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The Theory of Bank Resolution: Does the Bail-in Work?

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The Theory of Bank Resolution: Does the Bail-in Work?

Urs Lendermann[*]

Abstract

The Credit Suisse default triggered considerable discourse surrounding the absence of any bank resolution procedure. Instead, public guarantees and unconventional emergency liquidity assistance were granted. This situation prompts me to explore the bail-in tool and the total loss-absorbing capacity (TLAC) which were introduced by the G20 Financial Stability Board to eliminate the need for public bailouts of global systemically important banks in case of failure. Acknowledging the pragmatic standpoint, it is essential to recognize that banks hold divergent perspectives concerning their resolution planning while policymakers continue to grapple with the persistent 'too big to fail' dilemma without a clearly discernible pathway for resolution. In light of these premises, I propose to consider contractual approaches to enhance the TLAC framework, incorporating a market-based trigger design as a signal for eroding market confidence. These improvements aim to create conditions that enable central banks to provide emergency liquidity assistance, thereby averting systemic disruptions during a financial crisis.

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1. Introduction

In this study, I delve into the regulatory landscape that emerged in the wake of the 2007–2009 global financial crisis, which precipitated a surge in the demand for effective resolution mechanisms. The aim is to evaluate the too-big-to-fail (TBTF) reforms for global systemically important banks (G-SIBs), revealing distinct phases of regulatory responses. First, during the crisis, some banks were initially left to fail without intervention, aiming to set precedents; however, this experience only underscored the urgent need to prevent severe systemic disruptions. Subsequently, banks, which were failing or likely to fail, received public bailouts, leading to political actions to safeguard customers, creditors, the financial system, and the broader economy at the taxpayers' expense. Second, in the immediate aftermath of the crisis, public demand for stricter bank regulation emerged, with policymakers promising that such bailouts will never happen again given their far-reaching implications that surpass mere fiscal concerns.[1] However, the third phase, as predicted by economist George Stigler[2], witnessed systemically important banks discreetly influencing the multi-year regulatory process as public attention waned, leading to a potential cycle restart in the next crisis.

The concept of 'bail-in,' intriguingly proposed by representatives of G-SIBs themselves,[3] raises questions about its beneficiaries and potential implications. In this context, the Credit Suisse default in 2023[4] has triggered considerable discourse surrounding the loss-absorbing capacity of regulatory additional tier 1 (AT1) instruments.[5] Even more significant, is the

[1] See, for example, Stern, Gary H. and Feldman, Ron J. Too Big to Fail: The Hazards of Bank Bailouts. (2004) Washington DC: Brookings Institution Press; Consider the numerous contributions to the Chicago Federal Reserve Bank Conference on systemic financial crises on September 30 and October 1, 2004, Evanoff, Douglas D. and Kaufman, George G. (eds.) Systemic Financial Crises: Resolving Large Bank Insolvencies. (2005) New Jersey, London, Singapore et al.: World Scientific; Mishkin, Frederic S. How big a problem is too big to fail? a review of Gary Stern and Ron Feldman's too big to fail: the hazards of bank bailouts. Journal of Economic Literature, Vol. 44 No. 4 (2006), 988–1004.

[2] Stigler, George J. The Theory of Economic Regulation. Bell Journal of Economics and Management Science Vol 2 No. 1 (1971), 3-21.

[3] Paul Calello, former head of Credit Suisse's investment bank, and D. Wilson Ervin, former CRO of Credit Suisse, publicly claim the invention. See "From Bail-Out to Bail-In," The Economist, 28 January 2010.

[4] Cf. Swiss Federal Council, State Secretariat for International Finance SIF. 24.4.2023. https://www.efd.admin.ch/efd/en/home/financial-affairs/ubs-takeover-credit-suisse%20.html.

[5] Bolton, Patrick, Jiang, Wei, Kartasheva, Anastasia. " The Credit Suisse CoCo Wipeout: Facts, Misperceptions, and Lessons for Financial Regulation." Journal of Applied Corporate Finance (2023) 35:66-74.

absence of any resolution procedure while unconventional emergency liquidity assistance was provided, and public guarantees were granted. This necessitates a reconsideration of the Financial Stability Board's (FSB) Key Attributes of Effective Resolution Regimes for Financial Institutions ('FSB Key Attributes'),[6] which should have eliminated the need for any bailouts to G-SIBs.[7] The FSB identifies G-SIBs by employing a sophisticated methodology from the BCBS,[8] and annually discloses a list of the individual banks to the public.[9] The bail-in instrument empowers the resolution authority to hold certain liabilities of the bank liable to losses, either through a write-off[10] or temporary write-down[11], or by converting them into shares

https://doi.org/10.1111/jacf.12553; Paz Valbuena, Javier, Eidenmueller, Horst G. M. "Bailout Blues: the Write-Down of the AT1 Bonds in the Credit Suisse Bailout" April 1, 2023. European Corporate Governance Institute - Law Working Paper No. 705/2023, https://ssrn.com/abstract=4431170; Valiante, Diego. "The last days of Credit Suisse: banking crisis management under siege". Rivista delle Società 2023/1, p. 244; Zhenyu Wang, CoCo Bonds: Are They Debt or Equity? Do They Help Financial Stability? — Lessons from Credit Suisse NT1 [AT1] Bonds, 6 April 2023 https://www.ecgi.global/blog/.

[6] FSB. Key Attributes of Effective Resolution Regimes for Financial Institutions. Initially published in October 2011, adopted by the G20 at the Cannes Summit on November 3-4, 2011. Adjustments and amendments followed, most recently on 15 October 2014 https://www.fsb.org/wp-content/uploads/r_141015.pdf.

[7] In 2021, for the G20 Global Summit, the FSB already disclosed an evaluation report on the TBTF reforms in the banking sector, FSB. Evaluation of the Effects of Too-Big-to-Fail Reforms. Final Report as of 1 April 2021 https://www.fsb.org/wp-content/uploads/P010421-1.pdf. At the EU level, the European Commission had already produced a report on the new bank resolution regime in 2019, Commission report to the European Parliament and the Council on the application and review of Directive 2014/59/EU (Bank Recovery and Resolution Directive) and Regulation 806/2014 (Single Resolution Mechanism Regulation), Brussels, 30.4.2019, COM(2019) 213 final.

[8] BCBS, Global systemically important banks: assessment methodology and the additional loss absorbency requirement, updated 21 November 2022 https://www.bis.org/bcbs/gsib/. During the initial designation process, one of the banks within the scope provided incorrect figures. Surprisingly, this error not only affected the specific bank's result but also raised doubts about the accuracy of designations for other G-SIBs, resulting in no buckets and additional capital requirements in 2011. Presently, there are concerns regarding whether an existing G-SIB should remain in bucket 1 after acquiring another G-SIB that was also in bucket 1. This highlights that the simplistic perspective of 'one plus one equals one' might not fully address potential issues related to a 'too big to save' scenario under the BCBS's methodology.

[9] FSB, List of Global Systemically Important Financial Institutions (G-SIFIs), later on divided into insurers and banks, and subsequently limited to G-SIBs only https://www.fsb.org/work-of-the-fsb/market-and-institutional-resilience/global-systemically-important-financial-institutions-g-sifis/; The published list is considered soft law since the BCBS and the FSB, as international, nongovernmental organizations, lack enforcement power. Making the list public raises ambiguity as it could reveal the explicit state guarantee behind special rules for G-SIBs. Moreover, the G-SIB designation may provide a false sense of security and discourage aspiring banks.

[10] This is a reduction of liabilities, which leads to extraordinary income, increasing equity, similar to a write-up of assets through profit or loss.

