Lara Letizia Milione

Enhancing the Credibility of Resolution

An Analysis of the Impact of Recovery and Resolution Planning and Loss-Absorbing Capital Requirements on the Credibility of Bail-In

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The Deutsche Nationalbibliothek lists this publication in the Deutsche Nationalbibliografie; detailed bibliographic data are available on the Internet at http://dnb.d-nb.de

a.t.: Diss., Univ. Frankfurt am Main, 2022

ISBN 978-3-8487-7489-0 (Print)
978-3-7489-3280-2 (ePDF)

British Library Cataloguing-in-Publication Data
A catalogue record for this book is available from the British Library.

ISBN 978-3-8487-7489-0 (Print)
978-3-7489-3280-2 (ePDF)

Library of Congress Cataloging-in-Publication Data
Milione, Lara Letizia
Enhancing the Credibility of Resolution
An Analysis of the Impact of Recovery and Resolution Planning and Loss-Absorbing Capital Requirements on the Credibility of Bail-In
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302 pp.
Includes bibliographic references.

ISBN 978-3-8487-7489-0 (Print)
978-3-7489-3280-2 (ePDF)

Onlineversion
Nomos eLibrary

1st Edition 2022

Meinen Eltern

Vorwort

Die vorliegende Arbeit wurde im Sommersemester 2021 dem Fachbereich Rechtswissenschaft der Goethe-Universität Frankfurt am Main als Dissertation vorgelegt. Der Stand der Literatur wurde bis dahin berücksichtigt. Mein herzlicher Dank gilt meinem Doktorvater Herrn Professor Dr. Tobias Tröger, LL.M. (Harvard), dessen herausragende Lehre und unnachahmliche Art Stein des Anstoßes für diese Dissertation waren. Insbesondere die Jahre, die ich als Wissenschaftliche Mitarbeiterin an seinem Lehrstuhl verbringen durfte, haben mich geprägt und werden mir immer in bester Erinnerung bleiben. Herrn Professor Dr. Peter von Wilmowsky, LL.M. (Berkeley) danke ich für die zügige Erstellung des Zweitgutachtens und den angenehmen Prüfungsbeisitz. Der Friedrich-Ebert-Stiftung danke ich für die finanzielle und ideelle Förderung meines Promotionsvorhabens.

Ein großer Dank gilt ebenso meinen ehemaligen Kolleginnen und Kollegen des Lehrstuhls sowie des Forschungsinstituts SAFE, deren Kameradschaft und Diskussionsbereitschaft einen großen Beitrag zu dieser Arbeit geleistet haben und die mich auch über die Promotionszeit hinaus weiter begleiten. Insbesondere möchte ich hier Frau Rechtsanwältin Dr. Theresa Kreft und Herrn Richter Dr. Andreas Roth nennen, für deren Freundschaft allein sich die Promotionszeit bereits gelohnt hat. Auch möchte ich meinem Lebensgefährten Herrn Rechtsanwalt Martin Elias Kalbhenn für den seelischen und technischen Beistand danken, für die Hilfe bei der Endredaktion dieser Arbeit und einfach dafür, ein großartiger Partner zu sein. Auch meinen Schwiegereltern, Frau Ulrike Kalbhenn und Herrn Friedhelm Kalbhenn, sei an dieser Stelle für ihren Beistand und ihre Warmherzigkeit gedankt. Mein größter Dank gebührt jedoch meiner Familie und dabei insbesondere meinen Eltern, Frau Monika Milione und Herrn Calogero Milione, die mir gezeigt haben, dass Intelligenz und die wichtigen Dinge im Leben keines akademischen Abschlusses bedürfen. Durch ihre selbstverständliche Förderung und liebevolle Unterstützung haben sie mir das Studium und die Entstehung dieser Arbeit erst ermöglicht. Dafür und für so vieles mehr bin ich ihnen unendlich dankbar. Ihnen ist diese Arbeit gewidmet.

