality of an institution as a going concern and are appropriate to be used for the purposes of variable remuneration.

The EBA Guidelines state that when such instruments are available, the variable remuneration should consist of a balance of different type of available instruments¹⁵⁵. This means that such a requirement can be circumvented insofar as the instruments are not available¹⁵⁶. The availability of "other instruments" depends on whether such instruments have been issued and on the sufficiency of such issuance.

In case all the instruments are available, variable remuneration should consist of a balance of such instruments. The institution must be able to demonstrate that, in setting such balance "that they have taken into account the interests of shareholders, creditors, bondholders and other stakeholders".¹⁵⁷ However, not all eligible instruments can be part of variable remuneration. Indeed, only the subset of eligible instruments comply with the Commission Delegated Regulation can be used for such purpose. This, *de facto* kills both the market appetite and the competent authority attention toward such form of remuneration.

The Delegated Regulation provides a highly restrictive interpretation of the instruments that are appropriate for variable remuneration. AT1 and T2 instruments are allowed only if they match specific requirements¹⁵⁸ and "other instruments" are allowed only as long as they are linked to other appropriate AT1 or T2 instruments, i.e.: options or futures of capital instruments. Therefore, non-capital bail-in eligible instruments cannot be awarded within the variable remuneration. This means that the power of the Resolution Authority to fully write down or convert into common equity such instruments is not deemed sufficient to adequately reflect the credit quality of the institution.

Furthermore, not all instruments that have a contractual trigger for write-down or conversion are appropriate either. The trigger event for write-down or conversion set at least to 7% of the ratio between CET1 and RWAs. Such a high threshold has a massive impact on both AT1 and T2 instruments. For the latter, it implies that – *de facto* – there is no appropriate Tier 2 instrument. The institution should issue non-perpetual high-trigger

¹⁵⁵ EBA Guidelines, para 250.

¹⁵⁶ CRD V provisions fix this allowing the use of share-linked instruments for listed stock corporations. See n 111.

¹⁵⁷ EBA Guidelines, para 255.

¹⁵⁸ Set down respectively in Article 2 and Article 3 of the Delegated Regulation.

CoCos that qualify only as Tier 2 making them excessively expensive compared with the benefits they provide in terms of financial stability and regulatory compliance. When it comes to AT1 instruments, EU law qualifies as AT1 perpetual instruments that are written-down or converted once the ratio between CET1 and RWAs falls below 5.125%. A higher trigger, such as 7%, still complies with the requirements for AT1 but make the instrument more expensive to issue. Therefore, it does not come as a surprise the fact that the trigger of the vast majority of Contingent Convertibles that qualify as AT1 instruments is set exactly to 5.125%.¹⁵⁹ Consequently, the sufficient availability of adequate instrument is by no means guaranteed.

In conclusion, the analysis of all the relevant legislation provides a picture where the possibility of remuneration through debt is much more foreclosed as compared with the idea one may have simply reading primary legislation. The Delegated Regulation is particularly attentive to guarantee the possibility of complete, certain and non-discretionary write-down in case of distress, i.e.: it wants to make sure that identified staff can be harshly punished ex-post, consistently with the approach that inspires the whole framework for regulating bankers pay. On the contrary, a more preventive approach, restraining excessive risk-taking in good times, is warranted and will be developed in the next section.

5.2 Proposal for a New Regulatory Framework

In this section, I propose a new framework to address the shortcomings of the current pay regulation. In structuring the variable part of remuneration, I propose to award bail-in eligible securities to bank's employees. This would tighten the link between pay and performance and, at the same time, directly tackle the specificities of bank governance. Moreover, remunerating managers through debt would have a further positive spillover; increasing the resolvability of financial institutions.

The main material consequence of this proposal is to magnify the importance of variable remuneration. Moreover, in structuring the variable component of remuneration, this

¹⁵⁹ See descriptive statistics in Oliver Juhler Grinderslev and Kristian Loft Kristiansen, 'The Information Content in Contingent Convertible Bond Prices' (Danmarks Nationalbank Working Papers 2017).

proposal aims to strongly limit the use of cash bonuses and to resort mainly to shares (or share-linked instruments) and bail-inable instruments.

More specifically, as suggested by theory,¹⁶⁰ I will argue in favour of a balanced mixed of instruments with a bias toward equity. Since the main goal of pay regulation should not be to dis-incentivise risk-taking as such. It is worth remembering that risk-taking is the core element of banking. On the contrary, the aim must be to dis-incentivise excessive risk-taking resulting in value destructing decisions. Thus, a balance of instruments with an equity bias represents the most proportionate way to proceed, closely mirroring the example provided by UBS Bonus Bonds.¹⁶¹

To this end, the proceeding of this Section identifies the preferable type(s) of instrument(s) to form variable remuneration (5.2.1); the intertwine of the proposed framework with the other elements of pay regulation, such as deferral and retention policies (5.2.2). Finally, this section discusses the relationship between paying bank managers with bail-inable debt and the resolution framework, especially in terms of compliance with MREL (Minimum Requirement for Eligible Liabilities and Own Fund) (5.2.3).

5.2.1 Remuneration through Debt: Identifying the Instruments to Award

The first aspect to discuss is the type of instruments to be awarded as variable remuneration. So far only AT1 instruments have been tentatively awarded by UBS; yet the Swiss capital regulation sharply differs from the Capital Requirement Directive, and so it is the approach of the competent authority toward letting AT1 Cocos suffer losses. As it is not possible, and proportionate either, to provide a one-size-fits-all answer, the flaws and virtues of both AT1, T2 and non-capital bail-in eligible ("other") instruments are to be discussed.

AT1 contingent convertibles represent the natural candidate since they count both as regulatory capital and, more specifically, as capital in calculating the plain leverage ratio

¹⁶⁰ Edmans and Liu (n 46).

¹⁶¹ The variable remuneration at UBS consists for 20% of cash, for 30% of deferred contingent convertibles and for 50% of shares. See back Figure 28.

requirement,¹⁶² whereas Tier 2 instruments do not. As for the loss-bearing mechanism, "principal write-down" CoCos ought to be preferred to "conversion to equity" ones in order not to provide perverse incentives to managers once, if ever, the conversion happens.¹⁶³ Moreover, significant principle write-down CoCos in the portfolio of executives provide strong incentives toward early recapitalisation so to avoid losses. However, in the European experience, both the supervisor and the regulator proved to be particularly reluctant to impose any loss on CoCos in going concern, striving to avoid even the case where the issuing bank has to skip a coupon.¹⁶⁴ Therefore, *de facto*, CoCos become little more than "common" bail-in instruments that are prone to suffer losses only at the point of nonviability, after a decision of the resolution authority.

On the other hand, there is no functional difference between Tier 2 and other eligible instruments since the most qualifying divergence between the two, i.e.: maturity at issuance, can be efficiently dealt through deferral policy. Both Tier 2 and other instruments are prone to be fully written-down or converted as a result of the decision of the resolution authority in case of distress. Again, writing down the principal amount of the awarded instruments must be strictly preferred to conversion for the same reasons discussed above.

For the equivalence between Tier 2 and other non-capital instruments to hold *ad hoc* legislative provision are warranted. Namely, a further element is necessary: in any case, the instruments awarded to banks' employees should be structurally subordinated. That is to say, awarded instruments can be more senior than capital instruments (CET1, AT1 and T2) but must be more junior than any other debt claim in order not to grant an unreasonable shield to managers in case of bank distress.

Finally, *ad hoc* issuances of instruments should be preferred to the use of available instruments already issued for other purposes. *Ad hoc* issuances allow tailoring the contractual arrangement to the specific case of variable remuneration in banking, such as the structural subordination mentioned above. Moreover, this makes also easier the task

¹⁶³ See, more at length on this topic, Chapter 5

¹⁶² i.e.: ratio between capital and total non-risk-weighted assets; whereas "typical" capital requirements comprise both CET1, AT1 and T2 and risk-weighted assets are use as denominator.

¹⁶⁴ Paul Glasserman and Enrico Perotti, 'The Unconvertible CoCo Bonds' in Douglas D Evanoff and others (eds), *Achieving Financial Stability: Challenges to Prudential Regulation*, vol 61 (World Scientific 2017).

of the competent authority to effectively supervise on the soundness of remuneration practices, since the competent authority can more easily oversee the contractual structure of the awarded instruments. Finally, *ad hoc* issuances allow for a real increase of bail-inable debt, enhancing the resolvability of the bank; whereas, awarding instruments that are already outstanding in the secondary market would merely re-allocate existing bail-inable debt.

As a result, I propose to grant the competent authority, in close cooperation with the resolution authority, a broad mandate to oversee the reasonableness of the instruments chosen for remuneration, considering to the specific business and funding models of the bank.¹⁶⁵ The competent authority must also have sufficient power to impose corrective action in case the identified instruments and their balance are not in line with the long-term viability of the institution. In this respect, Article 104 of the Capital Requirement Directive listing the powers of the competent authority should be integrated accordingly.

5.2.2 Remuneration through Debt in Context

Remuneration through debt cannot be understood in an atomistic manner; instead, it should fit in the overall context of pay regulation: the regulatory design should magnify the complementary nature of this proposal with some aspects of pay regulation. On the other hand, it should acknowledge that this proposal can act as a (more efficient) substitute for other elements of the current regulation.¹⁶⁶

On this ground, I first propose to eliminate the cap on variable remuneration. Such a cap has been (mistakenly) introduced "in order to avoid excessive risk-taking".¹⁶⁷ This task, as widely argued above, can be taken over by structuring variable remuneration as balance of bail-inable instruments and share(-linked) instruments as well as a limited amount of upfront cash.

The fine-tuning of remuneration through debt with deferral and retention policies is more entangled, and no one-size-fits-all solution seems to be warranted. For instance, it

¹⁶⁵ On the desirability of a supervisory approach, see Ferrarini and Ungureanu (n 81).

¹⁶⁶ On the possibility to relax some of the rigid incumbent regulation once a more balanced and tailored remuneration framework is in place see also Tung and Wang (n 32); Bebchuk and Spamann (n 22).
¹⁶⁷ Recital 65 CRD IV.

does not seem plausible to impose the same deferral and retention policy to AT1 Cocos and bail-inable securities, given the sharp difference in their contractual design, liquidity in the secondary market, etc. Again, the competent authority should have a wide mandate to oversee the aptness of such policies to achieve optimal risk-taking incentives that foster the long-term viability of the institution.

However, it is possible to provide some guidelines to better integrate the remuneration through debt with the overall regulatory framework. The main aim is to guarantee that debt instruments granted as variable remuneration bear the losses, and that other outstanding liabilities do not shield managers form losses. This addresses large parts of the arguments against remuneration through debt proposed by Bebchuck and Jackson¹⁶⁸ and Alces and Galle.¹⁶⁹

To this end, no instruments should vest faster than the minimum amount of time required for calling or redeem instruments of the same seniority.¹⁷⁰ Moreover, as discussed in section 5.2.1, the non-capital bail-in eligible instruments should be deferred of at least the same period of Tier 2 instruments.

Finally, no specific regulatory adjustment seems necessary for the ex-post adjustment phase. Malus and clawback arrangements, in their interaction with deferral and retention policies, have the potential to adequately work also with debt instruments. Moreover, it is worth noting that the mechanism of implicit ex-post adjustment, i.e.: through price adjustment of the awarded instruments, would be enhanced. The balanced mix of instruments awarded as variable remuneration should reflect the long-term interests of shareholders for the stock part as well as the long-term viability of the institution as a whole for the "other instruments" part. Moreover, the latest revision of the resolution framework opened the door for an even more effective ex-post adjustment by the resolution authority in case of MREL breach. Section 5.2.3 better develops this argument.

¹⁶⁸ Bebchuk and Jackson Jr (n 44).

¹⁶⁹ Alces and Galle (n 56).

¹⁷⁰ For AT1 instruments, see Article 53(1)(i) CRR that prevent issuing institutions to call or redeem such instrument before 5 year after the date of issuance. The same provision covers Tier 2 instruments as well, see Article 63(1)(j) CRR.

5.2.3 Remuneration through Debt and the Resolution Framework

One of the main strengths of remunerating bank managers through bail-in eligible instruments is to create a positive synergy between remuneration packages, the governance incentives stemming therein, and the resolution framework, yielding a more coherent regulatory environment.

The first, obvious, advantage is that awarding newly issued MREL eligible instrument¹⁷¹ eases the task of building enough MREL capacity and, consequently, makes the institution more resolvable. This aspect was already stressed in the latest remuneration report by UBS, commenting on its Deferred Contingent Capital Plan (DCCP): "Therefore, DCCP awards not only support competitive pay, but also provide a loss absorption buffer that protects the firm's capital position".¹⁷²

Moreover, the revised Bank Recovery and Resolution Directive grants the resolution authority with pervasive powers to address MREL breaches, tackling one of the more serious gaps of the original version of the BRRD. Specifically, in case of MREL breach,¹⁷³ the resolution authority can promptly intervene using the supervisory powers of Article 104 CRD and, more importantly for what is here of interest, can limit distributions on MREL instruments (i.e.: coupon payments).

These new provisions enhance the enforceability and the preventive potential of the whole resolution framework. Furthermore, they can create positive synergies with the proposed remuneration through bail-inable instruments. In order to fully exploit the potential for such synergies, further reforms should allow for the possibility to cancel or diminish the distributions on MREL instruments awarded as part of variable remuneration. In particular, the resolution authority should have the power to restrict distribution on such instruments before MREL is breached so to incentivise the institution to build an adequate buffer. The resolution authority should also determine, on a case by case basis and in close cooperation with the competent authority, the required buffer on top of the minimum level of eligible instrument.

¹⁷¹ On the specific requirement to be eligible for counting as MREL instruments, see Article 45 BRRD.

¹⁷² See above n 68.

¹⁷³ See Article 45k BRRD II in conjunction with Articles 16a, 17 and 18 BRRD II.

This has a twofold benefit: on the one hand, it helps to align managerial incentives with the long-term viability of the institution; on the other hand, it has a positive spillover on the political availability of using resolution tools so that it, *de facto*, increase bank resolvability. The overarching goal is to make this synergy one of the crucial elements to trigger a virtuous circle in which better bank governance enhance bank resolvability and vice versa.

5.3 Critical Assessment of the Proposal

This assessment explicitly mirrors the one on the current regulation on bankers' pay (Section 4.3) and, thus, its structure is similar. The impact of the proposal is first discussed in the aspects related to the classical features of remuneration and its economic rationale (5.3.1). Thereafter, the focus shift into the capability of this proposal to tackle the specificities of bank governance (5.3.2). Finally, the discussion highlights the positive spillovers and synergies on the resolvability of banks (5.3.3). This latter element outlines how remunerating managers also with bail-inable debt, all else being equal, should be preferred since it generates positive spillovers and makes the overall regulatory framework more coherent.

5.3.1 Remuneration through Debt and the Economics of Remuneration

The proposal tightens the link between pay and performance. The cap on variable remuneration is eliminated since, even taking for granted the official justification for it,¹⁷⁴ the purpose to limit (i.e.: optimise) risk-taking incentives can be better achieved with remuneration through bail-inable debt.

Moreover, the proposal leans toward a supervisory approach,¹⁷⁵ consistently with the FSB approach.¹⁷⁶ This provides greater flexibility to individual banks, avoiding one-size-fitsall solutions as much as possible. Mandatory rules on structure, rather than standards, are

¹⁷⁴ Recital 65 CRD IV: "In any event, in order to avoid excessive risk-taking, a maximum ratio between the fixed and the variable component of the total remuneration should be set".

¹⁷⁵ See also the proposal for implementation in Section 6.

¹⁷⁶ Strongly arguing in favour of a supervisory approach, as opposed to structural regulation, see Ferrarini (n 75).

limited to cases where the negative externality is clear, and so the market cannot achieve itself the optimal result.¹⁷⁷

Admittedly, the complexity does not decrease sharply, and the analysis carried out so far showed that easy and straightforward remuneration packages for employees of complex banking institutions might simply be delusive: remuneration process of complex institutions is inherently complex. However, providing flexibility allows for better tailoring the process to the specificities of each institution, especially in terms of size and systemic significance. In this perspective, the adjustments in terms of proportionality, as included in CRD V,¹⁷⁸ represent a significant step forward. Overall, also the aspect of over complexity and calibration can be considered improved by this proposal, even though the improvement is not likely to be sizeable.

5.3.2 Remuneration through Debt and Bank Governance

As widely discussed above, the main contribution of this proposal is to directly and explicitly address the specificities of bank governance. In this regard, remunerating bank managers with bail-inable debt can be considered a game-changer. Again, mirroring Section 4.3.2, three dimensions are to be discussed: bank leverage and risk-shifting incentives; ex-ante reduction of excessive risk-taking incentives and incentives for early recapitalisation.