[11] This term is sometimes used when no complete or permanent reduction of liabilities is envisaged or, in other words, if a later 'write-up' seems possible.

or other capital instruments.[12] To overcome technical[13], economic[14], and legal obstacles,[15] the FSB proposed the issuance of 'bail-in bonds,' ensuring a credible and feasible process. This concept was termed the total loss-absorbing capacity (TLAC)[16], aligning with Basel capital standards,[17] which apply concurrently and count toward the TLAC requirement. The design of TLAC-eligible instruments is established in the FSB TLAC Term Sheet of 9 November 2015 ('FSB TLAC Term Sheet').[18] I will focus on G-SIBs, the bail-in tool, and TLAC[19] while examining the dynamics between the private sector and policymakers during the post-crisis period. Understanding these dynamics is crucial for identifying potential areas of improvement in the existing banking regulation framework and creating a more resilient and stable financial system.

The remainder of the study is as follows. Section 2 below offers insights into the current state of TBTF regulation, illustrating the various factors and interests that influence the

[12] FSB Key Attributes, Attribute 3.5, and Preamble, p. 3. On the mechanism, Huertas, Thomas F. On the case for bail-ins, in Dombret, Andreas R. and Kenadjian, Patrick S. (eds.). The Bank Resolution and Recovery Directive (2013), 167; Gardella, Anna. Bail-in and the Financing of Resolution within the SRM Framework, in Busch, Danny and Ferrarini, Guido (eds.). European Banking Union, (2015), 11.33; Ringe, Wolf-Georg. Bail-In between Liquidity and Solvency. American Bankruptcy Law Journal, Vol. 92 (2018), 299; Leckow, Ross, Gullo, Alessandro, and Emre, Ender. Bank Resolution Frameworks: Key Legal Design Issues. INSOL International. Bank Resolution: Key Issues and Local Perspectives, edited by Simon Brodie. (2019) London: INSOL International. p. 10 et seq.

[13] For example, the outstanding bonds were issued from operating subsidiaries below the top group company or special purpose entities due to tax considerations or capital market requirements; they were hedged via other group companies for structured products and derivatives or other purposes, or guaranteed.

[14] For example, holders of the liabilities to be 'bailed in' were themselves systemically important or economically and socio-politically significant natural or legal persons.

[15] For example, the debt instruments were issued abroad for different reasons, and neither the domestic jurisdiction was applicable nor the domestic authorities was competent to issue an order that could be reviewed by domestic courts (assuming their rulings were bail-in amiable than those of foreign courts). Therefore, international cooperation and burden sharing are among the greatest challenges in resolving global financial groups. The voluminous papers of the FSB alone on this subject, which constitutes a significant portion of its activity, prove this issue. Almost every key attribute requires international cooperation. Cf. Binder, Jens-Hinrich, Cross-Border Coordination of Bank Resolution in the EU: All Problems Resolved? (April 15, 2016). SSRN: 2659158.

[16] Initially, the concept was referred to as 'gone concern loss-absorbing capacity' (GLAC) and was later rebranded as TLAC.

[17] Common Equity Tier 1 (CET1), Additional Tier 1 (AT1), and Tier 2 capital.

[18] FSB (2015) "Principles on Loss-Absorbing and Recapitalisation Capacity of G-SIBs in Resolution: Total Loss-Absorbing Capacity (TLAC) Term Sheet." https://www.fsb.org/wp-content/uploads/TLAC-Principles-and-Term-Sheet-for-publication-final.pdf.

[19] This study excludes the resolution of domestic systemically important banks, while occasionally considering supranational and national specificities, such as the European minimum requirement for eligible liabilities and own funds (MREL) and the orderly liquidation procedure under Title II of the of the U.S. Dodd-Frank Wall Street Reform and Consumer Protection Act, Pub L No 111-203, 124 Stat 1376 (2010).

regulatory process in this context. Building on this, Section 3 addresses the crucial question of how funding cost advantages resulting from implicit state guarantees and inadequate pricing could have been mitigated or preserved. Section 4 tackles the impact of the resolution framework on the G-SIBs' international group structures. Section 5 presents an analysis of the bail-in trigger mechanism and its impact on the decision making process, contrasting it with the mandatory contractual approach found in the Swiss concept of Contingent Convertible bonds (CoCo). Based on the findings of this study, Section 6 will propose specific market-based enhancements to the current TLAC terms. Section 7 concludes.

2. Mastering Semantics in the Market for Bank Regulation

2.1. Pre-emptive Self-regulation

To gain a comprehensive understanding, it is worthwhile to reflect on the post-financial crisis scenario on the market for TBTF regulation. As the regulatory hog cycle[20] culminated, a notable political equilibrium emerged wherein the interplay between the demand for and supply of regulation found its balance. This intricate equilibrium is a result of several contributing factors, including asymmetric information, diverse individual stakes, the influence of political dynamics, and the differing marginal gains associated with regulation.

In considering the alignment of interests, policymakers faced the Sisyphean task of adequately responding to the unprecedented public bailout during the 2007–2009 financial crisis. Concurrently, the G-SIBs allayed their gravest concerns while awaiting this response, drawing from historical precedents that dramatically demonstrated political willingness and ability to act (e.g., the breakup of AT&T and the 1933 Glass-Steagall Act). Amid this setting, the so-called Private Sector Bail-in Initiative, which several G-SIBs formed in a non-committal

[20] In economics, the term hog cycle, pork cycle, or cattle cycle describes the phenomenon of regularly recurring cycles in the production and prices of particular commodities, cf. Ezekiel, Mordecai. "The Cobweb Theorem." The Quarterly Journal of Economics 52, no. 2 (1938): 255–80. https://doi.org/10.2307/1881734; Harlow, Arthur A. (1960), The Hog Cycle and the Cobweb Theorem. American Journal of Agricultural Economics, 42: 842-853.

manner,[21] offered policymakers a strategic counter-narrative by reframing the concept of a 'bailout' with a 'bail-in.'[22] In it, the bail-in semantically negated the TBTF problem.[23]

2.2. Recapturing the Too Big To Fail-Problem

Subsequently, a fruitful symbiosis emerged between the industry and policymakers to address their mutual challenge, that is, offering a convincing solution to the TBTF conundrum, all while ensuring minimal resistance from the influential financial industry and mitigating political repercussions. Bureaucracies, by their nature, may occasionally exhibit tendencies to augment their operational budgets; a certain level of inherent inefficiency is to be expected.[24] This bureaucratic inclination inadvertently provided a window of opportunity for the regulatory sector, prompting the establishment of specialized resolution authorities and the drafting of intricate rules at a rather conceptual level, subsequently creating a demand for consultancy.[25]

Leveraging this environment, the private sector managed to persuade policymakers of the advantages of the bail-in mechanism, effectively sidelining drastic measures such as breaking up the banking group or separating business lines,[26] imposing stringent equity capital

[21] Previous research on the formation and function of interest groups found that relatively few groups spontaneously coalesce and that their close cohesion enables them to exploit much larger groups. Olson, Mancur Lloyd. The Logic of Collective Action: Public Goods and the Theory of Groups. (1965) Cambridge, MA: Harvard University Press.

[22] Invented by Paul Calello and D. Wilson Ervin. "From Bail-Out to Bail-In," The Economist, 28 January 2010 and subsequently promoted by the Private Sector Bail-in Initiative, e.g., at a meeting with regulators on 14.10.2012 at the Canadian Embassy in Tokyo and on several other occasions.

[23] A "radioactive silver bullet", Kenadjian, Patrick S. "CoCos and Bail-Ins." Dombret, Andreas R. and Patrick S. Kenadjian, eds. The Bank Resolution and Recovery Directive: Europe's Solution for Too Big to Fail? (2013), in Institute for Law and Finance, Vol. 13. Berlin, Boston, MA: De Gruyter, p. 231.

[24] Niskanen, William A. Jr. Bureaucracy and Representative Government. (1971) Chicago, IL: Aldine Atherton.

[25] The concept of Minimum Requirements for Eligible Liabilities and Own Funds in the EU may be viewed as an example of over-engineered regulation due to the well-intentioned application of the principle of proportionality on a level playing field; on overly complex rules Haldane, Andrew G. "The dog and the frisbee." Speech at the Federal Reserve Bank of Kansas City's 366th economic policy symposium, "The changing policy landscape", Jackson Hole, Wyoming, 31 August 2012. https://www.bis.org/review/r120905a.pdf; Tröger, Tobias H. "Too complex to work: a critical assessment of the bail-in tool under the European bank recovery and resolution regime." Journal of Financial Regulation, Vol. 4 No. 1 (2018), 35–72.