Frankfurt am Main, Oktober 2022
Lara Letizia Milione

Content Overview

Content

List of Abbreviations

AG	Aktiengesellschaft
Art./Arts.	Article/Articles
AT1	Additional Tier 1
BaFin	Bundesanstalt für Finanzdienstleistungsaufsicht
BCBS	Basel Committee on Banking Supervision
BoC	Bank of Cyprus
BPE	Banco Popular Español
BRRD	Bank Recovery and Resolution Directive (Directive 2014/59/EU)
CBR	Combined Buffer Requirement
CET 1	Common Equity Tier 1
CMG	Crisis Management Group
CoCos	Contingent Convertible Bonds
Consob	Commissione Nazionale per le Società e la Borsa
CRD	Capital Requirements Directive (Directive 2013/36/EU)
CRR	Capital Requirements Regulation (Regulation (EU) No 575/2013)
DGS	Deposit Guarantee Scheme
DGSD	Deposit Guarantee Scheme Directive (Directive 2014/49/EU)
DPM	Data Point Model
DRI	Direct Recapitalization Instrument
EBA	European Banking Authority
ECB	European Central Bank
EDIS	European Deposit Insurance Scheme
ed/s.	editor/s
EEA	European Economic Area
EFSF	European Financial Stability Facility
EFSM	European Financial Stability Mechanism
e.g.	exempli gratia
ELA	Emergency Liquidity Assistance
EPFS	Extraordinary Public Financial Support
ESM	European Stability Mechanism

et al.	et alia
et seq.	et sequentes/and the following
EU	European Union
FDIC	Federal Deposit Insurance Corporation
FINREP	Financial Reporting
FSB	Financial Stability Board
GDP	Gross Domestic Product
GFST	Government Financial Stabilization Tools
GSIB	Global Systemically Important Bank
ibid.	ibidem
i.e.	id est
IFRS 9	International Financial Reporting Standard 9
IMF	International Monetary Fund
IRT	Internal Resolution Team
IT	Information Technology
ITS	Implementing Technical Standards
LAA	Loss Absorption Amount
LAC	Loss-Absorbing Capital
LACR	Loss Absorption Capital Requirements
LDR	Liability Data Report
LoLR	Lender of Last Resort
LRE	Leverage Ratio Exposure
MCC	Market Confidence Charge
MDA	Maximum Distributable Amount
MiFID II	Markets in Financial Instruments Directive (Directive 2014/65/EU)
MPE	Multiple Point of Entry
MPS	Monte dei Paschi di Siena
MREL	Minimum Requirements for Own Funds and Eligible Liabilities
NCWO	No Creditor Worse Off
NPL	Non-Performing Loans
NRA	National Resolution Authority
OSIB	Other Systemically Important Bank
para.	paragraph
P2G	Pillar 2 Guidance
RAP	Resolvability Assessment Process

RCA	Recapitalization Amount
RRP	Recovery and Resolution Planning
RTS	Regulatory Technical Standards
RTS on MREL	Regulatory Technical Standards on MREL (Regulation (EU) 2016/1450)7
RWA	Risk-Weighted Assets
SA	Standardized Approach
SAG	Sanierungs- und Abwicklungsgesetz
SIB	Systemically Important Bank
SIFI	Systemically Important Financial Institution
SME	Small and Medium Enterprises
SPE	Single Point of Entry
SRB	Single Resolution Board
SREP	Supervisory Review and Evaluation Process
SRF	Single Resolution Fund
SRM	Single Resolution Mechanism
SRMR	Single Resolution Mechanism Regulation (Regulation (EU) No 806/2014)
SSM	Single Supervisory Mechanism
SSMR	Single Supervisory Mechanism Regulation (Regulation (EU) No 1024/2013)
T2	Tier 2
TBTF	too big to fail
TFEU	Treaty on the Functioning of the European Union
TLAC	Total Loss-Absorbing Capacity
UK	United Kingdom
US	United States of America
XBRL	eXtensible Business Reporting Language

PART 1 – INTRODUCTION

Introductory Remarks

After financial markets were shaken up by the global financial crisis in 2007[1] and the eurozone crisis in 2009,[2] a rethinking of the stability of banks in times of distress was precipitated, encompassing legislators, policy makers, politicians, financial actors, and society equally. What followed was one of the most extensive legislative undertakings of modern times, changing the legal and financial world substantially. Although, in this period, a tremendous number[3] of legal acts have been passed in the

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1 See, among many, J. Crotty, 'Structural causes of the global financial crisis: a critical assessment of the 'new financial architecture'', *Cambridge Journal of Economics* 33 (2009), 563–80; J. Carmassi, D. Gros and S. Micossi, 'The Global Financial Crisis: Causes and Cures', *Journal of Common Market Studies* 47 (2009), 977–96; E. Helleiner, 'Understanding the 2007–2008 Global Financial Crisis: Lessons for Scholars of International Political Economy', *Annual Review of Political Science* 14 (2011), 67–87; O. Merrouche and E. Nier, *What Caused the Global Financial Crisis? - Evidence on the Drivers of Financial Imbalances 1999-2007*, IMF Working Paper (2010).