As for bank leverage and risk-shifting incentives, the benefit of this proposal is evident: once managers have (bail-inable) debt in their portfolio, shifting the risk to creditors implies that they shift the risk, to a certain extent, to themselves. More rigorously, bank employees would still enjoy the upside of their good risk-taking since a substantial part of their remuneration must still be awarded in shares. Bankers would also participate in the downside of the investment since they hold a substantial amount of debt. In this way, decisions that maximise the value of equity in expected terms but are detrimental to creditors are less likely to happen. In Section 2.4, I developed a simplified numerical

¹⁷⁷ See also Section 6.

¹⁷⁸ Directive (EU) 2019/878 Of the European Parliament and Of the Council Of 20 May 2019 Amending Directive 2013/36/Eu As Regards Exempted Entities, Financial Holding Companies, Mixed Financial Holding Companies, Remuneration, Supervisory Measures and Powers and Capital Conservation Measures. OJ L 150, 7.6.2019.

example showing such mechanism: starting from a typical situation of risk-shifting,¹⁷⁹ the example shows that remunerating the decision-maker through a combination of equity and debt, she will pass on the negative net present value project, aligning managerial and societal incentives.

Closely related to risk shifting, remuneration through debt would also indirectly address the problem of systemic negative externalities of banking activities. Once managers have both shares and bail-inable securities in their portfolio, they will strive to maximise the combined value of both parts of such a portfolio. Maximising the value of the bail-inable debt part implies to increase the institution's distance to default. In this regard, managers should be allowed to trade their securities in the secondary market before maturity. This latter feature ought to be balanced with appropriate deferral and retention policies. Moreover, even if the bank enters in distress, managers with a sizeable amount of bail-inable debt in their portfolio will be sensitive to the bank's liquidation value and, consequently, they will have limited incentives to gamble to resurrect.¹⁸⁰

Finally, maximising the value of the debt part of banker's portfolio provides incentives for early recapitalisation in times of turmoil. From the perspective of a banker that has both equity and bail-inable debt in her portfolio, early recapitalisation dilutes the equity part¹⁸¹ but, on the other hand, shield the debt part from losses.

5.3.3 Remuneration through Debt and Bank Resolvability

Creating positive synergies between different areas of banking regulation represents a crucial goal, especially given the extreme expansion of legislative bills of the last decade. Positive synergies create a more coherent regulatory framework and allow achieving the same effect with lower effort and regulatory burden. In this case, fine-tuning the resolution framework and the regulation of bankers pay has several advantages.

First, thinking of the ex-post nature of the resolution framework, i.e.: once the bank is already in distress and the resolution procedure is triggered, remunerating managers with deeply subordinated bail-inable securities has positive spillovers in terms of the feasibility

¹⁷⁹ For a simplified example on risk-shifting incentives see Becht, Bolton and Röell (n 4).

¹⁸⁰ This follows the intuition by Listokin (n 47).

¹⁸¹ Gordon (n 22).

of resolution. The first anecdotal evidence showed high resistance to resolution, and especially to plain open bank bail-in, from the media, public and politicians. However, the fact that following a decision of the resolution authority bank managers are the first in line to bear serious losses make a good political case for resolution. Section 6 details the possible implementation strategies to make bank managers the first in line in case losses are imposed through a decision of the resolution authority.

Second, looking more at the ex-ante potential of the resolution framework,¹⁸² the synergies between pay regulation and the resolution framework again highlight the potential to trigger a virtuous circle. The combination of remuneration through debt and the new powers of the resolution authority appears as a promising avenue. Particularly so for the powers granted to the resolution authority to react to MREL breaches, through limitation on distributions to MREL instruments. This has the potential to enhance governance incentives as well as bank resolvability. In order to achieve such results, managers must be first in line to have their coupon cancelled or diminished and, consequently, minor legislative adjustments in this direction are warranted.

However, not all that glitters is gold: the positive yield of such synergies, especially when it comes to the enhancement of ex-ante resolvability, highly depends on the efficient and effective cooperation between the competent and the resolution authorities. This represents an issue that horizontally touches upon all the features related to the resolution framework¹⁸³ and, therefore, also the potential positive synergies between the resolution framework and pay regulation.

To sum up, the proposal of remunerating bank risk-takers through bail-inable securities, as compared with the current framework for pay regulation:

(1) improves the link between pay and performance;

¹⁸² i.e.: enhancing resolvability and, thence, fostering long term viability of the business and funding model of the institution.

¹⁸³ Most notably, the competent authority has the competence to declare an institution to be "failing or likely to fail" which is a prerequisite for entering in resolution. See Article 32 BRRD.

- (2) marginally improves the situation when it comes to complexity and calibration of remuneration packages;
- (3) fine-tunes pay regulation with the specificities of bank governance, which represents the pivotal aspect of the whole proposal;
- (4) generates further positive spillovers and virtuous synergies with banks' resolvability and the resolution framework.

6. The Devil's in the Details: how to Reform Pay Regulation

In the previous section, I describe "the world as it should be". However, flipping upside down the current regulatory framework and remuneration practices is all but straightforward. Since it is known that the devil is in the details, in the proceeding of this section I propose two possible implementation strategies: the first focuses on opening up the possibility to use bail-inable debt for variable remuneration, removing the material impediments that currently exist. Such a strategy has the overarching goal to test for the market appetite toward such remuneration practice removing, or at least minimising, the biases in favour of the current practice (Section 6.1). The second proposed strategy is more radical and imposes, to a certain extent, the use of bail-inable debt in remuneration. Therefore, the attention focuses on correctly weighting the proposed implementation strategies so to make it as flexible and proportionate as possible (Section 6.2). Both strategies increase the role of the competent authority in overseeing the soundness of remuneration practices and promptly correcting them if needed.

6.1 A cautious approach: an unbiased possibility to remunerate through debt

The first possible strategy can be labelled as "cautious", and its main aim is to deregulate the structure of variable remuneration and, at the same time, to remove any limitation on remuneration through debt instruments. This would allow eliciting market appetite in an unbiased manner. In order to achieve so, modifications of both primary, secondary legislation and guidelines are warranted. Concerning primary legislation, Article 94(1)(I)(ii)¹⁸⁴ should be modified in two aspects. First, the incipit "where possible" must be erased. Indeed, up until now, such caveat made remuneration through debt a mere theoretical possibility and eliminating such exception represents the first unavoidable step for changing the current remuneration practices. Moreover, the appropriateness of the instruments indicated in the Article 94(1)(I)(ii) should not only require to reflect the credit quality of the bank but also to "foster the long-term viability" of the institution. This further benchmark should, therefore, be included in the primary legislation. Those criteria apply to variable remuneration in its entirety and represent the benchmark to evaluate its adequateness.

On the other hand, the Delegated Regulation specifying the classes of instruments that can be part of the variable remuneration needs substantial modifications. The delegated regulation has to align the requirements for "adequate instruments" with the requirements for regulatory capital and open to the use of bail-inable securities. To this end, AT1 instruments with a low trigger (5,125% CET1/RWA) should be included among the permitted instruments as long as the loss-absorbing mechanism of the instruments is the principal writ-down. On the contrary, instruments that convert to equity should have a higher trigger event to avoid the perverse incentives arising when the bank approaches the point of non-viability.¹⁸⁵ Such modification is crucial to open up the market of remuneration through debt. Even though theoretically it lowers the loss-absorbing quality of the instruments used for variable remuneration, this makes the possibility of remuneration through debt much more effective.

The second aspect needing severe revision is the category of "other instruments" that allows only for the use of instruments linked to (adequate) AT1 or T2 instruments. Indeed,

 $^{^{184}}$ Article 94(1)(I) CRD: a substantial portion, and in any event at least 50 %, of any variable remuneration shall consist of a balance of the following:

⁽i) shares or equivalent ownership interests, subject to the legal structure of the institution concerned or share-linked instruments or equivalent non-cash instruments, in the case of a non-listed institution;

⁽ii) where possible, other instruments within the meaning of Article 52 or 63 of Regulation (EU) No 575/2013 or other instruments which can be fully converted to Common Equity Tier 1 instruments or written down, that in each case adequately reflect the credit quality of the institution as a going concern and are appropriate to be used for the purposes of variable remuneration.

¹⁸⁵ On this point, see widely Chapter 5.

the arguments put forward so far proved the necessity to include also deeply subordinated non-capital instruments among the ones that are "appropriate to use for variable remuneration". However, the delegated regulation should pinpoint that to be considered "appropriate" such instruments, in the bankruptcy waterfall, must be senior to all capital instruments but junior to all other liabilities.

As for the guidelines on sound remuneration policies, no conceptual modification seems to be strictly necessary; yet, the regulatory changes proposed above implies the need to update the Guidelines accordingly.¹⁸⁶

Finally, the competent authority must play a quintessential role in this implementation strategy. The law should grant the supervisor with a wide mandate in assessing the adequateness of the structure of variable remuneration. The evaluation criteria should be the modified criteria of the revised article 94(1)(I), i.e.: the mix of instruments awarded must reflect the credit quality of the institution and foster its long-term viability.

6.2 A radical approach: mandating remuneration through debt

If the first strategy has been labelled "cautious", as it is limited to open up a workable option for the use of debt in variable remuneration; the second strategy can be labelled "radical" as it aims at including debt via mandatory provisions. This strategy aims to impose, to some extent, the use of debt instruments in variable remuneration and, at the same time, not to make the regulatory framework excessively rigid and burdensome.

In so doing, again, both primary, secondary legislation and Guidelines ought to be modified. Specifically, the whole Article 94(1)(I) needs to be deeply revised. The reviewed version should establish that for the purpose of variable remuneration, the institution can award a balanced mix of cash, shares (or share-linked instruments) and other instruments. These instruments can be either Additional Tier 1, Tier 2 or non-capital bail-inable instruments as long as they reflect the credit quality of the institution and foster its long-term viability.

¹⁸⁶ So, for instance, some part would make no sense anymore and shall be cancelled. A good example can be found in the first part of paragraph 255: "Where both equity or equity-linked and other eligible instruments defined under Commission Delegated Regulation (EU) No 527/2014 are available, it is possible to pay variable remuneration as a balance of different instruments"

The specific criteria that those instruments need to comply with is set down by secondary legislation. Consequently, the delegated regulation ought to be modified accordingly, in line with the modifications proposed in the first strategy. Therefore, the requirement for Additional Tier 1 instruments ought to be harmonised with the requirements to count as regulatory capital if the loss-absorbing mechanism is principal write down. Moreover, bail-inable securities should be considered adequate insofar as they are subordinated to any other non-capital liability.

Again, consistent with the FSB standards, the role of the competent authority must be pivotal. The supervisor must have even wider powers than in the first implementation strategy. Hence, Article 94(1)(I) should not only be modified in its substance but also integrated so to provide the competent authority with an explicit and pervasive mandate to oversee and promptly intervene if necessary. Specifically, the competent authority should ensure that, in structuring variable remuneration, the institution "[take] into account the interests of shareholders, creditors, bondholders and other stakeholders when setting the balance between different instruments".¹⁸⁷ If it is unlikely that the structure proposed fulfils the objectives discussed above, the competent authority should (have the power to) take adequate measures.

Finally, regulatory technical standards issued by the commission and drafted by the EBA,¹⁸⁸ should provide further explanation as for what can be considered a balanced structure of variable remuneration. Such standards should offer sufficient information to prevent uncertainty but, at the same time, should not be too rigid and static for allowing the banks to tailor the structure of variable remuneration to their own specificities.¹⁸⁹ Perhaps, the easiest way to do so is to set a quantitative benchmark. For instance, only for the purpose of the exposition, one might think of variable compensation packages composed by debt instruments for at least 33%, where no more than 15% can be paid upfront in cash. This proposal is in line with the example provided by UBS AG remuneration

¹⁸⁷ See EBA Guidelines, para 255, last part.

¹⁸⁸ The procedure is described in Article 10 of the REGULATION (EU) No 1093/2010 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 24 November 2010 establishing a European Supervisory Authority (European Banking Authority).

¹⁸⁹ Ian Ayres and Joshua Mitts, 'Anti-Herding Regulation' (2015) 5 Harv. Bus. L. Rev. 1.

scheme, that proved to be successful over time. This approach is in line with the conclusion in Edmans and Liu¹⁹⁰, where the authors argue for a balanced mix of equity and debt in remuneration packages, with an equity-bias.

If the structure of the variable remuneration complies with such benchmarks, that can be presumed to be balanced. Otherwise, the institution must demonstrate that the structure of variable remuneration, given the specificities of its business and funding models, is still adequate to reach the objective.

7. Conclusion

The chapter shows the theoretical foundations of remuneration through debt and highlights how that has a beneficial effect in banking, given the specialty of Bank Governance. In particular, the core argument of the study is that remunerating bankers through bail-inable debt would yield multiple positive outcomes.

Accordingly, the chapter proposes to sharply modify the EU regulation for bank managers' remuneration, embedding bail-inable instruments in the remuneration packages with the final aim to optimise the risk-taking incentives of high-profile bank employees.

The chapter discusses the optimal pool of instruments to form remuneration packages as well as the relationship between remuneration through debt and the other features of existing regulation. In this regard, the analysis reveals that remuneration through debt can act as a more efficient substitute for some of the existing rule (e.g.: cap on variable remuneration), whereas it acts as a complement for other features (e.g.: deferral and retention policies). In this latter case, the proposal for harmonising the regulation and optimise such complementarity are advanced.

Furthermore, this analysis also considers remuneration through debt in relation to the resolution framework, proposing specific marginal improvements to enhance the efficiency and the effectiveness of remuneration through debt on managerial incentives.

¹⁹⁰ Edmans and Liu (n 46).

Finally, the chapter proposes two possible implementation strategies, one more cautious, based on standards, and the other more radical, based on rules. The analysis highlights the pros and cons of both the approaches in terms of political feasibility and regulatory efficacy. There is no clear-cut conclusion of which strategy is superior. However, a combination of the two strategies can turn to be the best solution, widely applying the proportionality principle so that the radical (rule-based) approach applies only for systemically relevant banks. In contrast a lighter (standard-based) approach should apply with less relevant ones.

Looking at a broader picture, the analysis shows that remuneration through bail-inable debt fine-tunes the specialty of bank governance with the resolution framework for ailing banks, using remuneration as a tool to connect the two spheres.¹⁹¹ This line of reasoning hints to the fact that, from a positive perspective,¹⁹² the impact of the resolution framework on bank governance is suboptimal and the potential synergies between these two dimensions can be exploited only carefully bridging their edges.

¹⁹¹ For a general exposition of the relation between governance and regulation, see Chapter 2.
¹⁹² See Chapter 4, Chapter 5 and Chapter 6 of the dissertation.

Chapter 7 – The Case for Remunerating Bankers Through Bail-Inable Debt

Part III – Finetuning Bank Governance and Regulation

Chapter 8 - The Case for Granting Governance Rights to Bail-Inable Creditors

Abstract

Shareholders are the residual claimants on the assets of a corporation. In contrast, creditors are fixed claimants, mainly interested in the solvency of their borrower. Therefore, shareholders are usually thought to have optimal incentives to maximise the value of the corporation. This chapter discusses the extent to which such common wisdom applies in banking.

The chapter proposes a deep statutory reform in the area of bank governance, exploiting the potential positive synergies with the resolution framework for distressed banks and, in particular, the incentive structure of the so-called "bail-inable creditors". The overarching aim of such proposal is to fine-tune bank governance and incumbent substantive regulation and, subsequently, truly enhancing the quality of decision-making of banks in terms of risk-taking. At the same time, the proposed reform should increase the ex-ante credibility of resolution.

Finally, the chapter operationalises such a theoretical construct, proposing to grant bailinable creditors with a limited set of decision and appointment rights. This limited set of rights ought to be complemented by a general principle of sufficient accountability of bank's governance arrangements toward bail-inable creditors, so to allow for differentiated and proportionate implementation.

The analysis demonstrates how granting bail-inable creditors with ex-ante governance rights can represent a tool to correct for shareholders' perverse incentives and make debt governance work in banking. The policy proposal advanced in the chapter would complement substantive regulation and the oversight activity of the competent authority. The governance role of creditors has the potential to be particularly helpful in preventing disproportionate risk-taking decisions in good times when regulatory and supervisory standards are lax and systemic risk piles-up.

Keywords: Debt Governance; Voting Rights; Appointment Rights; Governance Arrangements

1. Introduction

Shareholders are the residual claimants on the assets of a corporation. Therefore, these are usually thought to have optimal incentives to maximise the value of the assets. Consequently, in virtually any jurisdiction, they are statutorily granted most of the legal rights to run the corporation. They are usually in charge of appointing the board of directors; moreover, they directly decide on a set of issues identified statutorily or through the corporate charter.¹

On the contrary, creditors are fixed claimants, and their interest is merely for the borrowing corporation to remain solvent. Thus, a limited set of statutory and contractual provisions should protect them from possible abuses of the shareholders and management, decreasing the agency cost of debt.² However, corporate decisions should still be allocated to the management appointed, directly or indirectly, by the shareholders. On the other hand, creditors can only dictate some positive or negative behaviours to the management through contractual commitments. Any other possible externality or other market failure is better addressed through regulation than through the modification of governance arrangements.³

This represents a simplified explanation of the shareholder centric model of corporate governance on which a fair degree of consensus has been reached over the last decades⁴ and proved itself quite robust to the many critiques it attracted over the years.⁵

This chapter shows how profound adjustments to the standard model are warranted in banking because of the special nature of bank corporate governance and its relationship

¹ Frank H Easterbrook and Daniel R Fischel, *The Economic Structure of Corporate Law* (Harvard University Press 1996) 63.