[26] Kashkari, Neel, "Lessons from the Crisis: Ending Too Big to Fail." Remarks at the Brookings Institution, February 16, 2016; Hoenig, Thomas M., "A Market-Based Proposal for Regulatory Relief and Accountability." Speech at the Institute of International Bankers Annual Conference. Washington, DC: March 13, 2017.

requirements,[27] or setting size limits on banks.[28] These measures began to appear unnecessary and inappropriate starting from that point. Instead, the FSB included the bail-in as a focal point in its proposals for a new resolution regime for G-SIBs, along with the implementation by the G20 member countries and others. Authorities suggested that the bail-in should be at the core of the resolution tools for institutions.[29] An official of a major resolution authority even termed the bail-in a 'game changer.'[30] Post this accomplishment, regulatory discussions reverted to the traditional pattern about the level of risk posed by banks that a society is comfortable tolerating, balanced against the essential credit supply to the economy and any other costs associated with it. Moreover, the circle of people interested in banking regulation, including almost all citizens in their capacity as taxpayers, bank customers, and voters during the 2007–2009 financial crisis, was narrowed to 'expert circles.' Thus, the bail-in successfully achieved its essential goal.

3. Preserving Funding Cost Advantages

3.1. Dissensions on the Implicit State Guarantee

Regulatory requirements, in essence, hinge more on political discourse than scientific certainty,[31] despite being veiled in an aura of technical specificity that could theoretically be delineated in an impact study.[32] This discourse revolves around wealth distribution, where the interests of G-SIBs (seeking low financing costs) contrast with those of investors (demanding risk-adequate pricing), competitors (seeking to mitigate unjustified funding cost advantages),

[27] Admati, Anat R. and Hellwig, Martin F. The Bankers' New Clothes. (2013) Princeton University Press, Princeton, NJ; Hoenig, Thomas M., "A Market-Based Proposal for Regulatory Relief and Accountability." Speech at the Institute of International Bankers Annual Conference. Washington, DC: March 13, 2017.
[28] Haldane, Andrew G., "On being the right size." Speech. Institute of Economic Affairs, 25 October 2012. https://www.bis.org/review/r121030d.pdf.; Kashkari, Neel, "Lessons from the Crisis: Ending Too Big to Fail." Remarks at the Brookings Institution, 16 February 2016.
[29] Deutsche Bundesbank. Monthly Report, Vol. 66 No. 6 (2014), 31–56.
[30] Wojcik, Karl-Philipp. Bail-in the Banking Union. Common Market Law Review, Vol. 53 No. 1 (2016), 91–138.
[31] According to Hans Kelsen's (1881–1973) "Pure Theory of Law" (Reine Rechtslehre, 2nd edition 1960. 5 pp., 196 pp.) moral convictions cannot be measured through logical or mathematical proof, nor can they be substantiated via experimental evidence. According to Hume's law, however, one cannot derive an 'ought' from an 'is,' cf. Hume, David. A Treatise of Human Nature, Book III, Part I, Chapter I; Kelsen himself cites Moore, George Edward, Principia Ethica, Cambridge 1922, 7 pp. see also Korb, Axel-Johannes, "Kelsens Kritiker: Ein Beitrag zur Geschichte der Rechts- und Staatstheorie" (1911−1934), Tübingen 2010.
[32] Cf. BCBS, TLAC Quantitative Impact Study Report, November 2015 http://www.fsb.org/2015/11/bcbs-tlac-quantitative-impact-study-report.

and the taxpayers (expecting compensation for implicit state guarantees). Thus, regulators' hesitancy is discernable regarding whether eliminating unjustified funding cost advantages for a bank should outweigh considerations of its profitability and concerns about meeting the capital requirements.[33]

Nevertheless, at least TLAC-eligible liabilities should no longer rely on an implicit and unconditional state guarantee.[34] Investors who choose the bank as their counterparty should be aware of the risks associated with their choice and bear responsibility if any such risks materialize. However, this argument holds true only if market discipline mechanisms, such as comprehensive risk disclosure and proper investment advice, are in place and effectively allow for informed investment decisions and negotiations of appropriate risk premiums. Additionally, investor suitability is crucial, as any mis-selling of these instruments can jeopardize the effectiveness of the loss-absorbing mechanism, potentially increasing the likelihood of a public bailout for financial, economic, or socio-political reasons.

3.2. Un-subordinating TLAC-eligible Liabilities

The most suitable approach to consolidate all 'capital structure liabilities' under TLAC and segregate them from 'operating liabilities' for bail-in purposes would be to introduce a clear contractual subordination requirement. Although the FSB formulated this,[35] three aspects have undermined its implementation. First, subordination only has to be established vis-à-vis liabilities excluded from TLAC.[36] However, *pari passu* is not required with the other subordinated debt, which qualifies as AT1 and even Tier 2 capital, if applicable.[37] Second, the

[33] While it might be reasonable to educate the market about the legal foundations of a bail-in and the creditor hierarchy, it is worth considering whether it is the authorities' mandate to calm the market for banks' loss-absorbing capital and thus reduce the risk-adequate premiums that have just emerged from the loss experience of AT1 investors in the case of Credit Suisse. On this, see "ECB Banking Supervision, SRB and EBA statement on the announcement on 19 March 2023 by Swiss authorities." Joint press release of 20 March 2023: https://www.bankingsupervision.europa.eu/press/pr/date/2023/html/ssm.pr230320~9f0ae34dc5.en.html.

[34] Davies, Paul and Hopt, Klaus J. "Non-Shareholder Voice in Bank Governance: Board Composition, Performance and Liability." (2019) in Busch, Danny and Guido Ferrarini, eds. Governance of Financial Institutions. Oxford: Oxford University Press, p. 128, para. 6.19.

[35] FSB TLAC Term Sheet, para 11, p. 15.

[36] FSB TLAC Term Sheet, para 11 and para. 1 in conjunction with para. 10, p. 15.

[37] FSB TLAC Term Sheet, p. 15, footnote (!) 11.

FSB did not exclusively require contractual subordination but allowed subordination by law (‘statutory subordination’). Third, the instruments could alternatively be issued out of a top-tier bank holding company (‘structural subordination’).[38]

3.3. ‘Non-preferred Senior’ Debt Instruments in the European Union

Initially, various EU member states adopted different national approaches to enable the issuance of TLAC-eligible liabilities, resulting in the creation of a new layer in the creditor hierarchy.[39] For instance, Germany introduced statutory subordination for certain senior unsecured debt instruments in bank insolvency in 2015, effective since 2017.[40] Likewise, Slovenia introduced statutory subordination alongside a general depositor preference based on a tiered system. In contrast, Italy introduced general depositor preference[41] over non-preferred senior liabilities.[42] In France, statutory recognition of a contractual ‘non-preferred’ senior debt layer was enacted in 2016, with Spain and Belgium also adopting similar systems in 2017.

The statutory approaches allowed banks in scope to immediately meet the new TLAC requirements without the need for issuing new bonds during the transition period. In particular, the German approach had a non-genuine retroactive effect and included bonds already issued at the time. The German federal government’s justification, citing “superior reasons of financial stability,”[43] was an interesting and innovative approach taken to intervene in existing contractual arrangements. It reflects their commitment to maintaining stability in the financial

[38] FSB TLAC Term Sheet, para 11, para 2(b), and (c), p. 15.

[39] Cf. International Monetary Fund, Euro Area Policies, Financial Sector Assessment Program, Technical Note—Bank Resolution and Crisis Management, July 2018, Box 5 p. 26; Lenihan, Niall J., Luedersen, Maike B., Schulte, Martin. The hierarchy of creditor claims in bank insolvency - Recent developments and the advisory functions of the European Central Bank, Revue de Droit Bancaire et Financier, 2016/VI.