2 C. Hadjiemmanuil, 'Bank Resolution Financing in the Banking Union' in J.-H. Binder and D. Singh (eds.), *Bank Resolution: The European Regime* (Oxford: Oxford University Press, 2016), pp. 177–210, pp. 179, 181 *et seq.*

3 The substantial reform of the financial and regulatory framework largely revolves around the work of global initiatives (such as the Basel Committee on Banking Supervision (BCBS)) that set global standards. In this regard, the most relevant European pieces of legislation include *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, p. 1–337* (Capital Requirements Regulation, henceforth: CRR), *European 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, p. 338–436* (Capital Requirements Directive, henceforth CRD), *Directive 2014/59/EU of the European Parliament and the Council of 15 May 2014 establishing a framework for the recovery and resolution of credit institutions and investment firms and amending Council Directive 82/891/EEC, and Directive 2011/24/EC, 2004/25/EC, 2005/56/EC, 2007/36/EC, 2011/35/EU, 2012/30/EU and 2013/36/EU, and Regulations (EU) No 1093/2010 and (EU) No 648/2012, of the European Parliament and of the Council OJ L 173, 12.6.2014, p. 190–348* (Bank Recovery and Resolution Directive, henceforth: BRRD) and

eurozone alone, all such regulation across the financial world enshrined the following principle: states – and thus ultimately taxpayers – shall no longer be financially responsible for institutions[4] that get into trouble but were previously considered too big, too complex, or too intertwined to fail[5] (collectively referred to as 'TBTF') and therefore needed to be kept alive through bailouts.[6] It became apparent that the only alternative to bailout at that time, namely the existing national regimes for normal insolvency proceedings, were unfit and would produce undesired results if applied. Thus, a certain resentment against their application spread. As a consequence, in many cases, these regimes were not regarded as a genuine alternative to bailout[7] and were not applied, leaving the public

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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 OJ L 225, 30.7.2014, p. 1–90 (Single Resolution Mechanism Regulation, henceforth: SRMR). For a systematic overview on banking legislation, see K. Langenbucher, T. H. Tröger, L. Milione, A. Roth, D. Kolassa, S. Honnefelder, A. K. Krischel, S. d. Lemos Peixoto, C. Lindemann, R. Maier, I. van Es and R. Silvestri, *EU Mapping 2017: systematic overview on economic and financial legislation: Study for the ECON Committee* (Luxembourg: Publications Office of the European Union, 2017), pp. 13 *et seq.*

4 'Institution' in the context of this thesis is defined as it is in the BRRD, as a credit institution (as defined in point (1) of Art. 4(1) of Regulation (EU) No 575/2013, not including the entities referred to in Art. 2(5) of Directive 2013/36/EU) and investment firms (as defined in point (2) of Art. 4(1) of Regulation (EU) No 575/2013 that is subject to the initial capital requirement laid down in Art. 28(2) of Directive 2013/36/EU). All other technical terms used herein have the same meaning as given to them by the BRRD, if not defined otherwise.

5 S. Gleeson and R. Guynn, *Bank Resolution and Crisis Management: Law and Practice*, First edition (Oxford: Oxford University Press, 2016), pp. 7–8; for the US approach to tackling too-big-to-fail, see Scott K. E., Jackson T. H. and Taylor J. B. (eds.), *Making failure feasible: How bankruptcy reform can end "too big to fail"*, Hoover Institution Press publication (Stanford, California: Hoover Institution Press, Stanford University, 2015), no. 662.

6 M. Pagano, 'Lessons from the European financial crisis' in E. Faia, A. Hackethal, M. Haliassos and K. Langenbucher (eds.), *Financial Regulation: A Transatlantic Perspective* (Cambridge, United Kingdom, New York: Cambridge University Press, 2015), pp. 23–48, pp. 25 *et seq.*; J. P. Krahnen and L. Moretti, 'Bail-In Clauses' in E. Faia, A. Hackethal, M. Haliassos and K. Langenbucher (eds.), *Financial Regulation: A Transatlantic Perspective* (Cambridge, United Kingdom, New York: Cambridge University Press, 2015); Binder J.-H. and Singh D. (eds.), *Bank Resolution: The European Regime* (Oxford: Oxford University Press, 2016) p. vi.