² Jean Tirole, *The Theory of Corporate Finance* (Princeton University Press 2010) 389.

³ Ian B Lee, 'The Role of the Public Interest in Corporate Law' in Claire A Hill and Brett H McDonnell (eds), *Research Handbook on the Economics of Corporate Law* (Edward Elgar Publishing 2012) 124.

⁴ Henry Hansmann and Reinier Kraakman, 'The End of History for Corporate Law' (2000) 89 Geo. LJ 439..

⁵ In this regard, the quintessential contribution is a brief article by Milton Friedman. See Milton Friedman, 'The Social Responsibility of Business Is to Increase Its Profits' *N.Y. Times* (13 September 1970). See also Steven M Bainsbridge, 'In Defence of the Shareholder Wealth Maximization Norm"' (1993) 50 Wash & Lee L Rev 1423. Recently, Hart and Zingales challenged this standard paradigm arguing that shareholders can have pro-social preferences that are not embedded in the share price. See Oliver Hart and Luigi Zingales, 'Companies Should Maximize Shareholder Welfare Not Market Value' (2017) 2 Journal of Law, Finance, and Accounting 247.

with incumbent financial regulation, with a particular reference to the resolution framework for ailing banks. The shareholder centric model of governance for banks provides shareholders with incentives to excessively engage in risk-taking.⁶ Moreover, shareholders lack the ability and the willingness to internalise the systemic externalities that banking activities generate.⁷ However, the shareholders themselves are exposed to the market risk generated by such systemic externalities, being market risk undiversifiable

Therefore, the arguments for opting out the shareholder centric model of governance are particularly strong for banks as it would benefit shareholders' themselves. To this date, only marginal adjustments to governance arrangements⁸ were deemed to be fit for purpose.⁹

In this landscape, the entry into force of the new EU resolution framework¹⁰ for ailing banks creates, as this chapter will show, the possibility to truly adjust banks governance arrangements. Such framework identifies a broad category of long-term non-runnable debt that is prone to suffer losses shareholder-like in case of financial distress.¹¹ These creditors, so the argument goes, should also monitor and discipline the bank ex-ante, to minimise the probability of experiencing losses.¹² Nonetheless, as the previous chapters¹³ and a vast

⁶ Marco Becht, Patrick Bolton and Ailsa Röell, 'Why Bank Governance Is Different' (2011) 27 Oxford Review of Economic Policy 437.

⁷ John Armour and Jeffrey N Gordon, 'Systemic Harms and Shareholder Value' (2014) 6 Journal of Legal Analysis 35.

⁸ Art 88 of the Capital Requirement Directive (CRD), Directive 2013/36/EU of the European Parliament and of the Council of 26 June 2013 on access to the activity of credit institutions and the prudential supervision of credit institutions and investment firms, amending Directive 2002/87/EC and repealing Directives 2006/48/EC and 2006/49/EC. OJ L 176, 27.6.2013.

⁹ On the other hand, many academics found those marginal adjustment not to be fit for purpose. See, for instance, Luca Enriques and Dirk Zetzsche, 'Quack Corporate Governance, Round III? Bank Board Regulation Under the New European Capital Requirement Directive' (2015) 16 Theoretical Inquiries in Law 211; Christoph van der Elst, 'Corporate Governance and Banks: How Justified Is the Match?' (2015) 284/2015.

¹⁰ Directive 2014/59/EU of the European Parliament and of the Council of 15 May 2014 establishing a framework for the recovery and resolution of credit institutions and investment firms. OJ L 173 12.6.2014.

¹¹ Christos Hadjiemmanuil, 'Bank Stakeholders' Mandatory Contribution to Resolution Financing: Principle and Ambiguities of Bail-In', *ECB Legal Conference 2015 - From Monetary Union to Banking Union, on the way to Capital Markets Union* (2015).

¹² Jianping Zhou and others, 'From Bailout to Bail-in: Mandatory Debt Restructuring of Systemic Financial Institutions' [2012] Journal Issue 3.

¹³ See Chapters 3 and 4.

literature showed,¹⁴ this mechanism functions better in theory than in practice. The proposed explanations are numerous, mainly focusing on the over-complication of the legal framework and the lack of credibility of resolution.

In the previous chapters of the dissertation, I also offered an additional argument, going beyond credibility and complexity, which is the discrepancies between the regulatory framework and the specificities of bank governance.¹⁵ Building upon this argument, this chapter proposes a reform of bank governance that aims at fine-tuning the resolution framework with the specific features of bank governance, focusing on the role of creditors.

With the law as it is, the BRRD creates more problems than it solves. So far, it proved to be ineffective ex-post, in handling the cases of resolution, and inefficient ex-ante in incentivising toward optimal risk-taking. Moreover, these components seem to reinforce one another and generate a vicious circle. However, the existence of a common resolution framework represents a significant achievement toward a genuine Economic and Monetary Union, at least for the Eurozone.¹⁶ It has the potential to enhance the resilience of single institutions as well as of the system as a whole.

Therefore, this chapter proposes a deep statutory reform in the area of bank governance. The overarching aim of such proposal is to fine-tune bank governance and incumbent substantive regulation and, subsequently, truly enhancing the quality of decision-making of banks in terms of risk-taking. At the same time, the proposed reform should increase the ex-ante credibility of resolution. In this vein, the chapter demonstrates how granting bail-inable creditors with ex-ante governance rights can represent a tool to correct for shareholders' perverse incentives and make debt governance work in banking.

The chapter proposes to make banks' decision-making process "sufficiently accountable" to the interests of MREL creditors. To this end, MREL creditors should have a limited set of appointment and decision rights. In particular, the right to appoint a common trustee as well as a qualified minority of strategic board committees, such as the audit

¹⁴ See, Tobias Tröger, 'Why MREL Won't Help Much' (2019) 20 Journal of Banking Regulation; Emilios Avgouleas and Charles Goodhart, 'Critical Reflections on Bank Bail-Ins' (2015) 1 Journal of Financial Regulation 3.

 ¹⁵ See, in general, Chapter 2. For an application to the remuneration structure of risk-takers, see Chapter 7.
 ¹⁶ Herman Van Rompuy and others, 'Towards a Genuine Economic and Monetary Union', vol 5 (2012).

committee, the remuneration committee and the risk committee. Moreover, MREL creditors should have a say on remuneration and dividend policies with the aim of preventing disproportionate distributions in good times. The second part of the chapter will discuss the specific details of this proposal, how it fine-tunes bank governance and the resolution framework and the main implementation challenges.

The chapter additionally argues that rebalancing the relationship between shareholders and creditors in bank governance would achieve a better alignment of private and social incentives since creditors cannot benefit from excessive risk-taking. This would act as a powerful complement to regulation and supervision, especially in good times when regulation is lax, and supervisors tend to delay actions.¹⁷ On the other hand, a more central and better-defined role of creditors out of insolvency would increase the credibility of resolution. This, as opposed to the vicious circle described above, could trigger a virtuous circle where better-governed banks are more resolvable which, in turn, optimises market discipline (i.e.: ameliorates corporate governance).

The chapter is structured as follows. Section 2 reviews and critically discusses the various strands of literature on "innovative" bank governance arrangements. Section 3 explores the theoretical arguments in favour of granting governance rights to creditors in financial institutions. Section 4 discusses the scope and borders of the policy proposal defining the creditors to which rights should be granted and the nature of such rights. Section 5 discusses the core issue of the proposal, i.e. the type of rights and governance status to be statutorily given to creditors, highlighting why and how those are functional to increase the resilience and resolvability of the single institutions. Section 6 concludes.

2. Governance Approaches to Account for Bank Specialties

In the aftermath of the global financial crisis, bank governance was heavily blamed as one of the drivers of the global burst.¹⁸ An impressive amount of academic research, as well as

¹⁷ On the concept, cause and consequences of the so-called "regulatory pendulum", see Alessio M Pacces and Dirk Heremans, 'Regulation of Banking and Financial Markets', *Encyclopedia of Law and Economics - Volume 9* (Edward Elgar 2012) 593.

¹⁸ See Jacques De Larosière and others, 'Report of the High-Level Group on Financial Supervision in the EU' [2009] European Commission. Brussels para 23. See also Grant Kirkpatrick, 'The Corporate Governance Lessons from the Financial Crisis' (2009) 2009 OECD Journal: Financial Market Trends 61.

policymakers' attention, stemmed therein. Policy reforms tackling bank governance mainly represented a political reaction against bankers and paid no attention to the distinctive features of bank governance.¹⁹ On the contrary, many academics pointed at the specialty of bank governance²⁰ and developed a proposal for reforming bank governance regulation accounting for such a specialty.

Therefore, before discussing the desirability of granting governance rights to creditors, it is worth briefly reviewing this strand of literature that can be grouped into four main categories. First, studies looking at fiduciary duties of bank directors; second, studies looking at the role of the State in bank governance; third, studies focusing on modification of the liability regime of bank insiders; fourth, studies looking at the role of nonshareholders corporate constituencies.

All of these contributions aim at modifying governance incentives to induce optimal risk-taking and let bank decision-makers internalise the externalities they create. Before moving to the analysis of each of these categories, two preliminary caveats are in order. First, corporate governance research and policymaking in banking mainly dealt with directors' remuneration.²¹ Although highly relevant, executive remuneration is not considered in this chapter as the focus of this analysis is on governance rights and duties of corporate constituencies. However, it is crucial to highlight that remuneration practices represents a natural complement of governance rights,²² and they need to co-exist to yield an efficient governance ecosystem. Second, most of the literature and proposals mainly deal with US banks; therefore, with US corporate law and financial regulation. Even though there is a certain convergence between US and EU regimes,²³ considerable differences persist. Thus, proposals that fit the US legal framework might not fit EU law and the and national laws of the Member States.

¹⁹ See Enriques and Zetzsche (n 10); van der Elst (n 10).

²⁰ See, in particular, Becht, Bolton and Röell (n 6); John Armour and others, 'Bank Governance' (2016) ECGI Law Working Paper 316/2016.Becht, Bolton and Röell (n 6); Armour and others.

²¹ See, for instance, Lucian A Bebchuk and Holger Spamann, 'Regulating Bankers' Pay' (2009) 98 Geo. LJ 247; Kevin J Murphy, 'Regulating Banking Bonuses in the European Union: A Case Study in Unintended Consequences' (2013) 19 European Financial Management 631; Sanjai Bhagat and Roberta Romano, 'Reforming Executive Compensation: Focusing and Committing to the Long-Term' (2009) 26 Yale J. on Reg. 359.

²² Se at length Chapter 4.

²³ Hansmann and Kraakman (n 4).

The first category of studies relates to proposals to alter the fiduciary duties owed by bank directors. In corporate law, directors and managers owe the corporation "fiduciary duties",²⁴ i.e.: the duty to act with care and loyalty in its best interest²⁵ and, according to the vast majority of scholars maximising shareholders value²⁶. In banking, the claim for opting out, at least partially, of the shareholders' value maximisation paradigm is particularly robust. The peculiarities of bank activities give shareholders incentives to engage in socially inefficient risk-taking.²⁷ Therefore, some authors proposed to modify the fiduciary duties owed by the management, broadening their scope and opting-out from the shareholders' centric paradigm.

In an influential study, Macey and O'Hara highlighted the vulnerabilities of bank governance well before the Global Financial Crisis.²⁸ According to the authors, the special corporate governance problems in banks weaken the case for fiduciary duties owed to shareholders only.²⁹ On the contrary, they argued that bank managers should owe fiduciary duties to equity as well as fixed claimants.³⁰ Such argument is fascinating and theoretically grounded; yet, it remains unclear how the management would be supposed to discharge its fiduciary duties in times where the best interests of shareholders and fixed claimants might diverge.³¹ Moreover, courts would be burdened with the impossible task to enforce such duties and decide on directors' liability in case of conflicting legal obligations. In other words, multiple fiduciary duties are likely to work better in theory than in practice, since

²⁴ The concept of fiduciary duties is proper of the US legal framework and scholarship. Yet, such paradigm can be used more in general to describe the functional feature of corporate law in different jurisdiction. Yet, the legal details and enforcement strategies may vary considerably cross-country, so that the general reference to "fiduciary duties" has to be understood as a simplified indication of the relation linking management and shareholders.

²⁵ Tamar Frankel, 'Fiduciary Duties', *The new Palgrave dictionary of economics and the law* (McMillan, London 1998) 127.

²⁶ Friedman (n 5). But see lately Hart and Zingales (n 5).

²⁷ Armour and Gordon (n 7) 58; De Larosière and others (n 19).

²⁸ Jonathan R Macey and Maureen O'Hara, 'The Corporate Governance of Banks' [2003] FRBNY Economic Policy Review 91. See also the post-crisis proposals, with similar outcome, by the same authors, Jonathan R Macey and Maureen O'Hara, 'Bank Corporate Governance: A Proposal for the Post-Crisis World' [2016] FRBNY Economic Policy Review 85.

²⁹ Macey and O'Hara, 'The Corporate Governance of Banks' (n 29) 97.

³⁰ ibid 102.

³¹ Bainsbridge (n 5) 1705.

they would add little to managerial duties in good times and would create spectacular legal uncertainty in bad times.

There have also been other, more radical, proposals of shifting fiduciary duties. In particular, Schwartz argued in favour of a "public governance duty"³² for directors of systemically important banks (SIFIs).³³ Such duty would entail "a duty not to engage in excessive risk-taking that could systemically harm the public".³⁴ Such a proposal could sound appealing at first; yet, at a closer scrutiny, it reveals to be even more problematic than the previous proposal. A duty to avoid the creation of systemic harms represent little more than a tautology,³⁵ and it is almost impossible to be verified in courts. Thus, if extending fiduciary duties to fixed claimants would cause legal uncertainty, imposing a public fiduciary duty would generate a much more problematic legal vacuum.

The second category of bank governance reform proposals deals with the idea of granting the State pervasive powers to tackle excessive risk-taking incentives of the management. In particular, Omarova proposed a "golden share" approach³⁶ that would grant a state official a seat in the board with pervasive veto powers should the fear of systemic or idiosyncratic crises materialise.³⁷ This is based on the idea that the state is the real residual owner of the bank as it guarantees its solvency. Therefore, the State should act as a "manager of last resort".

This approach can be criticised both for its paternalism as well as for its inability to solve the underlying problems of bank governance. It is difficult to identify functional differences between the "manager of last resort" and the mandate of the supervisor. Additionally, there are no reasons why the classic supervisory problem of forbearance and delayed action should not apply in this case. Moreover, should a State official be sued for liability,

 ³² Steven L Schwarcz, 'Misalignment: Corporate Risk-Taking and Public Duty' (2016) 91 Notre Dame L. Rev. 1.
 ³³ For a relatively similar proposal see, also, Robert Hockett, 'Are Bank Fiduciaries Special' (2016) 68 Ala. L. Rev. 1071, 1071.

³⁴ Schwarcz (n 16) 28

 ³⁵ David Min, 'Balancing the Governance of Financial Institutions' (2016) 40 Seattle UL Rev. 743, 763.
 ³⁶ Saule T Omarova, 'Bank Governance and Systemic Stability: The'Golden Share'Approach' (2017) 68 Ala. L. Rev. 1029.

³⁷ ibid 1055.

as it is likely, given the times of turmoil during which he would need to act, a state liability for corporate wrongdoing would materialise, burdening taxpayers.

A third, more promising, stream of research on bank governance focused on modifying the standard liability regime. The rest pf the section discusses both proposals to extend directors' and officers' liability³⁸ and proposals to extend shareholders' liability.

Armour and Gordon acknowledged that traditional private law tools, with special reference to tort law, are ineffective in the presence of systemic harms and that the shareholder' value maximisation paradigm incentivises excessive risk-taking.³⁹ Moreover, they observe that shareholders' maximisation strategy carried out by individual banks can even turn out to be detrimental to diversified shareholders. If bank activities generate systemic harms, they increase overall market risk, and market risk is undiversifiable.⁴⁰ Therefore, the authors argue against the application of shareholders' maximisation paradigm for systemically important financial institutions, so to make risk-takers more riskaverse. In so doing, the authors propose to override the "business judgement" rule for bank directors and officers and impose a negligence-based liability regime. Such liability would be owed to the firm and should be triggered by shareholders through derivative actions in case of material losses. It is crucial to highlight how such tort liability suit should take place before insolvency to avoid the judgement proof problem.⁴¹ This proposal attracted two main criticisms, pointing at the fact that quantifying "systemic harm" is likely to be an impossible task both for directors⁴² and courts.⁴³ The second criticism pertains specifically continental Europe, where the efficacy of such reform would be further undermined by the limited room for shareholders' derivative lawsuits.44

³⁸ Mostly based on Armour and Gordon (n 7).