[40] Section 46f (5) and (6) of the German Banking Act (Kreditwesengesetz) introduced by the Resolution Mechanism Act (Abwicklungsmechanismusgesetz), Federal Official Journal (BGBl) 2015 I 1864, subsequently repealed in 2018.

[41] On the exigency of depositor preference cf. Dobler, Marc, Emre, Ender, Gullo, Alessandro and Kale, Deeksha, International Monetary Fund, Technical Notes and Manuals, The Case for Depositor Preference, December 2020.

[42] However, for TLAC requirements, operational liabilities like payments from derivative contracts remained on the same level as senior unsecured bank debt instruments.

[43] Government Explanatory Memorandum to Art. 2 No. 23 Abwicklungsmechanismusgesetz (Section 46f (5), (6), (7), and (8) KWG) of 26.5.2015, BT-Drs. 18/5009, p. 77. Critically, Committee Recommendation of 02.06.15, BR-Drs. 193/1/15.

sector; however, it also raises questions about the potential implications and fairness for bondholders. Despite attempts to mitigate the implicit state guarantee, the funding cost advantages for affected bonds have not disappeared, ultimately at the expense of bondholders who were not compensated for their altered rank in the creditor hierarchy.[44] This acts as an example of internal subsidization as a branch of public finance.[45]

Regarding future refinancing rounds, stakeholders in EU member states have successfully advocated for harmonizing the French contractual model of 'non-preferred' senior debt instruments at the EU level. The call for harmonization comes due to divergent national approaches exacerbating national fragmentation and creating uncertainty for issuers and investors. In fact, the contractual model can empower G-SIBs in strategically navigating refinancing balance between cost-effectiveness and compliance. As existing statutory subordinated bonds mature, G-SIBs can issue the precise amount of 'expensive' non-preferred status bonds required for TLAC compliance, while utilizing cheaper 'preferred' senior bonds for additional funding needs.

The respective amendments to the Bank Recovery and Resolution Directive[46] required member states to create the new asset of non-preferred senior debt instruments issued by credit institutions by the end of 2018, just in time for the introduction of TLAC requirements in 2019.

3.4. 'Structural Subordination' Through US Bank Holding Companies

In the US, bank holding companies (BHCs) are considered a 'source of strength' for their operating subsidiaries.[47] In resolution, they are replaced by publicly-owned bridge banks,

[44] Though one might see a competitive advantage in this for German banks in scope, other member states were probably not averse to the German initiative since it gave their banks some breath in the competition for the narrow TLAC investor base in the European capital markets.

[45] Cf. Posner, Richard A. Taxation by regulation. Bell Journal of Economics and Management Science, Vol. 2 No. 1 (1971), 22–50.

[46] Directive (EU) 2017/2399. This part of the draft legislative act has been separated from other elements of the EU banking package, and were treated in an accelerated procedure, EU Commission, Media Release on Banking Reform: EU reaches agreement on first key measures, Brussels, 25.10.2017, IP/17/4182.

[47] Bank Holding Company Act of 1956, 12 U.S.C. § 1831o-1.

leaving their creditors behind, effectively constituting an economic bail-in.[48] Through the authoritative resolution mechanism under Title II Dodd-Frank Act[49], debt instruments issued at the BHC level are rendered structurally subordinated to senior debt from operating bank subsidiaries, qualifying them for TLAC. These instruments assume the TLAC risks inherent in the subsidiaries. However, the funding concept of US BHCs has long been familiar to the capital market and rating agencies which might explain why the FSB observed lower funding cost advantages of structurally subordinated debt.[50]

3.5. Introducing a Novel Regulatory Preference for Existing Senior Debt

To assess the impact of the TLAC definition, a notable observation arises from the industry's subtle use of language, avoiding the term 'subordinated' in the context of TLAC-eligible bonds' terms and conditions, and even risk disclosures, as the mere inclusion of this word could lead to substantial increases in financing costs of several basis points. This maneuver sheds light on the complex interplay between financial regulation and funding strategies, underscoring the importance of language and communication in shaping market perceptions and investor behavior within the TLAC framework.

Beyond these linguistic nuances, the oxymoronic combination of 'non-preferred'[51] and 'senior' in the EU law designation of TLAC-eligible liabilities[52] raises questions about transparency and may potentially mislead investors. The strategy for open bank resolution in the EU primarily relied on using instruments labeled with this term. Despite the encouraging

[48] Guynn, Randall D. Resolution Planning in the United States. In Dombret, Andreas R. and Patrick S. Kenadjian, eds. The Bank Resolution and Recovery Directive: Europe's Solution for Too Big to Fail? Institute for Law and Finance, Vol. 13 (2013) Berlin, Boston, MA: De Gruyter, at p. 145.

[49] U.S. Dodd-Frank Wall Street Reform and Consumer Protection Act, Pub L No 111-203, 124 Stat 1376 (2010).

[50] Legislative Act as of July 10, 2018, Federal Official Journal (BGBl) 2018 I 1102 of July 13, 2018. FSB. Evaluation of the Effects of Too-Big-to-Fail Reforms. Final Report as of 1 April 2021 https://www.fsb.org/wp-content/uploads/P010421-1.pdf.

[51] The introduction of this term might be inspired by the term "non-cumulative perpetual preferred stock" under Basel I, BCBS, Basle Capital Accord (1988), page 3, Footnote 2, https://www.bis.org/publ/bcbsc111.pdf.

[52] Directive (EU) 2017/2399, rec. 10-12, 14.

work of the FSB, TLAC threatens to become a non-transparent claim for creditors with an unclear position in a fragmented creditor hierarchy.[53]

Regarding structural subordination, the lack of transparency surrounding opaque intra-group financial relationships poses a challenge to investors striving to accurately evaluate funding structures.[54] This mirrors certain funding arrangements in which debt is routed through unregulated intermediate holding companies (IHCs), thereby transforming it into equity capital for subsidiaries. This intricate interplay gains complexity when Common Equity Tier 1 (CET1) instruments are issued by operating subsidiaries,[55] potentially jeopardizing the equity buffer for 'senior bonds' at the BHC level. This casts doubt on whether the pricing mechanism leads to an allocation of information that can actually be used for efficient market results,[56] that is, dispelling the prospect of a public bailout in this case.[57]

Finally, TLAC opposes the BCBS trend of enhancing the "quality, consistency, and transparency of the capital base" (Basel III, subheading A.1.). TLAC-eligible liabilities, other than eligible regulatory capital instruments, exhibit lower quality than the former Tier 3 capital.[58] For banks, TLAC-eligible liabilities come at lower costs than regulatory capital, regardless of the progress on mitigating the funding cost advantages of G-SIBs, as suggested by the FSB's evaluation of the effects of TBTF reforms in 2021, though these findings are put into perspective by other studies.[59]

[53] Cf. Deutsche Bundesbank, Monthly Report, Vol. 71 No. 6 (2019), 46.

[54] Davies, Paul and Hopt, Klaus J. "Non-Shareholder Voice in Bank Governance: Board Composition, Performance and Liability." (2019) in Busch, Danny and Guido Ferrarini, eds. Governance of Financial Institutions. Oxford: Oxford University Press, p. 141, para. 6.17 et. seq.

[55] Exception according to the FSB TLAC Term Sheet, paragraph 8(a).

[56] Cf. Hayek, Friedrich August. The use of knowledge in society. The American Economic Review, Vol. 35 (1945), 519.

[57] Cf. Tröger, Tobias H. Too complex to work: a critical assessment of the bail-in tool under the European bank recovery and resolution regime. Journal of Financial Regulation, Vol. 4 No. 1 (2018), 35–72.

[58] Tier 3 was a regulatory capital element introduced under Basel I.5, abolished with Basel III (Basel III, paragraph 9). Tier 3 consisted of subordinated bonds with original maturity of at least two years to cover market risk.