7 See recital (1) BRRD. For a deeper analysis showing why normal insolvency regimes do perfectly apply to commercial companies but not to banks, see Gleeson

to bear the massive expenses of bank rescues[8] and eventually destabilizing entire economies. This situation and the resulting reactions of taxpayers, stoked by negative media coverage across the world, would finally lead to a change. In Europe, this was the birth of what we today refer to as the European Banking Union.[9]

But why were people so reluctant to apply the existing national insolvency regimes that it became necessary to find a superior alternative? First, national insolvency proceedings actually terminated institutions, thereby destroying value,[10] and depleted the availability of the socially and economically important functions the respective banks used to provide. Second,

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and Guynn, *Bank Resolution and Crisis Management*, pp. 3–5, J. Armour, 'Making Bank Resolution Credible' in N. Moloney, E. Ferran and J. Payne (eds.), *Oxford Handbook of Financial Regulation* (Oxford: Oxford University Press, 2015), pp. 453–86, pp. 456 *et seq.*

8 For a detailed analysis of costs associated with bank rescues within the financial crisis, see European Commission, *The effects of temporary State aid rules adopted in the context of the financial and economic crisis, SEC(2011) 1126 final*, Commission Staff Working Paper (2011) retrievable at http://ec.europa.eu/competition/publications/reports/working_paper_en.pdf accessed 1 October 2022.

9 For insight into the development of the Banking Union, see European Commission, *Communication from the Commission to the European Parliament and the Council - A Roadmap towards a Banking Union COM(2012) 510 final*; European Commission, *Banking Union - restoring financial stability in the Eurozone*, Press Release/Memo (2014) retrievable at http://europa.eu/rapid/press-release_MEMO-15-6164_en.htm?locale=en accessed 1 October 2022; European Commission, *Communication to the European Parliament, the Council, the European Central Bank, the European Economic and Social Committee and the committee of the Regions on completing the Banking Union COM(2017) 592 final*; European Commission, *Completing the Banking Union by 2018*, Fact Sheet retrievable at http://europa.eu/rapid/press-release_MEMO-17-3722_en.pdf accessed 1 October 2022. For secondary literature on the Banking Union see Binder J.-H. and Gortsos C. V. (eds.), *The European Banking Union: A compendium* (München, Oxford, Baden-Baden: C.H. Beck; Hart; Nomos, 2016); D. Schoenmaker, 'The Banking Union: An Overview and Open Issues' in T. Beck and B. Casu (eds), *The Palgrave Handbook of European Banking* (London: Palgrave Macmillan UK, 2016), pp. 451–74.

10 The destroyed value arising from a bank's liquidation goes beyond the nominal value of the claims and the rights of claimholders to future cash flows. For example, insolvency proceedings would impede the liquidity-providing function of deposits while hedges would be destroyed by the loss-participation of risk-shifting derivatives. See T. H. Tröger, 'Optimal Bail-In Tools - Observations From A European Perspective' in D. Arner, D. Busch, E. Avgouleas and S. Schwarcz (eds.), *Systemic Risk in the Financial Sector: Ten Years After the Great Crash* (Centre for International Governance Innovation, 2019); J. H. Sommer, 'Why Bail-In? And How!', *Economic Policy Review* 20 (2014), 207-228, pp. 214, 216.

liquidation is a lengthy process, and is unsuitable in a situation where a quick reaction is needed. Third, and most importantly, the national insolvency proceedings provided no mechanisms to cope with the complex idiosyncrasies and systemic effects[11] of big[12] banks' failures in the 21th century.[13]

Therefore, the problem was not only that a bank as an institution itself faced insolvency and ceased to exist[14] but rather that some banks were so interconnected, so complex, or simply so big that insolvency would spill over, contaminating all kinds of creditors, other banks, and other states, thereby posing a threat to the economy and the financial system[15] in one country or even several countries. This presented governments and regulators with an unenviable dilemma. The affected parties expected governments to save the struggling banks (and governments themselves were not exactly unwilling to do so, since they believed the systemic

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11 These effects can occur because: the failing bank is a counterparty for a wide range of market participants; or because, due to liquidity shortness, it is forced to fire-sell assets, which leads to negative price movements, damaging other institutions. or because the defaulting of such institutions can spread (irrational) panic in the market through rumor, leading other institutions to possibly fail as well. See T. H. Tröger, 'Too complex to work: A critical assessment of the bail-in tool under the European bank recovery and resolution regime', *SAFE Working Paper* No. 179 (2017), p. 5 retrievable at SSRN https://ssrn.com/abstract=3023184 accessed 1 October 2022; M. K. Brunnermeier, 'Deciphering the liquidity and credit crunch 2007 - 2008', *The Journal of Economic Perspectives: a Journal of the American Economic Association* 23 (2009), 77–100.

12 As will be shown in the course of this thesis, it is not only the failure of big banks that can have systemic effects. The failure of medium-sized banks or even small banks can have negative consequences on the market, if they provide certain critical functions or are systemic in a domestic context.