³⁹ Armour and Gordon (n 8) 38 where the authors argue that "private law does not do an "imperfect job" of internalizing systemic harms; it does no job at all".

⁴⁰ ibid 39.

⁴¹ ibid 77. Such liability regime should act as a complement to other regulatory and governance measures, such as regulation of executives' pay, ibid 61.

⁴² Omarova (n 20) 1039, arguing that director might not be able to appreciate the systemic nature of bank risk-taking.

⁴³ Holger Spamann, 'Monetary Liability for Breach of the Duty of Care?' (2016) 8 Journal of Legal Analysis 337,
359.ibid. The author argues that courts might be unable to assess whether the risk undertook by director was "excessive", so that optimal liability could be close to zero

⁴⁴ Martin Gelter, 'Why Do Shareholder Derivative Suits Remain Rare in Continental Europe' (2011) 37 Brook. J. Int'l L. 843.

A second liability-based proposal is to, somehow, re-enact the extended liability of bank shareholders, partially overcoming the limited liability of the corporation.⁴⁵ This proposal builds on the old US regime of double shareholder's liability for banks. It served the purpose of "insuring" bank depositors in the absence of a public deposit insurer, minimising the risk of bank run.⁴⁶ The double liability regime ceased to exist after the creation of FDIC.⁴⁷ The double liability implied that shareholders' liability was not limited to the committed capital used to purchase the shares, but in bankruptcy was extended up to the par value (book value) of the shares each shareholder owned.

Relaxing the limited liability of shareholders, so the argument goes, would undermine the roots of excessive risk-taking incentives. Accordingly, it would induce equity holders to internalise the externalities generating by the shareholders' value maximisation paradigm. Lately, Macey and co-authors⁴⁸ reconsider the double liability rule, proposing an "extended" liability regime for SIFIs' shareholders. Under this proposal, the amount of the extension would crucially depend on the centrality of each institution in the financial network.⁴⁹ In other words, the more systemic externalities an institution is capable of creating because of its size, interconnectedness and complexity, the higher shareholders' liability should be.

Again, such a proposal sounds very appealing from a theoretical perspective. However, its implementation appears cumbersome: the enforcement of extended liability in court can be difficult and time consuming, leaving aside the potential judgment-proof problem of shareholders. Moreover, such double or extended liability only works as a gone concern tool, so that its potential rest on the incentives provided to shareholders and ultimately on the credibility of the threat to impose such liability.

⁴⁵ John Armour and others, *The Anatomy of Corporate Law: A Comparative and Functional Approach* (2017) ch 1; Giuseppe Dari-Mattiacci and others, 'The Emergence of the Corporate Form' (2017) 33 The Journal of Law, Economics, and Organization 193.

⁴⁶ See Macey and Miller (n 40) ch 31.; and Macey, J. R., & Miller, G. P. (1993). Double liability of bank shareholders: a look at the new data. Wake Forest L. Rev., 28, 933.

⁴⁷ Federal Deposit Insurance Corporation, that from 1933 act as the insurer of US deposits.

⁴⁸ Romano, Enriques and Macey (n 23)

⁴⁹ On financial regulation taking into consideration the specific topology of the financial system and building on network theory, Luca Enriques, Alessandro Romano and Thom Wetzer, 'Network-Sensitive Financial Regulation' [2019] The Journal of Corporation Law (forthcoming).see ibid.

In contrast, Armour and Gordon's proposal is meant to work as a going concern tool, as directors' and officers' liability is triggered by material losses while the bank is still solvent. Finally, this proposal attracted another, perhaps more fundamental, line of criticism, pinpointing the potential adverse spillovers of such regime in times of financial turmoil and liquidity scarcity. Such adverse spillovers can work in two directions. First, the liquidity of the stocks with enhanced liability would quickly dry out once the bank approaches insolvency, further decreasing the market value of equity. Consequently, this would endanger the resilience of the troubled bank at the worst possible time.⁵⁰ Second, issuing fresh equity would become extremely expensive, especially when it is more needed, i.e.: when insolvency is approaching.

Finally, the last stream of literature considered here focused on the role of bank creditors and debt governance.⁵¹ Such literature largely consists of proposals for letting creditors' representatives seating on the board, building on the paradigm of German labour codetermination. Davies and Hopt critically reviewed such literature in a recent paper,⁵² arguing that the scale of benefits of such proposals is likely to be rather limited; whereas, the legal problems arising from such a governance adjustment would be considerable. The first of these problems is the compatibility of creditors representation in the board and the codetermination system.⁵³

This contribution adds to this last stream of research and focuses on the role of creditors. However, it departs from it quite considerably. Sections 3 and 4 discuss in details the theoretical foundations of directly including bail-inable creditors in corporate governance. For the time being, it suffices to say that the distinctive aim of such proposal is to provide creditors with effective tools to police the building-up of excessive risk,

⁵⁰ On the disruptive effect of market and funding illiquidity, see Markus K Brunnermeier and Lasse Heje Pedersen, 'Market Liquidity and Funding Liquidity' (2009) 22 Review of Financial studies 2201. More in general on the role of liquidity in financial crises, see Markus K Brunnermeier, 'Deciphering the Liquidity and Credit Crunch 2007-2008' (2009) 23 Journal of Economic perspectives 77.

⁵¹ Most of the literature related to creditors of banking institutions deal with their (in)ability of creditors to monitor and impose discipline on the borrowing bank. This topic has been largely dealt with also in the context of the newly established resolution framework. See Chapter 4. See also, Tobias H Tröger, 'Too Complex to Work: A Critical Assessment of the Bail-in Tool under the European Bank Recovery and Resolution Regime' (2018) 4 Journal of Financial Regulation 35.

⁵² Paul Davies and Klaus J Hopt, 'Non-Shareholder Voice in Bank Governance: Board Composition, Performance and Liability' (2018) 413.

replicating their role in non-financial institutions while accounting for the specificities of bank governance.

Finally, it is important to stress how various proposals put forward in the last decade are not necessarily mutually exclusive. In particular, a modified liability regime represents a good complement to this proposal; whereas, the proposals pointing at including creditors in bank governance substitute proposals aiming at modifying fiduciary duties or granting governance rights to the State.

3. Good governance and the Role of Creditors

Granting (some) governance rights to creditors in solvent banks represents an unusual proposal from a corporate finance and corporate law perspective. Voting rights are usually allocated to shareholders as residual claimants on corporate assets.⁵⁴

Shareholders, so the traditional argument goes, have the incentive to maximise the overall value of the corporation since the value of their claim increases as the overall value of the corporation increases. Consequently, shareholders are better positioned to maximise social welfare. On the contrary, debtholders are to fixed claimants whose claim is independent from the value of the corporation as long as it is solvent. Therefore, so long as the corporation is solvent, creditors protect their fixed claim through monitoring and contractual arrangements.⁵⁵ On the other hand, in insolvency creditors have better incentives to maximise the liquidation value of the firm and, thus, increasing social welfare. Therefore, in insolvency, creditors become the "owners" of the corporation,⁵⁶ and most of the decision rights are allocated to them.⁵⁷

From this brief and necessarily simplified overview, the clash between the conventional wisdom on corporate governance and the proposal of granting governance rights to creditors is clear. On the other hand, the fact that bank governance is special has already

⁵⁴ Easterbrook and Fischel (n 1).

⁵⁵ For a broad overview, see Armour and others (n 47) ch 5.

⁵⁶ Jean Tirole, *The Theory of Corporate Finance* (Princeton University Press 2006) 389.

⁵⁷ In Coasian terms, in insolvency creditors are the ones that value control rights the most. Ronald H Coase, 'The Problem of Social Cost' (1960) 3 ournal of Law and Economics 1.

been highlighted.⁵⁸ Hence, this section discusses the distinctive features of bank governance in relation to creditors and highlights how such features build a strong case for regulatory intervention granting them governance rights. First, this section discusses the reasons leading to standard debt governance tools to be ineffective. Second, it proposes some on the welfare implications of effective debt governance in general and with specific reference to financial institutions. Finally, the discussion encompasses the potential positive spillovers in terms of legal certainty and credibility of the resolution framework.

Creditors usually protect their entitlements⁵⁹ from opportunistic behaviours of the management imposing market discipline⁶⁰ through monitoring. Furthermore, debt contracts are used as a device to allocate control rights to creditors contingent on future and uncertain events.⁶¹ However, previous chapters showed that in banking such channels are by and large foreclosed to creditors, making debt governance inefficient and ineffective.⁶² Thus, one of the "special features" of bank governance is that debt governance simply cannot work as in non-financial corporations.

Most of the creditors of modern banks do not have proper incentives to discipline their borrowers toward long-term solvency. Junior unsecured creditors are the category that seems better positioned to exert efficient discipline. In contrast, previous research showed how market discipline through monitoring is impaired in banking because of the opacity of bank assets and the persistence of an implicit guarantee on bank solvency.⁶³ The possibility of the new resolution to increase market discipline has been heavily debated. It seems that

⁵⁸ Becht, Bolton and Röell (n 6).

⁵⁹ See the definition of Corporate Governance in Andrei Shleifer and Robert W Vishny, 'A Survey of Corporate Governance' (1997) 52 The journal of finance 737. The authors define corporate governance as "the ways in which suppliers of finance to corporations assure themselves of getting a return on their investment". ibid 737.

⁶⁰ Defined as "ability of financial markets to provide signals leading borrowers to engage in projects consistent with their solvency". See Timothy D Lane, 'Market Discipline' (1993) 40 IMF Staff Papers 53, ch 55.

⁶¹ Philippe Aghion and Patrick Bolton, 'An Incomplete Contracts Approach to Financial Contracting' (1992) 59 The review of economic Studies 473.

⁶² See Chapters 4-6.

⁶³ See Chapter 4. See also Mark J Flannery and Robert R Bliss, 'Market Discipline in Regulation: Pre-and Post-Crisis' in Allen N Berger, Philip Molyneux and John OS Wilson (eds), *Oxford Handbook of Banking* (3rd edn, Oxford Handbook of Banking (3rd edition), Oxford University Press, forthcoming 2018).

the lack of credibility, the complexity⁶⁴ and the legal design⁶⁵ of the resolution impair the possibility of bail-inable creditors to impose efficient ex-ante discipline.

A similar argument holds for contractual protection. Previous research showed that the typical covenants attached to debt contracts to protect their entitlements are not available, as they would disqualify junior instruments from capital and MREL eligibility.⁶⁶ There is, indeed, a trade-off between ex-ante discipline through contracts and financial stability. Breaching a covenant usually provides the right to speed up the repayment. In non-financial corporations, this provides incentives not to breach the covenant in the first place. However, should the bank enter in financial difficulties and breach a covenant, a contractual right to early repayment would cause a flow of funds that are, instead, supposed to be stable such as senior unsecured debt or hybrid capital instruments.

Given the limited possibility to protect credit entitlements through usual mechanisms, the funding models of banks adjust accordingly, making long-term unsecured debt a less attractive and more costly way to fund bank activities. On the contrary, other sources of funding, such as short term⁶⁷ and secured debt, arose as cheap and attractive channels. The excessive reliance on such source of funding made banks less stable and more vulnerable to liquidity shocks.⁶⁸ On the other hand, unsecured creditors pre-eminently relied on the implicit guarantee of the State on bank solvency as a way of protection. This kept the cost of capital low, giving banks an implicit funding subsidy over other corporations.⁶⁹ Such implicit guarantee was, allegedly, eliminated with the post-crisis

⁶⁴ Tröger (n 53).

⁶⁵ See, again, Chapter 4.

⁶⁶ See Chapter 5, Section 3.

⁶⁷ See Patrick Bolton, 'Corporate Finance, Incomplete Contracts, and Corporate Control' (2013) 30 The Journal of Law, Economics, & Organization i64, 75. Bolton argues that excessive reliance on short term funding for banks represent an inefficient equilibrium caused by limited commitment problems; namely, nonexclusivity. This view, based on the incomplete contract theory, is against the view according to which short term funding represent an optimal capital structure in banking to discipline management. On this, see Douglas W Diamond and Raghuram G Rajan, 'A Theory of Bank Capital' (2000) 55 The Journal of Finance 2431.

⁶⁸ Brunnermeier and Pedersen (n 52)..

⁶⁹ João AC Santos, 'Evidence from the Bond Market on Banks''Too-Big-To-Fail'Subsidy' [2014] Economic Policy Review 29.

regulatory framework, so that the cost of long-term unsecured debt should rise considerably.⁷⁰

Therefore, providing effective tools for protecting the entitlements of creditors would make long-term unsecured debt marginally cheaper as compared with current bail-inable securities. Moreover, it should make these securities comparatively more attractive as compared with other sources of funding that are less stable and more prone to liquidity shocks. This represents the first relevant theoretical advantage of granting governance rights to unsecured creditors. It is worth noting that if long-term creditors have tools to protect their entitlements the cost of capital will decrease.⁷¹ However, lower cost of capital is ontologically different from the implicit subsidy provided by bailout expectations. It rests on a mechanism that is able to impose discipline on the activities of the borrower, whereas bailout expectations generate nothing but moral hazard.⁷² Moreover, making long-term non-runnable debt marginally more attractive to issue and hold, as compared with short-term/secured debt would ease the task of building sufficient MREL capacity.⁷³ Consequently, it would make the issuing bank more resolvable ex-ante.

Coming to the welfare implications of efficient and effective debt governance, there is nowadays ample evidence that creditors are active players in corporate governance also outside of insolvency and that their influence generates value.⁷⁴

⁷⁰ As long as the elimination of the State guarantee is credible. For fist, partial, empirical evidence see Fabrizio Crespi, Emanuela Giacomini and Danilo V Mascia, 'Bail-in Rules and the Pricing of Italian Bank Bonds' (2018) 25 European Financial Management 1321.

⁷¹ On the inverse relation between debt interest yield and the presence of covenants; see, Bradley, M., & Roberts, M. R. (2015). The structure and pricing of corporate debt covenants. The Quarterly Journal of Finance, 5(02), 1550001.

⁷² Franklin Allen and others, 'Moral Hazard and Government Guarantees in the Banking Industry' (2015) 1 Journal of Financial Regulation 30.

⁷³ On the problem of building enough MREL capacity, especially linked to the holders of MREL Instruments, see Chapter 6, Section 2 and 3. See also Dominique Laboureix, speech at 6th Industry Dialogue: 2017 MREL Policy, accessible at

https://srb.europa.eu/sites/srbsite/files/20171120_6th_industry_dialogue_item_2_mrel_dominique_labou reix. pdf. The estimation considers a sample of 76 banks, accounting for almost 80% of total assets of the banks subject to SRB authority

⁷⁴C Whitehead, 'Creditors and Debt Governance' (2012) 68 Research Handbook on the Economics of Corporate Law 75, 76.

In particular, Nini and co-authors⁷⁵ studied the impact of covenants violation on solvent non-financial firms. They demonstrated that the creditors played an active role both through the available legal mechanisms, explicitly forcing the renegotiation of the credit agreements and behind the scene.⁷⁶ Such an engagement leads to two notable results. First, unsurprisingly, led the breaching borrower to more conservative investment and distribution policies, reducing risk shifting and asset dilution, reducing the creditors' risk of bearing losses. Second, the engagement "produces" value for the corporation. Surprisingly, the corporations breaching covenants experienced positive abnormal stock returns in the quarters after the breach happened and stayed constant in the following quarters.⁷⁷ This shows that the ineffectiveness of debt governance in banking prevents from enjoying these welfare gains.⁷⁸

Moreover, the ability of debt governance to reduce the agency costs of debt and, in particular, risk-shifting and optimal risk-taking incentives in banking has even more important welfare implications. As previously discussed, there is ample evidence that shareholder centric governance paradigm incentivises excessive risk-taking, especially in good time, and that such excessive risk-taking contributes to build-up systemic risk. Effective debt governance would provide a "natural" solution for adjusting such shareholder centric paradigm.

Thus, granting governance rights to creditors, hence making debt governance effective, has the potential for early policing of disproportionate risks in good time, complementing the role of the supervisor. For instance, a perpetual AT1 holder might not be willing to let the bank take such risk and might block it should she have the tools to do so.

Finally, granting governance rights to creditors might generate a positive by-product, increasing legal certainty in resolution. The protection of property entitlements of creditors

⁷⁵ Greg Nini, David C Smith and Amir Sufi, 'Creditor Control Rights, Corporate Governance, and Firm Value' (2012) 25 The Review of Financial Studies 1713.

⁷⁶ For anecdotal evidence on behind the scene creditors engagement see Douglas G Baird and Robert K Rasmussen, 'Private Debt and the Missing Lever of Corporate Governance' [2006] University of Pennsylvania Law Review 1209.