[59] For example Pablos Nuevo, Irene. Has the new bail-in framework increased the yield spread between subordinated and senior bonds? European Journal of Finance, Vol. 26 No. 17 (2020), 1781–1797; Hellwig, Martin F. Twelve years after the financial crisis—too-big-to-fail is still with us. Journal of Financial Regulation, Vol. 7 No. 1 (2021), 175–187.

Despite, the FSB even expects TLAC to consist of at least 33 percent eligible debt capital (FSB TLAC Term Sheet, paragraph 6), having become an obligation for G-SIBs under US law (Long-term debt requirement under 12 CFR § 252.62).[60] Consequently, policymakers now prefer debt over equity, and the regulatory process is being taken to extremes with argumentation that appears plausible. From the industry's perspective, the introduction of TLAC regulations in the EU and US allowed G-SIBs to proceed without substantial adjustments to their funding structure.

3.6. Persisting Tax Preferences for TLAC-eligible Liabilities

Tax-driven considerations significantly impact the banks' funding strategies. In 2009, the International Monetary Fund (IMF) and Organization for Economic Co-operation and Development (OECD) staff, among others, highlighted tax incentives that encouraged leveraging a company (debt bias) and shifting revenue across jurisdictions (debt shifting).[61] This practice can result in the avoidance of taxation while tax and regulatory arbitrage are often interconnected in the case of banks. Consequently, hybrid financing instruments—functioning as debt for tax purposes but as equity for regulatory and rating agency purposes—have been used to reduce the cost of equity capital while still obtaining interest deductions.[62] Some economists concluded that the bank profits achieved due to leverage are bought with lower tax revenues for public budgets and pose higher risks for the overall economy.[63]

[60] This solution's origin can be found in the trigger calibration. Assume that a bank completely and exclusively meets the TLAC requirement with CET1. Then, resolution proceedings on such a bank would have to be initiated if it drops below a CET1 ratio of 18 percent RWA or a CET1 ratio of 6.25 percent of the total leverage ratio exposure which determine the regulatory minimum thresholds for TLAC. The industry felt this would destroy a well-capitalized bank in an ordinary course of business. Moreover, in case of default there should be a sufficient level of TLAC-eligible liabilities remaining to which a bail-in can be applied. Despite this, under EU law, any part of eligible liabilities can be completely met with CET1 according to Regulation 2019/877/EU, see recital 7 last sentence.

[61] IMF and OECD staff, with input from staff of the other organizations participating in the ITD2009, Financial Institutions and Instruments—Tax Challenges and Solutions, Background Paper for the International Tax Dialogue Conference Beijing, October 2009, page 10. FSB, Final Report on Corporate Funding Structures and Incentives, 28.8.2015, p. 11 and Annex C.

[62] IMF and OECD, ibid, 18pp.

[63] Admati, Anat R. and DeMarzo, Peter M. and Hellwig, Martin F. and Pfleiderer, Paul C. Fallacies, Irrelevant Facts, and Myths in the Discussion of Capital Regulation: Why Bank Equity is Not Socially Expensive. Working paper no. 2065 (2013). Stanford University Graduate School of Business Research, Stanford, CA.

The existence of the bank regulation and the new resolution regime still seems to justify claiming further preferential treatments in tax law today, opposed to disincentivizing debt funding; the US Internal Revenue Service introduced far-reaching exceptions for interest on internal TLAC-eligible instruments issued cross-border to other group entities from the Base Erosion and Anti-Abuse Tax (BEAT).[64] Through BEAT, US lawmakers aimed to limit profit reductions when US companies make payments abroad, whereas TLAC-eligible instruments shall be issued to the parent company abroad, outstreaming losses from the US in the event of default. Under the BEAT exemption, however, TLAC-eligible instruments can serve as vehicles to outstream profits to low-tax jurisdictions via high coupon payments.

Opposed to some economists' suggestions to levying a Pigouvian tax on institutions posing systemic risk externalities,[65] the UK government lobbied successfully to exempt financial services from the minimum tax of the OECD/G20 Base Erosion and Profit Shifting Project in 2021.[66] The OECD argued that most financial service sector activities with commercial customers would be excluded from scope given the impact of prudential regulation, such as bank or insurance licensing requirements designed to protect local deposit- or policy-holders in the market jurisdiction that typically ensure that residual profits are realized mainly in local customer markets.[67] Therefore, if substantial interest payments are made from US subsidiaries on internal TLAC to a parent company based in London, such transactions would be exempt from the BEAT, and the UK would not impose any minimum corporate income tax.

[64] 26 CFR § 1.59A-3(b)(3)(v).

[65] Brunnermeier, Markus, Crockett, Andrew, Goodhart, Charles, Persaud, Avenash, and Shin, Hyun Song. The Fundamental Principles of Financial Regulation, London, Centre for Economic Policy Research (CEPR), Geneva Reports on the World Economy 11, June 2009, p. 33 et seq.; Admati, Anat R. and Hellwig, Martin F. The Bankers' New Clothes. (2013) Princeton University Press, Princeton, NJ; Kashkari, Neel. Lessons from the Crisis: Ending Too Big to Fail. Remarks at the Brookings Institution, 16 February 2016.

[66] OECD/G20 Base Erosion and Profit Shifting Project, Statement on a Two-Pillar Solution to Address the Tax Challenges Arising From the Digitalization of the Economy (1 July 2021), section "Pillar One, Scope."; However, the IMF stated that the exclusion of regulated financial services might need to be reconsidered, cf. IMF, International Corporate Tax Reform (2023), Policy Paper No. 2023/001, p. 53.

[67] OECD Secretary-General (2020) "Tax Report to G20 Finance Ministers and Central Bank Governors, Saudi Arabia.

Not least, TLAC-eligible liabilities largely continue to benefit from various national tax preferences that are commonly provided for debt capital.[68] This approach is considered reasonable as it aims to stimulate the TLAC market.[69] In addition, under certain conditions, gains from the restructuring process (book profits from bail-in procedures that exceed the compensation for incurred losses) may be exempt from taxation.[70] Furthermore, the sovereign-bank nexus have likely prompted greater consideration of state aid admissibility, incentivizing bank management to meet TLAC requirements through debt instruments rather than CET1 capital to fully exhaust any funding cost advantages.

4. Preserving the Banking Group Structure

4.1. Navigating Political Realities in International Cooperation

The mandate of the BCBS is to establish prudential standards for ensuring the safety and stability of the banking system, and to create a 'level playing field' for fair international competition within the banking sector, as stated in its charter. Accordingly, the BCBS assumes a seamless cross-border flow of capital and liquidity within financial groups and specifies that its framework should be applied only "on a consolidated basis to internationally active banks."[71]

Global financial groups benefit from economies of scale through central treasury functions, cash pooling, and various other central services. However, tensions can arise between international cooperation and national fiscal capabilities and interests. Considering the political

[68] This even applies to subordinated perpetual bonds eligible for AT1 capital in several jurisdictions, such as the German Federal Ministry of Finance's Tax decree, "Schreiben betr. ertragsteuerliche Behandlung der Musterbedingungen des Bundesverbandes deutscher Banken für Instrumente des zusätzlichen Kernkapitals gemäß Art. 51 ff. CRR. Verwaltungsanweisung vom 10.04.2014 - IV C 2 – S 2742/12/10003:002." Under Dutch law, a similar preference (Dutch corporate income tax act, article 29a) has been abolished as of January 1, 2019. For an overview, see van der Meer, Jurgen (Clifford Chance), Tax treatment of AT1 and RT1 instruments issued by banks and insurers in certain European jurisdictions, July 2018). . https://www.cliffordchance.com/content/dam/cliffordchance/briefings/2018/07/tax-treatment-of-at1-and-rt1-instruments-issued-by-banks-and-insurers-in-certain-european-jurisdictions.pdf.

[69] The trade-off between the tax deductibility of coupons and supervisory requirements is discussed in the Deutsche Bundesbank Monthly Report, Vol. 70 No. 3 (2018), 61.