13 For an extensive analysis of macro- and micro-economic effects of bank insolvencies, see M. M. Göhner, *Bail-in oder Bail-out?: Bankeninsolvenzen aus wirtschaftspolitischer Perspektive*, Wirtschaftspolitische Forschungsarbeiten der Universität zu Köln (Baden-Baden: Tectum Verlag, 2018), Band 63, pp. 22–27.

14 Although this motif might also have persuaded some states to save their banks through bailout, saving a bank as an institution because it was considered a 'national champion' or a 'prestige object' was not the main reason for the refrainment from normal insolvency proceedings.

15 Contagious effects can occur through various means, one being the direct connection of banks' balance sheets, since one liability of an institution is the asset of another institution, firm, or state. But contagious interconnection can also be traced down to correlation in investment strategies or depositors' wrong inferences causing bank runs, which have a compounding effect on each other, further intensifying the contagion. See Armour, 'Making Bank Resolution Credible', pp. 457 *et seq*.

and economic consequences of regular insolvency to be worse, so they too would benefit from a rescue), which in turn aggravated the situation in sovereign debt markets.[16] Due to this doom-loop,[17] tumbling banks posed a direct financial and economic risk to their home country and its taxpayers. If a given bank was considered important for the real economy and the financial system, and insolvency would have meant a threat[18] to the stability of this system, the government of the relevant state would try to save it through monetary means by socializing the costs of the rescue, better known as bailing it out.[19] Not only did this bailout come at a sub-

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16 M. Yiatrou, *Bank Resolution Credibility and Economic Implications*, ADEMU Working Paper Series (2016), p. 2 retrievable at http://cadmus.eui.eu/bitstream/handle/1814/50205/ADEMU_2016_038.pdf?sequence=1&isAllowed=y accessed 1 October 2022; Armour, 'Making Bank Resolution Credible', p. 453.

17 V. de Bruyckere, M. Gerhardt, G. Schepens and R. Vander Vennet, 'Bank/sovereign risk spillovers in the European debt crisis', *Journal of Banking & Finance* 37 (2013), 4793–809, E. Farhi and J. Tirole, 'Deadly Embrace: Sovereign and Financial Balance Sheets Doom Loops', *The Review of Economic Studies* 85 (2018), 1781–823, Faia E., Hackethal A., Haliassos M. and Langenbucher K. (eds.), *Financial Regulation: A Transatlantic Perspective* (Cambridge, United Kingdom, New York: Cambridge University Press, 2015), p. 24.

18 Normal insolvency proceedings take time to identify and realize the available assets, to find the accounts of debts owing, and then to pay the creditors in accordance with the creditor hierarchy, which means creditors must bear the liquidity risk associated with the delay in insolvency proceedings. This procedure can aggravate potential contagious effects. See Armour, 'Making Bank Resolution Credible', pp. 455, 459.

19 Krahnen and Moretti, 'Bail-In Clauses', p 125. There is a rather long history of bank bailouts in Europe. Between 2008 and 2014, in 11 Member States, the fiscal impact of bailout exceeded 3 % of the 2014 GDP with Ireland reaching an outstanding 31.1 %, followed by Greece, Cyprus, and Slovenia. See: European Central Bank, *Economic Bulletin Issue 6/2015* retrievable at https://www.ecb.europa.eu/pub/pdf/ecbu/eb201506.en.pdf?b58dfa168a33d6dc69a2d397d0982e45 accessed 1 October 2022; and S. Micossi, G. Bruzzone and M. Cassella, 'Fine-tuning the use of bail-in to promote a stronger EU financial system', *CEPS Special Report* No. 136 (2016), p. 1 retrievable at https://www.ceps.eu/system/files/CEPS%20SR%20No%20136%20Bail-in%20StateAid%20and%20Public%20Interest.pdf accessed 1 October 2022. In Germany, there were numerous bailouts, including in recent times the SachsenLB, IKB Deutsche Industriebank in 2007, Hypo Real Estate in 2008, Commerzbank, BayernLB, LBBW, and WestLB. These banks were considered rather big and interconnected so the German government granted them public financial injections. On the other hand, 23 banks between 2008 and 2012 were sent into insolvency, such as Partin, Weserbank or Gontard & MetallBank in Germany – this was unsurprising as these were small banks with little importance in terms of the financial system's health. See C. Dohmen,

stantial fiscal cost[20] and consequently at an enormous cost to taxpayers, it also created incentives for banks to speculate on supporting state responses and to rely on fiscal help in the event they ever got into trouble again, which again caused moral hazard,[21] excessive risk-taking and opportunistic behavior among banks and their stakeholders. As a result, especially big, complex, or intertwined banks were tempted to rely on the financial safety net provided by states that would cushion them in case of financial distress, because they knew they were considered too big or too important to fail. Consequently, customers and investors anticipated such a subsidy, failed to evaluate the risk adequately,[22] and did not monitor the institu-

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Finanzwirtschaft: Wie alles zusammenhängt, Zeitbilder, 1. Aufl. (Bonn: Bundeszentrale für Politische Bildung, 2014), pp. 162, 164.