⁷⁷ Nini, Smith and Sufi (n 77) 1747.

⁷⁸ According to the so-called "representation hypothesis", the supervisor should substitute debt governance, mimicking market forces. See Dewatripont Mathias and Jean Tirole, *The Prudential Regulation of Banks*, vol 1 (MIT Press 1994).

subject to resolution represented one of the major criticisms raised in legal scholarship against bank resolution.⁷⁹ The use of the bail-in tool, so the argument goes, would violate the right to property of the creditors bearing losses. In the first cases disputed in front of the ECJ, the existence of the no-creditors-worse-off rules considered a decisive argument in favour of the constitutionality of bail-in.⁸⁰ Such rule implies that creditors cannot bear higher losses in resolution than the amount of losses they would have borne in the counterfactual liquidation scenario.⁸¹ However, the practical judicial implementation of such safeguard is more complicated than it might seem at first glance, generating a great ex-ante uncertainty and negatively impacting the incentives of creditors to exert discipline.⁸² In this regard, Chiu argued that: "the 'no creditor worse off' principle could also convince bail-inable debt holders that taking a back seat in monitoring would make no difference".⁸³

Arguably, ex-ante governance rights provide better protection to property entitlements than an uncertain cap on losses that can be borne in resolution.⁸⁴ Therefore, providing exante market-based safeguards could substitute for the ex-post judicial (and uncertain) safeguard in terms of property right protection. This, in turn, would have two more general positive consequences. First, it would enhance the incentives of bail-inable creditors to impose market discipline on the borrowing banks. Second, it would make resolution more credible, eliminating one material impediment to resolution. Should the NCWO rule be breached, the creditors are entitled to ex-post compensation paid out by the Single Resolution Fund.⁸⁵

Granting governance rights to junior unsecured (i.e.: bail-inable) creditors in order to make debt governance work also in banking firms seems to be theoretically well-grounded.

⁷⁹ Karl-Philipp Wojcik, 'Bail-in in the Banking Union' (2016) 53 Common Market Law Review 91, 117.

⁸⁰ Judgment of the Court (Grand Chamber) of 19 July 2016. Tadej Kotnik and Others v Državni zbor Republike Slovenije. Case C-526/14

⁸¹ For more details on the no-creditors-worse-off rule see VPG de Serière, 'No Creditor Worse Off in Case of Bank Resolution. Food for Litigation' (2016) 31 Journal of International Banking Law and Regulation 376.

⁸² For a detailed analysis of the impact of NCWO rule on incentives, see Chapter 4, Section 4.3.

⁸³ Iris HY Chiu, 'Corporate Governance: The Missing Paradigm in the Mandatory Bail-in Regime for Creditors of Banks and Financial Institutions' [2014] Journal of business law 611, 627.

⁸⁴ For the proprietary foundation of property rights see John Armour and Michael J Whincop, 'The Proprietary Foundations of Corporate Law' (2007) 27 Oxford Journal of Legal Studies 429.

⁸⁵ Article 75 and 78 BRRD.

Nonetheless, finding suitable legal tools for efficiently implementing such a proposal is not straightforward. Many questions arise, none of which have an unchallenging answer. Which creditors should have governance rights? Should this right be contingent on financial deterioration? And, crucially, which kind of rights is proportionate to grant? Sections 4 and 5 attempt to solve these puzzling issues and develop a suitable legal framework interacting with various areas of law and regulation; namely, resolution regulation, supervision law and national corporate laws.

4. A new Governance Status for Creditors: the Boundaries

The remainder of the chapter develops the core of the policy proposal and highlights why and how it should achieve its overarching goal: fine-tuning bank governance and the resolution framework. Such overarching goals has a twofold nature: first, it aims at addressing the specificities of bank governance, with particular regard to debt governance. Second, it aims at enhancing the resolvability of financial institutions and, consequently, its credibility.

The chapter argues in favour of a "structured" legal approach in granting governance rights to bail-inable debtholders. Such a "structured" approach should primarily consist of a general principle of "sufficient accountability" toward bail-inable creditors in corporate governance. Building on this general principle, the reform should also provide a limited set of core rights at EU law level, to be implemented and detailed nationally according to national corporate laws.

Before discussing the advantages of such a "structured" approach, it is necessary to set the stage of the policy proposals, considers two crucial features defining its boundaries. Namely, Section 4.1 deals with defining the pools of creditors to which the governance rights should be granted. Subsequently, Section 4.2 wonders whether such rights should be contingent on the deterioration of banks' solvency or should they be active at all time. Thence, once the boundaries are defined, Section 5 digs into the contents of the proposal and discusses its advantages.

4.1 Creditors Holding the Governance Rights

The first step to build a coherent policy proposal is to identify the pool of creditors whose position and incentives are compatible with limiting disproportionate risks. In so doing, this section proceeds by subtraction, skimming the unfit categories of creditors until only the pool of creditors that are fit for purpose remains.

First, it is easy to rule out all the creditors whose claim is not subject to bail-in.⁸⁶ Should the bank enter in resolution, those are not going to bear losses shareholder-like as a consequence of an administrative decision of the Resolution Authority. Therefore, their incentives cannot be considered appropriately aligned with the willingness of limiting risktaking ex-ante. As argued in the previous Section, creditors seek protection through other mechanisms; for instance, security interests on some of the bank's assets. Moreover, there are examples of short-term creditors that are radically incompatible with holding governance rights. Think, for instance, of depositors or repo counterparties.

Second, not all bail-inable creditors are equal, at least from an ex-ante perspective. There are considerable discrepancies between the pool of creditors that can be subject to bail-in and a subset of those that are eligible for MREL purposes.⁸⁷ Only committed, longterm non-runnable capital⁸⁸ can be counted for MREL purposes. Therefore, MREL functionally represents an additional capital requirement to be matched with own funds⁸⁹ and other eligible liabilities. Meeting such a requirement should assure that the institution has a solid base of long-term funding in its balance sheet and consequently it is, at all times, resolvable.

Such functional goal cannot be assured by any liability that, should the bank enter in resolution, is theoretically bail-inable. For instance, for the deposits exceeding the insured amount (i.e.: $100.000 \in$), the uninsured amount is bail-inable;⁹⁰ yet it is not MREL eligible.⁹¹

⁸⁶ See Article 44 BRRD. For an in-depth discussion, see also Chapter 4.

⁸⁷ Minimum Requirement for Own Funds and Eligible Liabilities, See Articles 45 and following BRRD.

⁸⁸ Capital is here used in its generic meaning of source of funding.

⁸⁹ i.e.: capital in technical terms, as disciplined by the Capital Requirement

⁹⁰ See the combined provision Article 44(2)(a) excluding covered deposits from bail-in and Article

⁹¹ Article 72a(2)(b) Capital Requirement Regulation, Regulation (EU) No 575/2013 of the European Parliament and of the Council of 26 June 2013 on prudential requirements for credit institutions and investment firms and amending Regulation (EU) No 648/2012. OJ L 176, 27.6.2013.

In the same way, a junior bond with a remaining maturity of 8 months is bail-inable in resolution⁹² but does not count toward MREL.⁹³

MREL eligible creditors are better positioned to influence bank governance, and their incentives are more in line with socially desirable outcomes.

At this point, one might wonder whether the subtraction exercise is completed, and MREL eligible creditors are the appropriate pool of creditors. MREL eligible creditors represents an extremely heterogeneous class. The common characteristics of such broad class of creditors are that all MREL liabilities are long-term, with at least one year of residual maturity, and are not secured in any way by the issuing bank. Beyond such common denominators, AT1 perpetual Cocos are as MREL eligible as five years Senior Bonds are. Clearly, the risk of bearing losses in resolution sharply differs between the two types of MREL creditors⁹⁴ and, arguably, also monitoring and disciplining incentives differ accordingly. Therefore, one might wonder whether it is reasonable to grant the same governance rights to these different types of creditors. Or, in other words, should the subtraction exercise go any further?

Thus, there are arguments to further restricting the pools of "suitable" creditors, or at least to differentiate the rights to grant to different classes of equally MREL eligible creditors. In contrast, two other elements are pushing to stop the subtraction exercise and grant the same governance rights to all MREL creditors.

The first argument relates to how MREL requirements are calibrated by the Resolution Authority.⁹⁵ The calibration of MREL considers the threshold of 8% of own funds and eligible liabilities⁹⁶ that needs to be bailed-in before accessing any resolution financing arrangement.⁹⁷ Therefore, at least in theory, if the bank enters in resolution, all MREL

⁹² Article 72(c)(1) CRR.

⁹³ Among the qualitative requirements to count as MREL instruments, the one of utmost importance is to have a residual maturity of at least 12 months. For more details on the legal framework pertain to MREL instruments see Chapter 4. For a critical assessment of such framework, see also Tröger (n 15).
⁹⁴ Article 46 BRRD.

⁹⁵ On the differences between MREL and Total Loss Absorbency Capacity for Globally Systemic Banks, as designed by the Financial Stability Board, see Review of the Technical Implementation of the Total Loss Absorbing Capacity (TLAC) Standard, 2 July 2019.

⁹⁶ Article 45b (4) BRRD.

⁹⁷ Article 44(5) BRRD.

capital is going to be bailed-in before public funds are granted to the ailing bank. This harmonises, to some extent, the incentives of MREL creditors.

The second argument is more pragmatic and aims to avoid over-complications of an already complex proposal. MREL creditors share the core functional characteristics highlighted in Section 3 and, crucially, they are already identified for different regulatory purpose.

Therefore, MREL creditors should be considered as a class when granting governance rights. Moreover, alternative methods can better differentiate the position of different creditors. For instance, the voting rights of each creditor can be weighted for a metric of the riskiness of different claims. It is not necessary to go deep into the details of how such mechanism should work. A simple example suffices to set the general idea: a creditor exposed for 1 million euro in T2 capital instruments should have more voting power than another creditor exposed for the same amount in senior unsecured debt.

As a further refinement, an ad hoc exclusion within MREL creditors is still warranted. For the purpose of this proposal, the so-called "internal MREL" exposures should not be considered.⁹⁸ Internal MREL consists of eligible exposures of the holding toward its subsidiaries so to assure that the group as a whole is resolvable with a Single Point of Entry Strategy (SPOE).⁹⁹ Thus, internal MREL has nothing to do with imposing discipline on the borrower, so that granting governance rights would make no sense as it would simply give rights to the holding that is already controlling the subsidiary.

Finally, it is now time for tackling the natural and foremost critique to this policy proposal: can it work? The concern is legitimate, as granting governance rights to creditors is rather unconventional. However, some elements suggest that creditors' rights could marginally improve bank resilience and resolvability. Chapter 6 documented the complex

⁹⁸ The resolution of complex banking groups represents one of the major challenges for financial stability. On this intricate matter, see Jens-Hinrich Binder, 'Cross-Border Coordination of Bank Resolution in the EU: All Problems Resolved?', *Research Handbook on Cross-Border Bank Resolution* (Edward Elgar Publishing 2019). More specifically, on the governance of banking groups and on its impact on stability and resolvability, see Thom Wetzer, 'In Two Minds: The Governance of Ring-Fenced Banks' (2019) 19 Journal of Corporate Law Studies 197.

⁹⁹ On preferable resolution strategy, see Jeffrey N Gordon and Wolf-Georg Ringe, 'Bank Resolution in the European Banking Union: A Transatlantic Perspective on What It Would Take' (2015) 115 Colum. L. Rev. 1297. (arguing in favour of a Single Point of Entry Strategy).

and mixed trends of the bail-inable creditors' composition. A clear path emerging from the evolution of such composition is the increasing share of professional investment in MREL eligible securities. Moreover, bank crossholdings, although stable, are shifting toward more senior positions.¹⁰⁰ Therefore, it can be argued that MREL creditors are increasingly professional investors that are capable and willing to influence bank governance so to assure of getting a return on their investment.¹⁰¹

Despite the above, in some countries, retail investment in junior bail-inable positions continue to be a burdensome legacy issue. For what is here of interests, granting governance rights to retailers represents a suboptimal outcome, as they are neither capable nor willing to efficiently exercise these rights because of insufficient sophistication and rational apathy. Moreover, retail holdings of bail-inable securities make resolvability increasingly difficult and, ex-ante, not credible. For all these reasons, a final refinement to the subjective scope of this proposal is necessary. The governance rights embedded in the securities should remain inactive so long as the securities are held by non-professional investors.¹⁰² This solution is milder than an outright ban on retail investors proposed by many scholars and policymakers.¹⁰³ Moreover, it is consistent with the approach taken by the EU legislation in the 2019 revision of the BRRD that aims to foreclose as much as possible the possibility of retailers to hold securities counting toward MREL.¹⁰⁴

In terms of the legal design of the reform, on top of the other requirement to include liabilities in MREL, Article 45 of the BRRD should require to include in MREL securities a contractual term granting the holders of such securities the rights conferred upon them, as specified in Section 5.

In the proceeding of the analysis, "MREL creditors" indicates the subset of bank creditors upon which governance rights should be conferred and has to be understood with

¹⁰⁰ See ECB, 'Financial Stability Review - November 2016' (2016). In Box 7 there is the analysis: "The evolution of Sectoral holding of bail-inable debt".

¹⁰¹ Shleifer and Vishny (n 61).

¹⁰² On the definition of "professional investor", see the Annex 2 to the Markets in Financial instruments Directive (MiFid 2). Directive 2014/65/EU of The European Parliament and Of the Council of 15 May 2014 on markets in financial instruments and amending Directive 2002/92/EC and Directive 2011/61/EU. OJ L 173, 12.6.2014.

¹⁰³ Martin R Götz and Tobias Tröger, 'Should the Marketing of Subordinated Debt Be Restricted/Different in One Way or the Other? What to Do in the Case of Mis-Selling?' (2016)..
¹⁰⁴ Article 44a BRRD.

this meaning unless it is explicitly stated otherwise. On the contrary, "bail-inable creditors" or simply "creditors" indicate the more general concepts discussed above in this section.

4.2 The Nature of Governance Rights: Contingent v Absolute Rights

The second step toward the definition of a new governance status for MREL creditors is to define the nature of their rights. In particular, defining whether such rights should be contingent on the deterioration of bank financial conditions.

In non-financial firms, debt governance mainly consists of control rights allocated through contracts and contingent on future events. For instance, a standard financial covenant can grant the creditors a right to speed-up the repayment of their exposure if the leverage of the borrower increases, breaching a contractually pre-specified threshold.¹⁰⁵ More in general, debt contracts can be seen as a tool to contingently allocate control¹⁰⁶ to creditors once the financial situation of the borrowing firm deteriorates to such a point that makes control rights more valuable to creditors than shareholders.¹⁰⁷

Contingently allocate control over corporate assets and decision-making to creditors decrease the agency costs of debt. Managers and shareholders are interested in retaining control so that they have appropriate incentives to avoid situations that are detrimental for the creditors and trigger the covenant. Additionally, should this situation anyway materialise, creditors are entitled with rights to minimise their risk of bearing losses. From an ex-ante perspective, this reduces the cost of debt capital, so that the borrowing firm is willing to restrict the set of available actions to be taken in the future to access cheaper funds.¹⁰⁸

Therefore, if the governance status of MREL creditors is meant to merely mimic debtgovernance in non-financial firms, rights should be contingent. However, a clear parallel with the analysis by professors Armour and Gordon on directors' liability arises.¹⁰⁹ They

¹⁰⁵ See, for instance, Adam B Badawi and Elisabeth de Fontenay, 'Contractual Complexity in Debt Agreements: The Case of EBITDA' (2019) Duke Law School DP 2019-67.

¹⁰⁶ Aghion and Bolton (n 63).

¹⁰⁷ Coase (n 59).

¹⁰⁸ There is an ample theoretical literature in corporate finance based on the limited possibility to credibly commit ex-ante. For an overview of this literature see Bolton (n 69) 71. ¹⁰⁹ Armour and Gordon (n 7).

persuasively argue that: "private law does not do an 'imperfect job' of internalising systemic harms; it does no job at all".¹¹⁰ The same claim can be advanced for debt governance: debt governance does not work in banking,¹¹¹ but even if it worked as in non-financial firms, it would not be able to internalise any of the systemic risk generated via banking activities.

As previously discussed, the aim of granting MREL creditors a new governance status is not just to make debt-governance more effective, but to propose debt governance as a complement to regulation and supervision in enhancing the resilience of single institutions and the system as a whole.¹¹² Therefore, the governance status of bail-inable creditors must consist of absolute rights that can be exercised in any state of the world.

Moreover, it is worth noting that granting rights contingent on the financial deterioration of the bank would add little, if any, advantage and might generate serious negative consequences. Once the bank enters into troubles, it gathers the attention of the supervisor and the market. At this point, both compliance duties and funding costs are likely to increase. In a moment of hardship, granting rights to MREL creditors would merely increase such hardship, with little room to impose higher or better discipline.¹¹³ On the contrary, the governance status of bail-inable creditors intendes to ease early policing of excessive risk-taking.