[70] Regarding German tax law, see Section 3a (1), sentence 1 of the German Income Tax Act, BT-Drs. 18/11531 of 15 July 15, 2017, p. 7. According to an informal statement by the EU Commission, there is no notification requirement, since—even if this constitutesconstituted state aid—it enjoys grandfather status.

[71] Basel II, paragraph 20, Basel III, paragraph 47.

realities, it is a rational approach that politicians primarily prioritize the interests of their domestic voters and taxpayers as they are accountable to them.[72] In the event of a debt haircut, there is an inherent preference for domestic creditors, provided they can be identified as such.

Recognizing these realities, a paradigm shift could be observed with the introduction of the FSB Key Attributes in 2011. The FSB began to not only focus on the financial group (as the BCBS does) but also started considering its subgroups and intra-group relationships. Depending on the resolution strategy, resolution measures can be applied to a single resolution group (single point of entry strategy [SPE]) or multiple resolution groups (multiple points of entry strategy [MPE]).[73] The TLAC requirements apply on a (sub-)consolidated basis to each resolution group. Even in an SPE, the FSB imposes 'internal TLAC' requirements to maintain a fallback position should the home supervisor or resolution authority act 'bad or mad,' meaning they refrain from supporting subsidiaries in host countries during a resolution, even if they were able and allowed to.[74]

4.2. 'Presumptive Path' to Resolution

The Private Sector Bail-in Initiative has urged competent authorities to clarify their intended resolution strategy during a crisis with a 'presumptive path.'[75] Generally, it favored an SPE unless a decentralized group structure makes an MPE seem more appropriate. The advantage of an SPE is evident. Only the home resolution authority can order a bail-in (and further measures) at the top group level, allowing other parts of the group to remain operational. As a result, fewer organizational preparatory measures for a group breakup are needed to improve resolvability within the framework of recovery and resolution planning compared to an MPE.

[72] For evidence of unequal treatment within the context of sovereign debt restructuring, refer to Sturzenegger, Federico, Zettelmeyer, Jeromin. "Haircuts: Estimating Investor Losses in Sovereign Debt Restructurings, 1998–2005." IMF Working Paper, WP/05/137, 2005, pp. 63.

[73] FSB. Recovery and Resolution Planning for Systemically Important Financial Institutions: Guidance on Developing Effective Resolution Strategies, 16 July 2013 https://www.fsb.org/wp-content/uploads/r_130716b.pdf.

[74] FSB TLAC Term Sheet, paragraph 16.

[75] Private Sector Bail-in Initiative. Pre-reading document, Working Draft – For Discussion. Tokyo, Japan. 14 October 2012 (unpublished), p. 6, recital 3 and chapter 9, p. 53.

In addition, an SPE increases the likelihood that the group structure will be essentially preserved even during a crisis. These approaches have been successful insofar as some authorities have made joint[76] or even sole[77] declarations of sympathy for the fundamental application of an SPE. It should be noted, however, that the ultimate decision still rests with the competent crisis management group responsible for the respective banking group.

The private sector anticipated regulators to segregate ‘operating liabilities’ from ‘capital structure liabilities’ within G-SIBs’ resolution entities using TLAC, applying the bail-in to the latter and preserving the former.[78] While the initiative cited market concerns for predictability and certainty in resolution procedures as reasons for this approach, it may have aimed to maintain the bank’s operational status for as long as possible using an ‘open bank’ resolution approach, without significant adjustments to the group’s funding structure.[79] The FSB then sought to demonstrate that TLAC can facilitate a bail-in without inherently limiting its applicability.[80] Despite official efforts to manage depositor expectations,[81] scholars hold divergent perspectives on whether additional liability categories beyond TLAC could theoretically be subject to a bail-in also.[82]

4.3. Fragmentation of the G-SIB Club

Interestingly, both resolution strategies call into question the assumption of the free flow of capital and liquidity within an internationally active financial group. An SPE requires

[76] Federal Deposit Insurance Corporation (FDIC) and the Bank of England. A joint paper on Resolving Globally Active, Systemically Important, Financial Institutions, 10 December 2012.

[77] Swiss Financial Market Supervisory Authority FINMA, Recovery and Resolution of Globally Systemically Important Banks, FINMA Position Paper on Recovery and Resolution, 7 August 2013.

[78] Private Sector Bail-in Initiative. Pre-reading document, Working Draft – For Discussion. Tokyo, Japan. 14 October 2012 (unpublished). workstream #2.

[79] Cf. discussion Private Sector Bail-in Initiative. Pre-reading document, Working Draft – For Discussion. Tokyo, Japan. 14 October 2012 (unpublished). Section 1, p. 5.

[80] FSB TLAC Term Sheet, Foreword, and section 7.

[81] For example, Raaflaub, Patrick, and Branson, Mark. “Putting Capitalism Back into Banking.” The Wall Street Journal Europe, August 2, 2013, p. 13: “Depositors should not believe that they will in any circumstance be made good on amounts that exceed the level of deposit insurance. Depositors should also become sensitive to the fact that there is no free lunch in banking: If they are earning excessive returns on their deposits, it is because they are taking on excessive risks.”

[82] Tröger, Tobias H. Advocates for this position: “Too complex to work: a critical assessment of the bail-in tool under the European bank recovery and resolution regime. Journal of Financial Regulation, Vol. 4 No. 1 (2018), 35–72.

significant international cooperation and a prior definition of burden sharing. Following the 2007–2009 financial crisis, skepticism has grown regarding whether the ringfencing of assets in the respective host countries is sufficient for insolvency or whether different regulatory requirements should be imposed.[83] A shifting view from business lines to legal entities could be observed during the past decade. In this regard, US regulators have opened up a fallback position with the regulation of Foreign Banking Organizations (FBO) in 2014 that allows for the application of an MPE for all foreign subsidiaries operating in the US. The Federal Reserve System has made it mandatory for all systemically important FBOs with USD 50 billion or more in consolidated assets to establish and maintain a US IHC comparable to a US BHC.[84] Meanwhile, US regulators also subject the subgroups of FBOs in the country to the same regulatory standards as their BHCs, protecting the depositors, critical functions, financial system, and financial interests of the US.[85]

However, according to different group structures (such as continental European parent banks vs. US BHCs), this event led to higher capital requirements for European banking groups with a significant footprint in the US on a consolidated basis. Overall, US requirements for FBOs constitute a decisive barrier to establishment and trade; they could challenge the idea of international cooperation and coordination in financial market regulation,[86] perhaps indicating that the G-SIB club has since fragmented into regional clubs that see their interests more promisingly realized in individual lobbying efforts.[87] Likewise, this is perceptible in the

[83] This is valid even in the EU. See the EU Commission, Report to the European Parliament and the Council, Legal Obstacles to the Free Movement of Funds between Institutions within a Single Liquidity Sub-Group, Brussels, 5.6.2014 COM(2014) 327, S. 6.

[84] Federal Reserve System, 12 CFR § 252.147 or § 252.153, Enhanced prudential standards for bank holding companies and foreign banking organizations; final rule. Federal Register, Vol. 79 No. 59 (2014), 17240.

[85] Tarullo, Daniel K. Regulating Large Foreign Banking Organizations. Speech given at the Harvard Law School Symposium on Building the Financial System of the Twenty-first Century: An Agenda for Europe and the United States, Armonk,. New York, 27 March 2014 https://www.federalreserve.gov/newsevents/speech/tarullo20140327a.htm.

[86] Cf. FSB Report on Market Fragmentation, 4 June 2019. https://www.fsb.org/wp-content/uploads/P040619-2.pdf.