20 In the period of 2008 to 2014, total gross fiscal support of euro area governments to the financial system amounted to approximately 8 % of the region's GDP, C. Hadjiemmanuil, 'Limits on State-Funded Bailouts in the EU Bank Resolution Regime' in G. B. Navetti, G. Calzolari and A. F. Pozzolo (eds.), *European Economy: Banks, Regulation, and the Real Sector* (Rome: Europeye, 2016), pp. 91–117, p. 92. Although slightly diverging numbers exist, the EU Member States and central banks approved a total of 5045 billion euros between 2008 and 2016 for recapitalizations, impaired asset measures, guarantees, and other liquidity measures. Of this amount, 1946.9 billion euros was actually used, see European Commission, *State Aid Scoreboard 2017: Aid in the context of the financial and economic crisis* Figure 1 – Total amounts of state aid to banks approved and used in the EU over the period 2008–2016 (in billion EUR) retrievable at http://ec.europa.eu/competition/state_aid/scoreboard/state_aid_scoreboard_%202017.pdf accessed 1 October 2022; K.-P. Wojcik, 'Bail-in in the Banking Union', *Common Market Law Review* 53 (2016), 91–138, pp. 91 *et seq.* Approximately 80 % of the total support consisted of loans and guarantees to strengthen the liquidity position of the banks, see W. P. de Groen, *Cash outflows in crisis scenarios: Do liquidity requirements and reporting obligations give the Single Resolution Fund sufficient time to react?*, In-Depth Analysis for the Economics and Monetary Affairs Committee of the European Parliament (2018) retrievable at http://www.europarl.europa.eu/RegData/etudes/IDAN/2018/614507/IPOL_IDA(2018)614507_EN.pdf accessed 1 October 2022.

21 E. Avgouleas and C. Goodhart, *A Critical Evaluation of Bail-ins as Bank Recapitalisation Mechanisms*, Centre for Economic Policy Research Discussion Paper (2014), available at SSRN https://ssrn.com/abstract=2478647 accessed 1 October 2022; Wojcik, 'Bail-in in the Banking Union', pp. 100 *et seq.*; J. Zhou, V. Rutledge, W. Bossu, M. Dobler and N. Jassaud, *From bail-out to bail-in: Mandatory debt restructuring of systemic financial institutions*, IMF staff discussion note (Washington, DC: Internat. Monetary Fund, 2012), 2012/3..

22 Evidence was found that a positive relationship between bailout expectations and risk-taking exists. See L. Dam and M. Koetter, 'Bank Bailouts and Moral Hazard: Evidence from Germany', *Review of Financial Studies* 25 (2012), 2343–80.

tions, resulting in banks' risk-taking being underpriced[23] and increasing the probability and severity of future crises.[24] Furthermore, these implicit subsidies caused rating agencies to give the respective institutions better ratings, which in turn lowered risk premiums and as a consequence the banks' refinancing costs, which thereupon increased the banks' profits.[25] Consequently, many investors shifted their money from smaller to bigger banks, since they also knew that the government would not let the bank go into insolvency. They thought "why not charter an unsinkable ship?" This phenomenon fostered the assumption that the financial strength of a Member State[26] would determine the riskiness of its banks, as a financially strong economy[27] can more easily rescue a troubled bank. This assumption disrupted cross-border lending and incentivized ring-fencing of national liquidity and entities, even within the same banking group. Eventually, on a macroeconomic level, the bailout of mismanaged institutions that proved (and in the future will most likely continue to prove) incapable of surviving[28] runs counter to economic considerations in the majority of cases. Bailing-out such troubled banks prevents market consolidation

23 G. H. Stern and R. J. Feldman, *Too Big to Fail: The Hazards of Bank Bailouts* (Washington, DC: Brookings Institution Press, 2009), ch. 3.; Micossi, Bruzzone and Cassella, 'Fine-tuning the use of bail-in to promote a stronger EU financial system', p. 2.

24 Hett/Schmidt found that market participants rationally adjust their bailout expectations in reaction to government interventions. For an overview of, and data on, the impact of bailout expectations on market discipline see F. Hett and A. Schmidt, *Bank Rescues and Bailout Expectations: The Erosion of Market Discipline During the Financial Crisis*, Safe Working Paper Series (2016) retrievable at SSRN https://ssrn.com/abstract=2365686 accessed 1 October 2022.