In conclusion, MREL securities should embed absolute, non-state contingent, governance rights. Such rights should act as a complement to supervision to prevent the pile-up of risk, especially in good times.

5. A new Governance Status for Creditors: the Contents

Having identified who should be granted with governance rights and when such rights should be exercised, the next step is to define the contents of the rights that are necessary

¹¹⁰ ibid 38.

¹¹¹ For the reasons highlighted in Section 3.

¹¹² On the potential of governance arrangement to contribute in reaching macro-prudential targets, see Enriques, Romano and Wetzer (n 51).

¹¹³ On retrospective effectiveness of discipline see Constantinos Stephanou, 'Rethinking Market Discipline in Banking: Lessons from the Financial Crisis' (2010) 5227.

and sufficient to achieve the goal of this proposal, i.e.: complement financial regulation and supervision in minimising the creation of systemic externalities due to excessive risk-taking.

Defining the contents of the governance status of bail-inable creditors represents a tricky exercise as it faces two main perils: to "under-entitle" or to "over-entitle" bail-inable creditors. Under the first peril, bail-inable creditors have few and ineffective rights and are unable to positively influence the decision-making of the borrowing bank. Conversely, if creditors are over-entitled with many and highly intrusive rights, the control powers of shareholders and the necessary discretion of the management over corporate decisions would be hindered.

These scenarios are both value-decreasing. In case of under-entitlement little, if anything, would change in terms of preventing excessive risk-taking; whereas, non-trivial costs for setting up and running the new governance arrangements would be borne by the banks and probably by the creditors themselves, at least indirectly. On the other hand, in case of over-entitlement, the limitation of entrepreneurship would be excessive, with the risk of letting the bank passing on positive net present value projects for the mere reason that these entail some risk.

The exact calibration of the necessary and sufficient rights to grant bail-inable creditors is, therefore, at the same time, crucial and complex. Such complexity derives from two crucial idiosyncrasies: the heterogeneity of banks business and funding models (and the specific risks they entail) and the heterogeneity of national corporate laws.

That being the case, EU law should limit itself to identify a limited set of core rights and complement these with a general clause requiring both Member State and individual institutions to be sufficiently accountable toward bail-inable creditors in their decision-making process and governance arrangements. What follows represents a first, tentative, attempt to operationalise this intuition: Section 5.1 discusses the desirability of a general clause including MREL creditors in the governance arrangements of banks; whereas, Section 5.2 proposes substantive rights to grant MREL creditors at EU level.

5.1 The General Principle

The general clause of "sufficient accountability" should be codified as one of the principles on governance arrangements itemised by Article 88 of the Capital Requirement Directive¹¹⁴. The principle should require the management body to set up governance mechanisms assuring sufficient accountability toward bail-inable creditors.

Sufficient accountability represents a vague and open-ended concept and voluntarily so. The goal of this principle is that banks, in their decision-making process, should take into account the interests of MREL creditors not to suffer losses and to receive the principal amount and interests when those come due. The generic formulation of the principle is important for two reasons. First, it allows individual banks to set up governance arrangements that are consistent with their business model and organizational structure and to experiment with different arrangements. Second, it gives the supervisor with some flexibility in determining the "sufficiency" of the governance arrangements of individual banks, allowing for a proportionate implementation of the principle.

This general principle should be further specified, expressly stating that these governance mechanisms should comply at least with the minimum set of rights provided by EU law, unless the law grants ad hoc exemptions for proportionality reasons.

Section 5.2 discusses the set of rights that should be granted to MREL creditors. Before moving to that part of the analysis, it is important to discuss the advantages of the "structured" legal design outlined so far. Two main advantages are worth mentioning.

First, including the "sufficient accountability" clause among the general principles of bank governance arrangements makes the implementation of such standard a matter that

¹¹⁴ The other general principles listed in Article 88 CRD are:

⁽a) the management body must have the overall responsibility for the institution and approve and oversee the implementation of the institution's strategic objectives, risk strategy and internal governance;

⁽b) the management body must ensure the integrity of the accounting and financial reporting systems, including

financial and operational controls and compliance with the law and relevant standards;

⁽c) the management body must oversee the process of disclosure and communications;

⁽d) the management body must be responsible for providing effective oversight of senior management;

⁽e) the chairman of the management body in its supervisory function of an institution must not exercise simultaneously the functions of a chief executive officer within the same institution, unless justified by the institution and authorised by competent authorities

the competent authority has the mandate to continuously supervise.¹¹⁵ The review and evaluation of the bank's governance arrangements falls within the so-called "Supervisory Review and Evaluation Process" (SREP),¹¹⁶ to be carried out by the competent authority at least annually. This would make the Competent Authority, hence the Single Supervisory Mechanism for the Euro Area, the gatekeeper of the governance status of the MREL creditors, overseeing its sufficiency at least on a yearly basis.

For assessing the compliance with the standard of "sufficient accountability" transparently and predictably, the European Banking Authority should issue appropriate guidelines. Such guidelines should allow for the widest diversification possible as for the specific governance arrangement to be considered "sufficient", so to encourage experimentation and anti-herding behaviours.¹¹⁷

Second, this proposal allows for a proportionate and, potentially network sensitive, implementation of the "sufficient accountability" standard. Including the evaluation of the "sufficient accountability" within the SREP gives a gatekeeping responsibility to the competent authority which is legally mandated to apply it proportionally.¹¹⁸ Clearly, what can be deemed sufficient for a medium-size regional bank is likely not to be considered so for a Globally Significant Bank (G-SIB). In this regard, requiring different governance arrangements to different banks can be considered a direct application of the proportionality principle. Looking at this from a substantive perspective, the differentiated application of the "sufficient accountability" principle can be implemented in a "network sensitive" manner,¹¹⁹ accounting for the contribution of each institution to systemic risk.¹²⁰ In so doing, the competent authority should require higher standards for those banks generating higher systemic externalities because of their centrality and interconnectedness within the financial network.¹²¹

¹¹⁵ Article 98(7) CRD.

¹¹⁶ Article 97 CRD.

¹¹⁷ Ian Ayres and Joshua Mitts, 'Anti-Herding Regulation' (2015) 5 Harv. Bus. L. Rev. 1.

¹¹⁸ Proportionality can be considered a general principle of EU administrative law as an application of the principle of "open, efficient and independent European administration". See Article 298 TFEU. ¹¹⁹ Enriques, Romano and Wetzer (n 51).

¹²⁰ For possible metrics measuring such contribution, see ibid 14.

¹²¹ It is worth noticing that such account for systemic risk is necessarily qualitative and not strictly quantitative, contrarily to the examples provided by Enriques and co-authors. The governance rights and

On top of the limited set of governance rights discussed below, institution-specific arrangements should guarantee sufficient accountability toward bail-inable creditors. To allow the management to discharge such duty effectively, EU law should mandate Member States to provide tools compatible with national corporate laws that banks can use to comply with the general principle of sufficient accountability.

Given the far-reaching nature of this proposal, digging into the details of possible creditor right regimes in various countries and types of institutions represents a far-reaching objective falling out of the scope of this research. In evaluating these arrangements, the competent authority should consider two objectives: limiting switching costs to a minimum, adapting governance mechanisms that are already in place in a given jurisdiction, and incentivising anti-herding solutions.¹²²

5.2 Governance Rights Granted at EU Law Level

5.2.1 General Features

This Section discusses the minimum sets of rights allowing creditors to have a positive impact on bank governance, complementing regulation and supervision, and argues that a mix of targeted appointment and decision rights can be considered fit for purpose. An adequate "governance infrastructure" constitutes the prerequisite making the governance status of MREL effective. Therefore, it is necessary to preliminarily introduce the General Meeting of MREL creditors and their common trustee.

All the holders of MREL instruments should compose the General Meeting of MREL creditors. The voting rights at the meeting should be defined by the amount of exposure toward the bank and weighted according to the riskiness of the exposure. Riskier instruments grant higher voting rights. The General Meeting should vote on a limited and standardised number of items. Namely, the appointments discussed in Section 5.2.2 and

arrangements cannot be conceptualised as continuous variable assuming every possible value, but rather discrete and complex modules of rights and duties that can be target only by clustering covered institutions into various group with different coefficient of systemic relevance. An example of such an approach is the "bucket approach" employed by the Financial Stability Board. See BCBS, Global systemically important banks: updated assessment methodology and the higher loss absorbency requirement, July 2013¹²² Ayres and Mitts (n 119).

the decisions to be taken according to Section 5.2.3, including the decision to start a liability suit if deemed appropriate.

The common trustee of MREL creditors should facilitate the coordination of the MREL creditors.¹²³ To this end, she should be responsible for calling and organising the Annual General Meeting and representing MREL creditors in case of a liability lawsuit (see Section 5.2.3). She should possess all the required characteristics of independence required to independent directors.¹²⁴ In the same vein, the remuneration should be fixed and insensitive to the performance of the bank or other performance metrics.

As mentioned before, these two basic structural features are necessary for coordination purposes and enforcement. Sections 5.2.2 and 5.2.3 discuss, respectively, appointment and decision rights that should be granted to MREL creditors. Moreover, those explain the role of General Meeting of MREL creditors and the common MREL trustee in each specific instance.

5.2.2 Appointment Rights

According to the framework of the analysis, granting MREL creditors with some rights of appointment makes sense only if their appointees enhance the decision-making process of the bank, optimising its risk-taking appetite. Following this line of argumentation, MREL creditors should have the power to appoint qualified minorities of strategic committees;¹²⁵ namely, the risk committee, the audit committee and the remuneration committee.

Such a choice needs a prelaminar explanation and justification. The fact that the MREL creditors representatives should count for a qualified minority of each committee aims at striking an appropriate balance between the risks of over and under entitlement previously

¹²³ It is worth noticing that the type of trustee discussed here is different in means and scope from the traditional indenture trustee who has the power to enforce the indentures of a bond. As a means of comparison, the MREL trustee is closer to the figure depicted by Yakov Amihud, Kenneth Garbade and Marcel Kahan, 'A New Governance Structure for Corporate Bonds' [1999] Stanford Law Review 447.

¹²⁴ Note that the standard concept of "independence" in corporate governance, indicating individuals without significant personal and financial links with the company. Thus, the status of the trustee should be integrated by the requirement for independent directors set down in national corporate law or corporate governance code. This differs from the more substantive but vague concept of "independence of mind" introduced in the European Legislation as a feature with which each member of the management must discharge its duties. See Article 91(8) CRD: "Each member of the management body shall act with honesty, integrity and independence of mind to effectively assess and challenge the decisions of the senior management where necessary and to effectively oversee and monitor management decision-making".

¹²⁵ For instance, two fifth of the committee members should be MREL creditors representatives.

discussed at the beginning of Section 5. In the same vein, granting MREL creditors with the right to appoint members of the committee but not necessarily members of the board are meant to achieve the same balance. Moreover, such choice delivers two additional advantages. First, it allows for a certain degree of flexibility in the legal design of MREL representatives so that this can fit more easily in national corporate law and institution-specific arrangements.¹²⁶ Second, it allows to design a system in which the presence of MREL creditors representatives can actually make a difference and where the representatives are incentivised to do so. The rest of this section better develops and explains this latter point, when it discussed the duties and responsibilities of the MREL representatives.

To assure that the potential for a positive impact of bondholders' representatives in strategic committees is fully exploited, the rights and duties of the MREL creditors' representatives need to be further detailed. First of all, in terms of rights and duties vis-à-vis the management of the bank, the MREL creditors' representatives should be given access to all the relevant information as any other non-executive director. On the other hand, committee members should be held liable for unduly revealing confidential information or damaging the bank with intent or gross negligence.

The situation is more entangled and delicate when it comes to the relationship between committee members and MREL creditors. Evident agency problems might arise and the probability of committee members to be captured by bank management seems non-trivial. If this is the case, the presence of committee representatives would be irrelevant because their ability and willingness to voice the interests of MREL creditors in the committee would be impaired.

Standard governance strategies might help to mitigate such agency costs. Committee representatives should possess all the characteristics of independence and integrity required to independent directors.¹²⁷ Moreover, committee representatives should owe fiduciary duties to MREL creditors. Thus, in discharging their duties, the representatives

¹²⁶ The MREL creditors representatives might or might not have a seat in the board and if they are granted with a seat in the board they might or might not have a voting rights for all or some of the issues to be discussed. Yet, in compliance with the proposed general principle of Article 88 CRD, MREL creditors representatives should always have voting rights in the board committees.

¹²⁷ See note 124.

must act in the best interests of the creditors. This duty is only mitigated by the duty not to intentionally or gross negligently harm the bank, as discussed above. In this respect, having MREL creditors' representatives only seating in the committees and not on the board might alleviate possible legal problems arising from multiple fiduciaries owed both to MREL creditors and the corporation.

The liability regime of MREL creditors' representatives closely follows their fiduciary duties. Thus, committee members should be held liable vis-à-vis MREL creditors if they negligently avoid acting or to be appropriately informed on the matters to be discussed and decided within the committees and their inaction causes serious damage to bondholders.¹²⁸ The General Meeting of MREL creditors should decide any liability lawsuits with a simple majority,¹²⁹ and the common MREL trustee should have standing. Moreover, a qualified minority of MREL creditors should be allowed to begin a derivative lawsuit.¹³⁰

Finally, committee representatives should draft a comprehensive and detailed report on the activities of the committees and the impact of their decisions on the stability and resilience of the bank as well as the probability of MRE creditors to incur in losses. The report should be made available to MREL creditors before their Annual General Meeting. Particular attention should be devoted to the remuneration and dividend policies, as the report should represent the underlying material on which MREL creditors exercises the decision rights discussed in Section 5.2.3.

5.2.3 Decision Rights

The appointment of committee representatives might not be enough to efficiently impact on the decision-making of the bank management. As discussed in the previous Section, the representatives of MREL creditors should count for a qualified minority of the committees, so that the rest of the members can overcome the reservations or proposals of the

¹²⁸ The standard of negligence mitigated by the duty not to harm the bank should be considered appropriate, further shielding committee representatives from liability, e.g.: imposing gross-negligence standard, would not achieve the goal to minimise agency costs between MREL creditors and their representatives. ¹²⁹ See Section 5.2.3

¹³⁰ A derivative lawsuit is a legal action filed by an individual shareholder, in the name of the company, to redress wrongs or harms to the company that the Board of Directors or Officers will not address themselves.

creditors' representatives. Therefore, it seems also necessary to give the generality of creditors limited decision rights, complementing the role of creditors' representatives.

In particular, the right to vote on executive remuneration and dividends represents an effective set of core rights to be granted through EU law. Those would be relatively easy to implement in each jurisdiction and would complement the existing regulatory and supervisory framework. In this regard, the annual report of the MREL representatives discussed in the previous section represents an important background material. The report should provide a clear-cut and straightforward indication on the matters MREL creditors are asked to vote on, stating whether the remuneration and dividend policy takes in adequate consideration the interests of MREL creditors and, more in general, the solvency and stability of the bank.

Taking the law as it is, the competent authorities can limit both dividend and variable remuneration¹³¹ only once the bank is in material breach of the so-called combined buffer requirement.¹³² Granting an unconditional right to creditors to block disproportionate distributions in good times would provide an important complement to the prudential tools currently in place. On the other hand, it does not seem proportionate to grant a generalised veto right on other types of distribution of corporate assets such as share repurchase or, more in general, capital instruments redemptions. The Competent Authority has already ample and non-contingent power to authorise such operations only if the bank satisfies stringent conditions.¹³³

The most entangled aspect of the proposal consists of the legal effects of a possible rejection of remuneration and/or dividend policies of the bank. Making the decisions of the MREL creditors binding might be considered an over-entitlement. In contrast, if these decisions are merely consultative, the opposite risk of under-entitlement arises. Moreover, in this matter is also important to provide some flexibility in the implementation, so to

¹³¹ Article 141 CRD, setting the cases in which distributions can be restricted, the types of distribution that should be restricted and the maximum amount of distribution possible in case the combined buffer requirement is breached.

¹³² Article 128 CRD.

¹³³ Articles 77 and 78 CRR.

account for the heterogeneity of national corporate laws and bank's business models and strategic decisions.

There are three main dimensions to consider in designing the exact scope and effect of the voting rights granted to MREL creditors. First, the timing of the AGM of MREL creditors as compared to the AGM of shareholders. If MREL creditors vote on remuneration and dividend after the AGM of shareholders already deliberated on these issues, making the creditor's decision binding would be particularly difficult from a legal perspective and highly intrusive. On the contrary, if the opposition of creditors is on a managerial proposal, the law can oblige the management to revise its proposal accordingly. Second, the MREL creditors can be asked to vote on the policies on dividends and remuneration to be applied "pro futuro" and/or on the actual determination to distribute dividend or pay out remuneration. Third, hybrid forms in between consultative and binding decisions are possible and likely desirable.¹³⁴

Finally, the MREL creditors during the Annual General Meeting can deliberate on the initiation of liability lawsuits. In particular, the common trustee should be allowed to act on MREL creditors' behalf against the committee representatives for breaching their fiduciary duties. Moreover, they should be allowed to initiate a derivative lawsuit against the directors and the management for damaging the corporation.