[87] The Institute of International Finance continues to advocate for enhanced cooperation though, see Addressing Market Fragmentation: The Need for Enhanced Global Regulatory Cooperation, January 2019 https://www.iif.com/portals/0/Files/IIF%20FSB%20Fragmentation%20Report.pdf; subsequently: How Fragmentation is Continuing to Challenge the Provision of Cross-Border Financial Services: Issues and

contemporary debate on the risk sensitivity of international capital standards.[88] Notably, foreign banks, regulators, and supervisory authorities have suggested reconsidering the proposed US FBO regime.[89] The public authorities had to balance advocating international cooperation and refraining from acting against prudentially sound regulations on behalf of the domestic financial industry.[90]

Subsequently, the EU required systemically important third-country groups to establish an EU Intermediate Parent Undertaking (IPU, as opposed to IHCs) as an umbrella company for all relevant European entities.[91] Considering the remarkable resemblance in its design, one might reasonably interpret the newly enacted legislation as a measure reflecting a response to certain concerns, whereby a previously unarticulated objective has been discreetly incorporated into banking regulation. The new requirements on both sides of the Atlantic did, however, not lead to a break-up and an establishment of self-sufficient regional sub-groups.

5. Shattering the Illusion of Bail-in Trigger Certainty

5.1. Genesis of Contractual Mandatory Trigger Design

TLAC-eligible liabilities are not automatically exposed to losses in the ordinary course of business. Instead, debt instruments must first be made loss-absorbing through some

Recommendations March 2, 2023 https://www.iif.com/portals/0/Files/content/32370132_iif_scer_market_fragmentation_vf_03_02_2023.pdf .

[88] The appropriate level of risk sensitivity in prudential standards as shown in the calibration of the risk-neutral leverage ratio requirement and the risk-based Basel III output-floor on the results produced by using internal ratings under the internal rating-based (IRB) approach was controversial during the finalization of Basel III as risk-neutral capital requirements affect continental European banks more than US headquartered banks given the different business models.

[89] For many home regulators, see, for example, the joint statement of the Deutsche Bundesbank and BaFin of April 26, 2013, available at https://www.federalreserve.gov/SECRS/2013/April/20130426/R-1438/R-1438_042613_111089_571489255536_1.pdf.

[90] Cf. Quarles, Randal K. "Trust everyone - but brand your cattle: finding the right balance in cross-border resolution." Speech given at Harvard Law School, Cambridge, Massachusetts on 16 May 2018 https://www.bis.org/review/r180522a.htm; the same Quarles, Randal K. in his former capacity as FSB Chair, Letter to G20 Finance Ministers and Central Bank Governors ahead of their meeting in Washington DC on April 11-12, 2019: "Identifying and addressing possible sources of market fragmentation that may be harmful to financial stability is important for maintaining an open and resilient financial system."

[91] Directive 2013/36/EU, article 21b as amended by Directive (EU) 2019/878, article 1 (9).

intervention. Two trigger concepts can be considered feasible as follows:[92] 1) a unilateral declaration by the debtor based on the bond terms and conditions in particular (a contractual approach); and 2) an official order imposed by the competent authority or an insolvency court on the issuer or the holders of the debt instruments through an administrative act (a statutory approach) that might be early intervention measures or a bail-in and be complemented by contractual recognition.

In response to the financial crisis of 2007/2008, the Squam-Lake Group, an association of Anglo-American economists, proposed CoCos as a contractual instrument in 2009 to strengthen the capital base of banks, drawing inspiration from the insurance industry.[93] The 2010 report by the Swiss Commission of Experts for mitigating the economic risks posed by large companies endorsed this solution and underscored its advantages over statutory measures.[94] When a trigger event occurs, the bonds should increase the equity capital through conversion into shares due to genuine CoCos, or an anticipated debt waiver from write-off instruments. The initial consensus was that a regulatory trigger should be applied, and it should be based on a capital threshold. On the threshold calibration, the Swiss Commission of Experts set a ‘high trigger’ CET1 threshold of 7 percent of the risk-weighted assets (RWA) for ‘recovery CoCos’ and a ‘low trigger’ with a CET1 threshold of 5 percent RWA for ‘resolution CoCos.’

As for the trigger governance, the CoCo triggering should ideally be automatic—although, it is not. Instead, whether the threshold values have been reached should be determined and

[92] Another concept commonly known from sovereign debt restructuring mechanisms is the consensual adjustment of bond terms through creditor resolution and with the issuer’s consent, based on collective action clauses. However, this approach appears less suitable in banking. In anticipation of state aid, it would be more promising for creditors to adopt a holdout strategy and wait.

[93] Squam Lake Working Group on Financial Regulation (2009), An expedited resolution mechanism for distressed financial firms: Regulatory hybrid securities, Council on Foreign Relations, April. The initial idea of CoCos traces back to Culp, Christopher L. (2002), “Contingent Capital: Integrating Corporate Financing And Risk Management Decisions,” Journal of Applied Corporate Finance, vol. 15(1), pages 46-56, March; Flannery, Mark J. (2005), “No Pain, No Gain? Effecting Market Discipline via ‘Reverse Convertible Debentures’”, in Hal S. Scott (ed.), Capital Adequacy beyond Basel: Banking, Securities, and Insurance, Oxford University Press.

[94] Swiss Commission of Experts for limiting the economic risks posed by large companies. Final Report. 30 September 2010, p. 24 et seq.

certified: one must pull the trigger to actively complete the conversion or change the instruments' terms and conditions. This should fall into the issuer's duty.

5.2. Regulatory Shift to Discretionary Statutory Triggers

While Switzerland was internationally conceived as a laboratory in the process of dealing with the financial crisis, three diverging developments can be observed on the international level during the regulatory implementation process.

First, the BCBS introduced the contractual CoCo/Write-off feature to AT1 capital;[95] However, it did not choose the Swiss high recovery trigger. While AT1 capital is intended for use in a going concern, the BCBS has instead chosen the low resolution trigger, slightly adjusted to a CET1 ratio of 5.125 RWA or higher.[96] During the banking crisis, certain national competent authorities (such as those in Spain, Ireland, Portugal, and Greece) required several banks to hold AT1 capital with write down triggers set at levels above. In 2014, the EU fully harmonized Basel rules under the EU Capital Requirements Regulation (the Single Rulebook), preventing member states from introducing generally applicable rules that deviated from these standards, regardless of their stringency.[97]

Second, the BCBS did not introduce any automatic trigger clause into Tier 2 (gone concern) capital instruments.

Third, the FSB refrained from introducing any contractual or mandatory trigger design into the TLAC term sheet. TLAC-eligible liabilities other than AT1 can thus only be held liable via a statutory bail-in, making their loss absorption less likely, which will be reflected in lower risk premium to be paid.

[95] Basel III paragraph 55.11

[96] The calibration at 5.125 RWA (ie 0.625 percentage points above the CET1 minimum ratio requirement of 4.5 percent) is linked to the last of the four stages of distribution restrictions under the combined buffer requirement. BCBS. Evaluation of the impact and efficacy of the Basel III reforms, December 2022, Recital 124.

[97] EBA Q&A 2013_39 as of 31.10.2013. Answer prepared by the European Commission.

Concerns were raised that the AT1 capital trigger could prove ineffective and calibrated too low and too late.[98] The 2022 BCBS evaluation of Basel III reforms finds only “scarce and mixed” evidence for the loss-absorption capacity of AT1 instruments during stress periods.[99] Triggering CoCos or Write-offs carries a high potential for personal liability of the acting top executives of the respective bank which might thus be inclined to rational apathy and try to evade such responsibility through inaction. Subsequently, the supervisory or resolution authority must intervene and determine that the thresholds are met or even enforce the loss-absorbing mechanism via early termination rights or a bail-in respectively. In response to these challenges, the BCBS introduced a point of non-viability (PONV) clause in the definition of both AT1 and Tier 2 capital instruments, which became relevant in the Credit Suisse case. This clause mandates that capital instruments must be held liable at the PONV, ensuring at least burden sharing with public sector injection of capital or similar.[100] The PONV is, however, determined by the competent authority that subsequently pulls the trigger itself. Notably, this clause is not introduced into the TLAC term sheet for eligible liabilities other than regulatory capital instruments.