25 The Bank of England estimated that this overreaching in favor of systemic banks has an approximate value of one trillion US dollars annually. See Dohmen, *Finanzwirtschaft*, p. 162.

26 Evidence for this may be found in Schäfer et. al, who found that banks in European crisis countries are much more strongly affected by bail-in rumors than banks from other countries. They stated that this is because fiscal capacity is one important determinant of bail-in expectations. See A. Schäfer, I. Schnabel and B. Di Weder Mauro, 'Bail-in expectations for European banks: Actions speak louder than words', *CEPR Discussion Paper* DP11061 (2016) retrievable at SSRN https://ssrn.com/abstract=2723322 accessed 1 October 2022.

27 Zhou, Rutledge, Bossu, Dobler and Jassaud, *From bail-out to bail-in*, 2012/3, p. 20.

28 For the problem of 'zombie banks' or 'the walking dead dilemma' see, amongst others C. Gandrud and M. Hallerberg, *How not to create zombie banks: lessons for Italy from Japan*, Bruegel Policy Contributions retrievable at http://bruegel.org/wp-content/uploads/2017/03/PC-06-2017-030317.pdf accessed 1 October 2022. For recent developments see Y. Onaran, 'Zombie Banks', Bloomberg, 11 July 2017

and deprives other better-managed banks of market opportunities. These effects can decrease social welfare and the financial stability in the medium term.[29]

To help overcome this plight and in order to save taxpayers' money from bailouts, the European legislator equipped the Banking Union with the following three remedial features: a Single Supervisory Mechanism (SSM)[30]; a Single Resolution Mechanism (SRM)[31] (the SSM and SRM were both based on a Single Rulebook)[32]; and a European Deposit Insurance Scheme (EDIS)[33]. These were designed to complement existing national deposit guarantee schemes. Although the setting up of the EDIS as a third component has attracted some major resistance – especially from Germany[34] – and its proposals are still ongoing and have not yet been adopted

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retrievable at https://www.bloomberg.com/quicktake/zombie-banks accessed 1 October 2022.

29 Göhner, *Bail-in oder Bail-out?*, Band 63, pp. 30–40; J. P. Krahnen, *Banking Failures: Consolidation is Better than Rescue: Bailing out ailing banks distorts competition*, SAFE Policy Blog (2017) retrievable at https://safe-frankfurt.de/policy-blog/details/banking-failures-consolidation-is-better-than-rescue.html accessed 1 October 2022.

30 *Regulation (EU) No 1022/2013 of the European Parliament and of the Council of 22 October 2013 amending Regulation (EU) No 1093/2010 establishing a European Supervisory Authority (European Banking Authority) as regards the conferral of specific tasks on the European Central Bank pursuant to Council Regulation (EU) No 1024/2013 OJ L 287, 29.10.2013, p. 5–14* (2013) (henceforth: SSMR).

31 *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 OJ L 225, 30.7.2014, p. 1–90* (henceforth: SRMR).

32 Key elements of the Single Rulebook are the CRD IV, which transposes Basel III capital requirements; the *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. 149–178* (Deposit Guarantee Scheme Directive, henceforth DGSD); and the BRRD.

33 EDIS would complement the existing national deposit-guarantee schemes, along with EU legislation that already insures the protection of all deposits up to 100 000 euros. Through a single fund, EDIS would ensure equal and more financially-equipped protection of all Banking Union depositors in case of failure. See European Commission, *Completing the Banking Union by 2018*, p. 2.

34 See only recently the rejection of the proposal in the German parliament: Deutscher Bundestag, *Antrag zu dem Vorschlag für eine Verordnung des Europäischen Parlaments und des Rates zur Änderung der Verordnung (EU) Nr. 806/2014 im Hinblick auf die Schaffung eines europäischen Einlagenversicherungssystems KOM(2015) 586 endg; Ratsdok. 14649/15 - Drucksache 19/2525* (2018). Not only was Germany

by the European Parliament and the Council,[35] the introduction of the SSM and SRM has been relatively smooth. For now, both the SSM and the SRM are fully operational in all participating Member States forming the Banking Union.[36]

With these problems in mind, the European legislator created the centerpiece of the Banking Union, a framework for the recovery and resolution of credit institutions and investment firms,[37] namely the Bank Recovery and Resolution Directive (BRRD).[38] The aim of the BRRD was to redress the technical and economic challenges of bank failures by infusing the European Banking Union project with several fundamental and innovative notions. One of the most important ideas behind the BRRD was that banks, once failed, need to be resolved in the most cost-effective and orderly way, setting aside costly public bailouts and providing an alternative to the unsuitable and slow-mode national insolvency regimes.