6. Conclusion

This chapter argues in favour of including (some) bank creditors in the decision-making process of their borrowers through statutory reforms. It shows how such a major adjustment to the standard governance arrangements is warranted.

In so doing, the chapter reviews several strands of literature proposing to sharply "alter" corporate governance arrangements of banks accounting for systemic externalities. Some of such proposals, such as the ones extending the responsibility of directors in the pre-insolvency phase nicely complements the argument in favour of more robust debt governance. On the contrary, other proposals, especially those pointing at modifying the

¹³⁴ For an overview of the various policy options already implemented worldwide see Randall S Thomas and Christoph Van der Elst, 'Say on Pay around the World' (2014) 92 Wash. UL Rev. 653.

fiduciary duties of bank directors, are in a relation of mutual exclusiveness with granting governance rights to creditors.

The chapter proposes two main theoretical justifications for statutorily including creditors in the decision-making process of their borrower. First, the specialties of bank governance make a particularly strong case for departing from a purely shareholderoriented approach to governance. Second, analysing the problematic relation between governance incentives and financial regulation, the chapter argues that the room for debt governance in banks is particularly narrow. In contrast, functioning and efficient debt governance would be needed especially in banks. Moreover, as an additional positive spillover, governance rights to creditors would increase the credibility of the resolution framework and, thus, the resolvability of the single institutions. This latter consideration highlights the potential for triggering a virtuous circle where debt governance enhances the overall quality of bank corporate governance which, in turn, increase the credibility of the resolution framework. Being the resolution framework more credible, the disciplining pressure on banks risk-taking appetite increases, further enhancing the quality of the decision-making process, i.e.: the quality of bank governance.

Finally, the chapter attempts to operationalise a framework for granting creditors some governance rights. It proposes to grant unconditional rights to creditors holding instruments that are eligible for MREL purposes. Moreover, it proposes to include among the principles on bank governance arrangements a general clause of "sufficient accountability" toward MREL creditors in decision-making. This approach has the advantage to include the quality of debt governance within the annual evaluation carried out by the supervisor. The adequacy of governance arrangements would become part of the annual SREP with the potential to put in motion a virtuous iterative procedure between the individual bank and the supervisor. This would help refining the governance role of the MREL creditors and fitting it to the specificities of each bank.

To complement such general principle and make it effective, few specific appointment and decision rights should be granted to MREL creditors with the aim to balance the interests of both shareholders and creditors constituencies. Specifically, in terms of appointment rights, MREL creditors should be able to appoint a qualified minority of the member of some strategic committees, such as audit, risk and compensation. On the other hand, MREL creditors should be asked to vote on the remuneration and dividend policy, complementing the role of committee representatives in restraining the possibility of the bank to engage in disproportionate risky projects in good times.

Part III – Finetuning Bank Governance and Regulation

Chapter 9 – Conclusions

1. Good Governance for Banks

1.1 Bank Governance and Financial Regulation

The dissertation started with the analysis of bank corporate governance, investigating why and how bank governance is different from the corporate governance of non-financial firms. In particular, it pinpoints the crucial role of debt governance and the impact of systemic externalities preventing banks from pursuing socially optimal strategies.

Based on the distinctive features of bank governance, the thesis develops a framework for analysing the relation between financial regulation and bank governance, where governance regulation acts as a medium between the special features of bank governance and the regulatory goals. Governance regulation should aim to reduce, and hopefully fill, the wedge between regulatory goals and banks' incentives stemming from said regulation. Accordingly, regulating substance and regulating governance are not alternatives to achieve the same result. Rather, these are in a circular relation: substantive regulation set the goal and the scope of the regulatory intervention. In turn, governance regulation provides incentives to banks and bankers to achieve such goals.

Looking at governance regulation as a medium between bank governance and substantive regulation represents a step further as compared to previous competing theories.

As compared to representation hypothesis,¹ this approach acknowledges that standard governance mechanisms cannot work smoothly in banking, but also accounts for the fact that regulation and supervision cannot, themselves, mimic the market. Compared to the complementarity hypothesis of bank governance and regulation², it provides a clear path to operationalise the complementarity of governance and regulation in the area of debt governance.

¹ Dewatripont Mathias and Jean Tirole, *The Prudential Regulation of Banks*, vol 1 (MIT Press 1994).

² John Armour and others, 'Bank Governance' (2016) ECGI Law Working Paper 316/2016.

Following the framework, the incumbent regulation on bank governance reveals to be largely unsatisfactory. It fails to capture the essence of bank governance and to promotes better decision-making. Instead, it often realizes a mere crystallization of previous best practices, reducing the flexibility in organizational decisions and encouraging herding behaviours.

Against such and unsatisfactory state of the art, the thesis proposed an alternative way to enhance the quality of bank governance and foster financial stability. Namely, this proposal hints at shifting the focus to debt governance and fine-tune it with the newly established resolution framework for ailing banks.

To this end, the investigation proceeded in three consequential directions: first, discussing the potential of the BRRD to act enable debt governance in banking; second, positively assessing whether governance incentives as shaped by the BRRD and the regulatory goals are fine-tuned; third, normatively proposing tailored governance regulation to fine-tune debt governance and the resolution framework.

1.2 Debt Governance and the Resolution Framework

The post-crisis stream of reforms in the EU had the recovery and resolution framework as one of its centrepieces. The dissertation discussed the rationale of the European Resolution framework and to the context in which it is embedded, the European Banking Union.

The analysis reveals that the existence of a resolution framework is a necessary yet not sufficient element to exploit the full potential of debt governance in banks.

Chapter 3 highlighted the promises and perils of the BRR framework according to the legal and economic literature. In this regard, the emphasis was on the features undermining the credible enforcement of resolution tools and powers in case of bank distresses; the link between the ex-ante credibility of resolution and the ability of bail-inable debt holders to discipline the borrowing bank.

Looking at the legal design and the first applications of the resolution framework, the dissertation argued that the credibility of the resolution framework is not the only element at play. The full and consistent credibility of resolution and predictability of its outcome is not strictly necessary: the expectation of suffering non-trivial losses, in any form of burden-

sharing exercises, is sufficient to provide bail-inable creditors with incentives to discipline the borrower.

Nevertheless, the expectation of bearing losses in the future is still not sufficient to assure that bail-inable creditors will play a positive governance role. The missing element spotlighted in the thesis is, again, the necessary intermediation of the law. Market discipline is not an act of God. It proceeds through specific channels, such as contractual arrangements, that need to be enabled or at least not foreclosed by the legal framework.

This represents a specific perspective through which the dissertation faced the inherent tension between financial stability and market discipline. Legal rules strike a balance between market discipline and financial stability.

Therefore, no clear-cut conclusion on the incentives provided by the recovery and resolution framework in terms of corporate governance can be drawn looking only at the BRRD. The channels through which creditors can impact the decision-making of the borrowing banks deserved an individual an attentive scrutiny. In so doing, the scrutiny of the applicable regulatory framework to each of those channels is revealing. Specifically, it explains whether and to what extent it enables or forecloses the governance potential of bail-inable creditors.

2. The Impact of the Resolution Framework in Bank (Debt) Governance

2.1 Market Discipline Through Price Adjustment

The first channel of market discipline discussed in the positive analysis of the dissertation was monitoring and price adjustment.

The analysis reveals that the rules shaping the market for bail-inable securities lead to an overall dilution of the incentives to monitor banks' risk-taking behaviour. So long as investors rationally expect to be shielded from losses thanks to mechanisms out of their contractual arrangements, the incentives to discipline the behaviour of the borrowing bank cannot be optimal. The discussion focuses on two instances in which the legal framework of the BRRD, pursuing multiple policy goals, artificially shield creditors from losses. Namely, the legal protection of property rights through the no-creditors-worse-off principle and the rules on granting bailout money to failing banks.

Therefore, the inherent dilution derives from the coexistence of a plurality of policy objectives. Both "maintaining market discipline" and "minimising reliance on extraordinary public financial support" are expressly mentioned by Article 31(2) as resolution objectives. On the other hand, the protection of Property Rights is implicitly part of those objectives representing a pillar of the legal system in itself, protected by national constitutions as well as at European level.³

Even though the BRRD explicitly states that "the resolution objectives are of equal significance",⁴ the actual legal design and the foreseeable resolution practice lean toward the primacy of stability consideration. In a nutshell, the co-existence and the interplay of multiple policy goals addressed by the BRRD impede to provide bail-inable creditors with optimal incentives to monitor their borrower.

2.2 Contractual Incompleteness, Contingent Allocation of Control and Regulatory Foreclosures

The second channel of market discipline discussed in the positive analysis of the dissertation was contractual arrangements.

The ability of bargaining on each and every instance of an agreement represents a cornerstone of the law of contracts. Such contractual freedom can only be limited if the agreement between two parties is deemed detrimental for society, typically because of negative externalities.

In this regard, the incumbent regulation on capital and bail-in eligible instruments limits the possibility of embedding a wide array of clauses in the contractual arrangements. The purpose of this statutory limitation is to guarantee that eligible instruments are of sufficient quality to guarantee the stability of the bank issuing these securities. This represents a clear application of the trade-off between financial stability and market

³ As enshrined by Article 1, Protocol 1 of the European convention of Human Rights.

⁴ Article 31(3) BRRD. An identical provision can be found in the SRMR, Article 14(3).

discipline, scrutinized through the lens of contractual possibilities in designing bail-inable securities. The analysis demonstrated that financial stability considerations prevail both in the pre-crisis and post-crisis regulatory framework, being absent compelling arguments to drop-off and strongly favour market discipline imposed through contract.

Given the current regulatory framework, the dissertation explored the room left to investors for impacting on banks stability through contractual arrangements, mainly following the literature on contingent allocation of control. Traditional contractual devices, such as covenants speeding up the repayment of instruments, are unavailable because of the qualitative requirements set by regulation. Moreover, even when contractual devices are compliant with existent regulation, the room for actually impacting on bankers' behaviour is limited because of the risk of redundancy with other pieces of legislation and the supervisory activities.

The situation changes in the case for Contingent Convertible instruments so long as Cocos are consistently converted or written down if their trigger is breached. From the perspective of financial stability, Cocos represent a powerful buffer, especially if the trigger event is far from the point of non-viability. Moreover, the available contractual characteristics of Cocos, if properly designed, can have an impact on the *ex-ante* and *expost* risk appetite of banks that decides to issue them. In particular, the crucial design features consist of voting rights, economic rights, and reconversion options, so to diversify the incentives of original shareholders from the ones of Coco holders.

2.3 The Composition of Bail-inable Debtholders Matters

In concluding the positive evaluation of the impact of the BRRD on bank governance, the dissertation investigates the who should hold bail-inable securities to maximize the positive impact of creditors on bank governance.

An ideal holder of bail-inable securities should maximise the positive corporate governance impact in terms of reducing excessive risk-taking behaviours as well as minimise the adverse impact on the economy, in terms of both financial stability and other spillovers. On top of these two dimensions, also an "existence constraint" has to be satisfied, i.e.: since the required amount of outstanding eligible securities had been estimated to be around 26% of banks' RWA, an enormous amount of securities has to be

issued, thus held. This constraint, tough frequently neglected, play a crucial role in seeking for the optimal composition.

According to this framework, no bulletproof category of investors in bail-inable securities seems to exist. Rather, a mixed composition of holders with different investment strategies and time horizons is likely to yield optimal results, i.e.: no investor can yield efficient outcomes both in terms of corporate governance and stability as well as having a sufficiently deep pocket to fulfil the "existence constraint".

Thereupon, the analysis seeks for a mix of holders whose combined impact mimic as close as possible the benchmark. In so doing, Chapter 6 shows the relevant trends in the investors' composition between 2013 and 2018. The empirical evaluation relies on aggregated data published in the Security Holding Statistics Dataset. Such an exercise showed that investors are adjusting to the new resolution framework, with an increasing share of institutional investors, a rather stable involvement of other banks and a sharp decline in retail investors' holdings. Nonetheless, data show a sizeable cross-country heterogeneity where path dependency hinder the creation of a level playing field among European banks. The discussion pinpoints how overall investors are adjusting to the new resolution framework.

Building on the limited and highly aggregated empirical evidence, the research attempts to generalise its findings highlight some functional characteristics of investors that should compose the optimal mix. In so doing, bail-inable securities are grouped according to the seniority of the claim: senior claims can be held by categories with deeppocket even though they might pose considerable stability concerns (such as banks). IN contrast, junior positions should be held by investors that are able and willing to influence bank management and pose relatively low stability concerns.

This research highlights how the composition of bail-inable debtholders affects the outcome of any possible resolution decision and is, therefore, dense of policy relevant implications. Even more so from an ex-ante perspective: a composition of bail-inable debtholders that would yield suboptimal outcomes in case of resolution would make the

decision of resolving failing banks particularly difficult, endangering the overall credibility of the entire resolution framework.

As the functional argument of the analysis suggests, granting (some) ex-ante governance rights to (some) bail-inable debtholders might provide the correct incentives toward an optimal mix.

3. Finetuning Bank Governance and Regulation

3.1 The Case for Remuneration Through Debt

The first policy proposal to fine-tune bank governance and substantive regulation dealt with bankers' remuneration. Thus, Chapter 7 discussed the theoretical foundations of remuneration through debt and highlighted how that has beneficial effects, especially in banking. The core argument of the study is that remunerating bankers through bail-inable debt would yield multiple positive outcomes.

Accordingly, a proposal to sharply modify the incumbent EU regulation for bankers' remuneration was advance, embedding bail-inable instruments in the remuneration packages with the final aim to optimise the risk-taking incentives of high-profile bank employees.

The analysis identified the optimal pool of instruments to use in remuneration packages. It also addressed the relationship between remuneration through debt and the other feature of incumbent regulation. In this regard, remuneration through debt can act as a more efficient substitute for some of the existing rules (e.g.: cap on variable remuneration); whereas, it acts as a complement for other features (e.g.: deferral and retention policies).

As an additional positive spillover, remunerating bank risk-takers (also) with bail-inable debt would enhance the resolvability of the bank itself. It would increase the buffer of eligible liabilities. Moreover, and most importantly, it would increase the political availability of resolution powers, as bakers would be the first in line to bear losses following a resolution decision.

Finally, the analysis identified two possible implementations. The first more cautious, based on standards, and the second more radical, based on rules. The cautious approach aims at removing the material impediments to remuneration through debt and providing regulatory incentives for using bail-inable instruments in remuneration. This way, the market appetite for remuneration through debt could be tested in an unbiased way. The radical approach consists of mandating remuneration through debt through regulation.

There is no clear-cut conclusion of which strategy is superior. However, a combination of the two strategies may represent the optimal solution. It should widely apply the proportionality principle and employ the radical (rule-based) approach only for systemically relevant banks. In contrast, a lighter (standard-based) approach should apply to less relevant institutions.

Looking at a broader picture, the analysis showed that remuneration through bailinable debt fine-tunes the specialty of bank governance with the resolution framework for ailing banks, using remuneration as a tool to connect the two spheres. This line of reasoning hints to the fact that, from a positive perspective, the impact of the resolution framework on bank governance is suboptimal and the potential synergies between these two dimensions can be exploited only carefully bridging their edges.

3.2 The Case for Governance Rights to Bail-inable Debtholders

The second policy proposal to fine-tune bank governance and substantive regulation argues in favour of including bail-inable debtholders in the decision-making process of their borrowers through statutory reforms.

The analysis shows how such a major adjustment to the standard governance arrangements is warranted. In so doing, the starting point was the review of several strands of literature proposing to sharply "alter" corporate governance arrangements of banks accounting for systemic externalities. Some of such proposals, such as the ones extending the responsibility of directors in the pre-insolvency phase nicely complements the argument in favour of more robust debt governance. On the contrary, other proposals, especially those pointing at modifying the fiduciary duties of bank directors, are in a relation of mutual exclusiveness with granting governance rights to creditors. The chapter discussed two main theoretical justifications for including creditors in the decision-making process of their borrower. First, the specialties of bank governance make a particularly strong case for departing from a purely shareholders-oriented approach to governance. Second, analysing the problematic relation between governance incentives and financial regulation, the chapter argues that the room for debt governance in banks is particularly narrow. In contrast, a functioning and efficient debt governance would be needed especially in banks.

Moreover, as an additional positive spillover, governance rights to creditors would increase the credibility of the resolution framework and, thus, the resolvability of the single institutions. This latter consideration highlights the potential for triggering a virtuous circle where debt governance enhances the overall quality of bank corporate governance which, in turn, increase the credibility of the resolution framework. Being the resolution framework more credible, the disciplining pressure on banks risk-taking appetite increases, further enhancing the quality of the decision-making process, i.e.: the quality of bank governance.