There is a widespread consensus that by setting up the BRRD, Europe – at least theoretically – came up with a competent way to deal with failing banks and to provide alternatives to both undesirable bailouts and

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reluctant in relation to setting up the EDIS, but already in the process of setting up the European Stability Mechanism (ESM), the successor of the EFSM and the EFSF, Germany tried to fend off and resist the centralization of resolution funding. It was afraid that this would amount to an *ex post de facto* mutualization of the costs from past national supervisory failures. See Hadjiemmanuil, 'Bank Resolution Financing in the Banking Union', p. 195.

35 European Commission, *Completing the Banking Union by 2018*. However, the development of the EDIS was recently discussed by the European Commission; see European Commission, *Communication to the European Parliament, the Council, the European Central Bank, the European Economic and Social Committee and the committee of the Regions on completing the Banking Union COM(2017) 592 final*, pp. 9–13.

36 On the completion of the Banking Union, see European Commission, *Communication to the European Parliament, the Council, the European Central Bank, the European Economic and Social Committee and the committee of the Regions on completing the Banking Union COM(2017) 592 final*.

37 In the following, credit institutions and investment firms together are referred to as 'institutions' in the context of Art. 2(23) of the BRRD.

38 *Directive 2014/59/EU of the European Parliament and the Council of 15 May 2014 establishing a framework for the recovery and resolution of credit institutions and investment firms and amending Council Directive 82/891/EEC, and Directive 2011/24/EC, 2004/25/EC, 2005/56/EC, 2007/36/EC, 2011/35/EU, 2012/30/EU and 2013/36/EU, and Regulations (EU) No 1093/2010 and (EU) No 648/2012, of the European Parliament and of the Council OJ L 173, 12.6.2014, p. 190–348* . The BRRD was a product of the recommendations made by the Basel Committee's Cross-border Bank Resolution Group and the Financial Stability Board.

unsuitable insolvency proceedings. From now on, banks that are failing or likely to fail,[39] but are considered too big or too important to undergo normal insolvency proceedings, shall be put into resolution.[40] In this regard, the introduction of the bail-in tool represented the most notable and innovative resolution tool.[41]. Conceptualized as the reverse scenario of bailout – since not the government but the creditors themselves are put in charge of absorbing losses and recapitalizing the institution through write-down and conversion of debt or other liabilities according to a pre-defined hierarchy[42] – the new tool renders the industry more risk-conscious and responsible[43] while at the same time avoiding having to use public funds to finance bailouts and the negative consequences attached thereto.

But obviously the mere fact that the European legislator changed the law and set up a framework that – at first glance – looks conclusive does not mean that all pre-existing challenges and distortions will be eliminated right away. The main parts of the new legislative framework are experimental in nature since they have no meaningful precedents that could be used as guidance. This leaves a high level of uncertainty about central legal and economic aspects,[44] especially with respect to the growing dimension of EU and non-EU cross-border banking coordination. In addition, as the BRRD only emerged in May 2014, the banking industry as well as financial market participants will need time to adjust to the new rules and to rid themselves of the old habits and mindsets that were prevalent pre-Banking Union and pre-BRRD. Lastly, as dealing with failing banks is a highly political issue, political considerations and the interference of

39 Art. 32(4) BRRD sets out the circumstances under which an institution can be deemed failing or likely to fail.

40 Resolution, according to Art. 2(1)(1) BRRD, is defined as "the application of a resolution tool or a tool referred to in Art. 37(9) in order to achieve one or more of the resolution objectives referred to in Art. 31(2)." For a detailed introduction of the institutional setting of the resolution procedure within the Banking Union, see D. Busch, 'Governance of the Single Resolution Mechanism' in D. Busch and G. Ferrarini (eds.), *European Banking Union* (Oxford: Oxford Univ Press, 2015), part III, ch. 9; Jahn U., Schmitt C. and Geier B. M. (eds.), *Bankensanierung und -abwicklung: Handbuch*, 1. Auflage (München: C.H. Beck, 2016), pp. 236 *et seq.*

41 Art. 43 BRRD.

42 Art. 48 BRRD.

43 Tröger, 'Too complex to work', p. 3; on the influence on banks' risk-taking incentives U. Vollmer and H. Wiese, 'Minimum capital requirements, bank supervision and special resolution schemes. Consequences for bank risk-taking', *Journal of Financial Stability* 9 (2013), 487–97, p. 489.

44 Binder and Singh (eds.), *Bank Resolution*, p. vii.