To operationalise these intuitions, Chapter 8 proposed to grant unconditional rights to creditors holding instruments that are eligible for MREL purposes. Moreover, it proposes to include among the principles on bank governance arrangements a general clause of "sufficient accountability" toward MREL creditors in decision-making. This approach has the advantage to include the quality of debt governance within the annual evaluation carried out by the supervisor. The adequacy of governance arrangements would become part of the annual SREP with the potential to put in motion a virtuous iterative procedure between the individual bank and the supervisor. This would help refining the governance role of the MREL creditors and fitting it to the specificities of each bank.

Few specific appointment and decision rights granted to MREL creditors should complement the general principle, in order the interests of both shareholders and creditors constituencies. Specifically, in terms of appointment rights, MREL creditors should be able to appoint a qualified minority of the member of some strategic committees, such as audit, risk and compensation. On the other hand, MREL creditors should be asked to vote on the remuneration and dividend policy, complementing the role of committee representatives

329

in restraining the possibility of the bank to engage in disproportionate risky projects in good times.

The two policy proposals put forward in Part III complement one another. The first, focusing on the remuneration of bank risk-takers, approaches the specialty of bank corporate governance from the perspective of the cash flow rights of the managers and other risk-takers of the bank. The second, focusing on voting rights to be granted to bail-inable creditors, approaches the specialty of bank governance from the perspective of the desirable allocation of voting and control rights.

Those represent two separate but inter-related angles to approach the corporate governance of banks; whereas, the existing literature usually approaches the cash flow and voting rights separately According to this unifying perspective on bank governance, specific arrangements on cash flow rights complements the adjustments on voting and control rights. This proved to be the most promising approach to shed light on what is "good governance" for banks.

In this regard, this book markedly enhances our understanding of bank governance both from the legal and economic perspective, proposing itself as a trailblazer in the debate on how governance regulation promotes good bank governance and, in turn, fosters social welfare and financial stability. Chapter 9 – Conclusions

Bank Governance and the Bail-in

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354

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Bank Governance and the Bail-in

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I will deliver this urgency in a rather informal manner, by listing people with no specific order and adding mostly incomprehensible references.

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My mom, whose resilience knows no limits.

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Benedetta, life grew us apart and rightly so. Our run had more ups and downs than I can count, during which you experienced (suffered!) most of the elaboration of this book. You always made this enterprise (and his author!) shinier than it would have been otherwise. Thank you for the run.

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Bank Governance and the Bail-in

Summary

[English]

This dissertation assesses the impact of the post-crisis stream of reforms on the corporate governance of European Banks. The project deals with the EU Directive on Bank Recovery and Resolution (BRRD) and investigate a fundamental question. *Can the resolution framework for distressed banks enhance the quality of banks' decision making?*

According to the Directive, an administrative agency, the Resolution Authority, can impose losses on (a part of) the bank's creditors should the bank become "failing or likely to fail". Bail-inable creditors become residual claimants of the bank, contingent on its distress.

The dissertation proceeds in three main building blocks. First, it addresses the problem of what is good governance for banks and how bank governance relates to the resolution framework and to bail-inable creditors. Second, it analyses the is the impact of the BRRD on the governance role of bail-inable creditors. Third, building on the findings of the positive analysis, it proposes statutory reforms to exploit the positive interplay between bank governance and resolution.

The first part establishes an analytical framework for bank governance, starting from the problem of what can be defined as "good governance". In fact, bank governance is special as compared with non-financial corporation, but what constitutes good bank governance is still unknown. The thesis contributes to this debate focusing on the relationship between substantive regulation and governance.

The analysis distils two crucial features. First, governance incentives and the goals of substantive regulation are often at odds and the two needs to be finetuned for achieving optimal results. Second, debt governance represents a crucial yet understudied area in bank governance, as it has the potential to curb excessive risk-taking and the (systemic) externalities stemming therefrom. In this regard, the existence of the EU resolution framework opens the possibility for a positive interplay between governance and regulation.

This approach innovates the literature on both bank governance and resolution. Bank governance is usually approached from the perspective of shareholders and/or the management rather than creditors. On resolution, the dissertation widens the current state of the literature on bank resolution, linking its ex-ante and ex-post natures.

The second part builds upon this analytical framework and carries out a positive analysis encompassing three channels of debt governance; namely, price internalisation of risk; contractual arrangements and the discrete impact of different type of creditors.

This approach innovates the debate on market discipline, that is usually limited to the ability of creditors to internalise different risk in the price of the securities. The dissertation starts from this premise and immediately highlights the efficiency of creditors' discipline depends on the interplay between governance incentives and the design of substantive regulation. The existence of a resolution framework should incentivise bail-inable creditors to better discipline the borrowing bank; yet, the design of both the capital and resolution regulation largely foreclose such possibility to creditors.

Against this backdrop, the third part of the dissertation moves to the normative question of how to enable debt governance so to exploit the positive interplay between governance and resolution. The approach to this normative part combines and complements the study of cash flow rights of the management with the study of the voting rights to bail-inable creditors. Such a unified approach is rather uncommon in the literature, where cash flow rights and voting rights are often approached separately whereas those complement each other in the dissertation.

On the cash flow side, the dissertation proposes to include bail-inable debt as part of the variable remuneration for bank risk-takers. This would better align the incentives of bankers with the socially desirable outcomes; moreover, it would fix most of the flaws of the existing regulation on remuneration. From the standpoint of resolution, the proposal would enhance the credibility of the resolution framework and the resolvability of individual institutions.

On the voting right, the proposal is to grant a limited basket of ex-ante governance rights to bailinable creditors. This would truly enable debt governance, circumventing the regulatory foreclosures highlighted during the positive analysis and restrain excessive risk-taking incentive in good times, when systemic-risk piles-up.

[Dutch]

Deze dissertatie onderzoekt de invloed van de post-crisis stroom van hervormingen van de corporate governance van Europese banken. Het project heeft betrekking op de EU-richtlijn betreffende herstel en afwikkeling van banken (BRRD) en onderzoekt een fundamentele vraag. *Kan het afwikkelingskader voor falende banken de kwaliteit verbeteren van het bancaire besluitvormingsproces?*

Volgens de Richtlijn kan een administratieve instantie, de Afwikkelingsautoriteit, verliezen opleggen aan (een deel van) de crediteuren van de bank indien de bank "faalt of zal gaan falen". Crediteuren die kwalificeren voor bail-in worden resterende schuldeiser van de bank, afhankelijk van de situatie. De dissertatie behandelt drie belangrijke bouwstenen. Eerst wordt ingegaan op de vraag wat good governance voor banken is en wat de relatie is van governance van banken met het afwikkelingskader en met crediteuren die kwalificeren voor bail-in. Vervolgens wordt een analyse gemaakt van de invloed van de BRRD op de governancerol van crediteuren die kwalificeren voor bail-in. Ten slotte wordt, voortbouwend op de bevindingen van de positieve analyse, een wijziging van de regelgeving voorgesteld om te profiteren van de positieve interactie tussen governance en afwikkeling van banken.

Het eerste deel biedt een analytisch kader voor governance van banken, beginnend met de vraag wat de definitie is van "good governance". Vergeleken met niet financiële ondernemingen is de governance van banken in feite speciaal, maar wat goede governance van banken inhoudt is nog steeds niet bekend. Dit proefschrift levert een bijdrage aan deze discussie met de nadruk op de relatie tussen materiële regulering en governance.

De analyse onderscheidt twee belangrijke kenmerken. Ten eerste, governanceprikkels en de doeleinden van materiële regulering zijn vaak met elkaar in tegenspraak en moeten op elkaar worden afgestemd om optimale resultaten te behalen. Ten tweede, governance van schulden vormt een belangrijk maar onderbelicht terrein bij governance van banken, omdat dit de mogelijkheid heeft om het nemen van excessieve risico's en de daaruit voortvloeiende (systemische) externe omstandigheden in bedwang te houden. In dit opzicht biedt het bestaan van het EU-afwikkelingskader de mogelijkheid voor een positieve interactie tussen governance en regulering.

Deze benadering vernieuwt de literatuur over zowel governance als afwikkeling van banken. Governance van banken wordt doorgaans benaderd vanuit het perspectief van aandeelhouders en/of management en niet vanuit dat van crediteuren. Met betrekking tot afwikkeling verbreedt

365

de dissertatie de huidige stand van de literatuur inzake afwikkeling van banken, door koppeling van de ex-ante en ex-post aard daarvan.

Het tweede deel bouwt verder op dit analytisch kader en voert een positieve analyse uit die drie kanalen van governance van schulden omvat namelijk: prijsinternalisering van risico, contractuele regelingen en de verschillende gevolgen van verschillende soorten crediteuren.

Deze benadering vernieuwt de discussie over marktdiscipline, die zich doorgaans beperkt tot het vermogen van crediteuren om het verschillende risico in de prijs van de effecten te internaliseren. De dissertatie gaat uit van deze vooronderstelling en benadrukt meteen dat de efficiëntie van de discipline van crediteuren afhankelijk is van de interactie tussen governanceprikkels en het ontwerp van materiële regulering. Het bestaan van een afwikkelingskader zou crediteuren die kwalificeren voor bail-in moeten stimuleren om de lenende bank beter te disciplineren, maar het ontwerp van zowel de kapitaal- als de afwikkelingsregeling sluit die mogelijkheid voor crediteuren grotendeels uit.

Tegen deze achtergrond gaat het derde deel van de dissertatie over de normatieve vraag hoe het voor governance van schulden mogelijk kan worden om de positieve interactie tussen governance en afwikkeling te benutten. De aanpak van dit normatieve deel vormt een combinatie en aanvulling van het onderzoek naar cashflowrechten van het management met het onderzoek naar de stemrechten van crediteuren die kwalificeren voor bail-in. Een dergelijke gebundelde aanpak is nogal ongebruikelijk in de literatuur, waar cashflowrechten en stemrechten vaak afzonderlijk worden benaderd terwijl deze elkaar in de dissertatie aanvullen.

Voor wat betreft de cashflowkant, wordt in de dissertatie voorgesteld om de schuld die kwalificeert voor bail-in op te nemen als onderdeel van de variabele vergoeding voor de risiconemers van de bank. Dit zou de prikkels van bankiers beter afstemmen op de sociaal gewenste resultaten, bovendien zou het de meeste tekortkomingen in de bestaande vergoedingsregeling opheffen. Vanuit het gezichtspunt van afwikkeling zou het voorstel een verbetering zijn van de geloofwaardigheid van het afwikkelingskader en de afwikkelbaarheid van individuele instellingen.

Voor wat betreft het stemecht is het voorstel om een beperkt aantal ex-ante governancerechten te verlenen aan crediteuren die kwalificeren voor bail-in. Dit zou governance van schulden echt mogelijk maken, de in de positieve analyse belichte gereguleerde afscherming omzeilen en prikkels met excessieve risico's in goede tijden beperken, wanneer systemische risico's zich opstapelen.

Concluderend gaat het proefschrift uit van de vooronderstelling dat governance van banken speciaal is. Het bouwt voort op die vooronderstelling en voedt het huidige begrip van governance van banken. De dissertatie laat zien dat governance van banken en de nieuwe afwikkeling een positieve interactie kunnen hebben en stelt voor om governance van schulden te versterken als een krachtige aanvulling op regulering en toezicht. De dissertatie benadrukt het ex-ante potentieel evenals de tekortkomingen van afwikkeling van banken en stelt voor hoe deze tekortkomingen opgeheven kunnen worden. Dit zou de prikkels voor excessieve risico's in aanwezigheid van systemische externe omstandigheden in bedwang houden, terwijl een enkel op aandeelhouders gebaseerde benadering van governance inefficiënt is.

Curriculum Vitae

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Short bio

Edoardo D. Martino (Montevarchi, 1991) is PhD candidate in Law & Economics at Erasmus University Rotterdam. Before joining Erasmus University, Edoardo gained a law degree in Italy, at University of Florence and the European Master in Law and Economics (University of Hamburg, University of Ghent, Warsaw School of Economics).

Edoardo's research focus on the economic analysis of corporate law and financial regulation. On this topic, during his PhD trajectory Edoardo published articles in journals such as the European Business Organization Law Review (EBOR) and the European Journal of Risk Regulation (EJRR), among others. He was invited to give talks about his research in many universities, international conferences and policy institutions, such as the European Central Bank and the European University Institute. During his Ph.D., Edoardo visited University of Bologna, University of Hamburg, University of Amsterdam and University of Oxford.

Education	
European Doctorate in Law and Economics. Joint Degree at Erasmus university Rotterdam; University of Hamburg and University of Bologna	2016-2020
European Master in Law and Economics, LL.M., M.Sc. (60 ECTFs) – With Distinction	2015-2016
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Work experience	
Intern at Plus Bank S.A Investment banks	2016
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Fully Funded Scholarship for participating in the EMLE program from "Regione Toscana"	2016
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Publications	
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Martino, E. (2019). Free Trade Agreements have bitten off more than they can chew. Analysing the problematic allocation of competences between the EU and the Member States and suggesting a way forward, <i>Upgrading Trade in Services in EU</i> <i>and International Economic Law (eds)</i> with Keijzer, T and Quintavalla A.	2019
Martino, E. (2019). Bail-inable securities and financial contracting: can contracts discipline bankers?. <i>European Journal of Risk Regulation</i> , 10(1), 164-179.	2019
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Martino, E. (2018). Subordinated Debt Under Bail-in Threat. University of Bologna Law Review, 2(2), 252-299.	2018
Others	'
Member – European Banking Institute – Young Researcher Program	Since 2018
Member – ECGI Young Scholar Community	Since 2019

PhD Portfolio

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PhD training

Bologna courses	year
Introduction to Statistics (prof. Alessandra Giovagnoli);	2016
European Competition Law (prof. Alberto de Pra)	2016
Experimental Law and Economics (prof. Marco Casari)	2016
Modelling Private Law (prof. Francesco Parisi)	2016
Game Theory and the Law (prof. Emanuela Carbonara)	2017
Behavioural Law & Economics and Enforcement (prof. Paolo Vanin)	2017
Econometrics I (prof. Chiara Monfardini)	2017
Specific courses	year
Seminar 'How to write a PhD'	2017
Academic Writing Skills for PhD students (Rotterdam)	2017
Introduction to German Law (prof. Hannes Rosler)	2017
Political Economics of Autocracies (prof. James Hollyer)	2017
Modelling Contract and Tort Law (prof. Barbara Luppi)	2017
Topics in International Law and International Relations (prof. Cosette Kramer)	2017
Banking Regulation (prof. Robert DeYoung)	2017
Empirical Banking – Methodological Aspects (prof. Steven Ongena)	2017
Seminar Series 'Empirical Legal Studies' (prof Jonathan Klick and Dr. Jaroslaw Kantorowicz)	2018
Institutions and Financial Structure (Enrico Perotti)	2019
Seminars and workshops	year
Bologna November seminar (attendance)	2016
BACT seminar series (attendance)	2017-2018
EGSL lunch seminars (attendance)	2017-2018
Joint Seminar 'The Future of Law and Economics' (attendance)	2018
Rotterdam Fall seminar series (peer feedback)	2017
Rotterdam Winter seminar series (peer feedback)	2018

Presentations	year
EMLE Mid-Term Meeting Conference in Law and Economics (Ghent). Poster Presentation.	2017
Bologna March seminar	2017
Hamburg June seminar	2017
Rotterdam Fall seminar series	2017
13th Annual Conference, Italian Society of Law and Economics. (Rome)	2017
Edinburgh Postgraduate Law Conference	2018
Presentation. EGSL Lunch Lecture	2018
International conference "Corporate Governance, Ownership and Control" (Rome)	2018
Rotterdam Winter seminar series	2018
Erasmus Early-Career Scholars Conference	2018
Cardiff Corporate Governance Research Group - First International Conference (Cardiff)	2018
Bologna November seminar	2018
14th Annual Conference, Italian Society of Law and Economics. (Rome)	2018
EMLE Mid Term Meeting Conference in Law and Economics	2019
Invited to the European Central Bank, Single Supervisory Mechanisms (Frankfurt)	2019
EBI Young Researchers Annual Workshop on Banking and Financial Regulation (Frankfurt	2019
Joint Seminar 'The Future of Law and Economics'	2019
EGSL Lunch Lecture	2019
EDLE Opening Seminar	2019
Financial Stability Conference (Berlin)	2019
15th Annual Conference, Italian Society of Law and Economics. (Milan)	2019
Invited to European University Institute, Finance, Innovation and Regulation Working Group.	2020
Job Seminar, Sustainable Business, Culture and Corporate Regulation, University of Maastricht	2020
Attendance (international) conferences	year
Single Resolution Board (SRB) Conference, Brussels	2017
Financial Stability Conference, Berlin	2017
Workshop Experiments at Crossroads between Law and Economics	2017
Annual Conference of the Florence School for Banking and Finance	2018
EBI Global Annual Conference	2019
Amsterdam Conference on Prospectus Regulation and Liability	2019

Bank Governance and the Bail-in