Thus, it can be stated that, during the regulatory process, the contractual approach transformed into a statutory one, and the mandatory determination by the bank shifted into a discretionary decision made by the public authorities. While the Swiss G-SIBs embraced the CoCo concept as part of the Swiss Commission of Experts for mitigating the economic risks posed by large companies,[101] one of them later leaned towards bail-in bonds on the international stage. Overall, this has achieved two goals for the industry.

[98] Cf. Deutsche Bundesbank, Monthly Report Vol. 70 No. 3 (2018) at 61 („[…] the current CET1 ratio of 5.125% seems too low […]“).

[99] BCBS. Evaluation of the impact and efficacy of the Basel III reforms, December 2022, Recitals 124-127.

[100] Basel III para. 49 footnote 9 in conjunction with BCBS press release no: 03/2011 of 13 January 2011, Annex: “Minimum requirements to ensure loss absorbency at the point of non-viability” point 4: “[...] the earlier of: (1) [...], as determined by the relevant authority; and (2) the decision to make a public sector injection of capital [...]”

[101] Swiss Commission of Experts for limiting the economic risks posed by large companies. Final Report. 30 September 2010.

First, the risk of personal liability reduced for bank executives at the expense of state liability for a wrongful bail-in execution, threatening an indirect bailout.[102] Second, instead of automatism and compulsory burden sharing, the broad scope for assessment and huge discretion lead to ambivalence, after which the responsible politicians are confronted with the dilemma between a bail-in and bailout.[103] This forms a gateway for time inconsistency problems previously examined within academic discourse.[104]

5.3. Time Inconsistency Problem

In its 2021 evaluation report on the TBTF reforms, the FSB placed primary emphasis on the perceived credibility of bail-in measures among market participants rather than their proven effectiveness.[105] This resembles deposit guarantee schemes (DGS) that rather rely on psychological reassurance to prevent bank runs than to pay-out covered deposits in an event of default. The function of the DGS is thus precisely to avoid being invoked by instilling trust among creditors in its capability, although it may not actually exist. Likewise, the effectiveness of the bail-in tool hinges on universal recognition similar to the concept of a placebo; however, its actual feasibility remains untested. This aspect is filtered out to avoid invalidating the pre-existing persuasion of the new resolution regime. Simultaneously, the endowment effect and

[102] Bliesener, Dirk H. Legal Problems of Bail-ins under the EU's proposed Recovery and Resolution Directive. In Dombret, Andreas R. and Patrick S. Kenadjian, eds. The Bank Resolution and Recovery Directive: Europe's Solution for Too Big to Fail?. In Institute for Law and Finance, Vol. 13. (2013) Berlin, Boston, MA: De Gruyter, at 197. According to some observers, practice showed that, at least under EU law, institutions or bodies need not fear being "crippled" by a too "generous" liability regime for unlawful supervisory and resolution acts, cf. Almhofer, Matina. The liability of authorities in supervisory and resolution activities, in Zilioli, Chiara and Wojcik, Karl-Philipp (Eds.), Judicial Review in the European Banking Union, (2021), 221 para. 14.38. In any case, the wheels of justice turn slowly, so compensation would not have to be paid until the markets had long calmed down and the acting protagonists were no longer in office. This might alleviate the concerns of state liability against a bail-in to some extent. However, it does not mitigate the systemic, economic, and political risks arising from executing a bail-in.

[103] On the complexity of the EU resolution regime, which hinders the application, refer to Tröger, Tobias H. "Too complex to work: a critical assessment of the bail-in tool under the European bank recovery and resolution regime." Journal of Financial Regulation, Vol. 4 No. 1 (2018), 35–72.

[104] Cf. Kydland, Finn E. and., Prescott, Edward C. Rules rather than discretion: the inconsistency of optimal plans. Journal of Political Economy, Vol. 85 No. 3 (1977), 473–491.

[105] The chosen approach is intelligible as there were no viable alternatives given the absence of G-SIB resolution cases at that time.

confirmation bias go hand-in-hand, which may lead to overestimating the potential of a bail-in as long as its activation is not required.

Should it come to a financial crisis, though, how much ever politicians may believe in bail-in today, it is unlikely that incumbents will rely on it in the future. As politicians' preferences change over time, any previously articulated preference for a bail-in can become inconsistent during a crisis.[106] To immerse oneself in the decision-making scenario of a responsible politician in a crisis situation, one might consider the recent Credit Suisse case as an illustrative example:[107]

First, regarding the challenge of deciding when and whether to initiate resolution proceedings, the authorities encounter a diagnostic problem. Typically, banks face insolvency due to impending illiquidity, a sensitive early indicator, reflecting a lack of market confidence in the sufficiency of equity capital. However, a bank's true capitalization remains a black box, especially in the context of dynamic balance sheet development.[108] Clarity only emerges after detailed valuations, tax adjustments, and similar processes. The discretionary nature of identifying failure events, coupled with the blurred line between recovery and resolution, creates pre-insolvency uncertainty, leading to potential delays in taking action.

Second, politicians will scrutinize the suitability of using a bail-in strategy in response to a banking crisis. The most pressing concern will be liquidity. In this scenario, the bail-in might offer limited relief to the bank. The promise of the bail-in relies on the indirect effect of recapitalization, aiming to restore the bank's money market access. This will be difficult to understand for the incumbents, as the assumption that 'liquidity follows capital' was disproven

[106] Stern, Gary H., Feldman, Ron J. Too Big to Fail: The Hazards of Bank Bailouts. (2004) Washington DC: Brookings Institution Press.

[107] Cf. Swiss Federal Council, State Secretariat for International Finance SIF, Brief Summary, Fact Sheets and Frequently asked questions (FAQ) as of 24.4.2023. https://www.efd.admin.ch/efd/en/home/financial-affairs/ubs-takeover-credit-suisse%20.html

[108] The valuation issues in the Credit Suisse crisis may serve as an example. See Credit Suisse: "Credit Suisse announces technical delay of publication of 2022 Annual Report." Press Release. March 9, 2023.

during the 2007–2009 financial crisis.[109] The bail-in process might thus be designed to set the stage for central banks to step in with Emergency Liquidity Assistance (ELA),[110] adhering to Walter Bagehot's 'lender of last resort' principles.[111] Several central banks adjusted the solvency criteria in their ELA frameworks to require a credible prospect of the applicant bank's recapitalization within a specified timeframe, such as a (renewable) period of 24 weeks in the case of the Eurosystem.[112] However, determining the required capital and deciding which liabilities to include in a bail-in is intricate. Prior due diligence by auditors is essential, but even with prompt action, their liability is limited, placing their audit opinion in an economic perspective. Supervisory authorities rely on these audit opinions to form their judgments, and any public certification could expose state liability. This complexity could lead to the consideration of an 'over-bail-in', in which all TLAC-eligible liabilities would be held liable, or more probably, to exploring the possibility of entirely avoiding a bail-in.

Third, the mere announcement of a bail-in has the potential to trigger counterproductive consequences. In a scenario characterized by idiosyncratic risk, a debt haircut might constitute an event of default, leading to early termination of financial contracts[113] and exacerbate financial distress of a G-SIB. A bail-in, through its impact on financial interconnections and the potential for psychological contagion, could precipitate a cascading effect, culminating in a broad market crisis that imperils financial stability. In a scenario dominated by systemic risk,

[109] This prompted the BCBS to introduce a separate liquidity regulation under Basel III.

[110] This has already been campaigned for by the Private Sector Bail-in Initiative of representatives of global systemically important banks in preparation for a meeting with regulators on 14.10.2012 at the Canadian Embassy in Tokyo, see the Pre-reading document, Working Draft – For Discussion. Tokyo, Japan. 14 October 2012 (unpublished). workstream #5; see also Ringe, Wolf-Georg. American Bankruptcy Law Journal, Vol. 92 (2018), 299 et seq.

[111] Bagehot, Walter. Lombard Street - A Description of the Money Market, London 1920 (1st edition: London 1873), 61 et. seq. established the following criteria: 1) only solvent banks should benefit from liquidity support; 2) they should have solid collateral; and 3) there should be a penalty rate.

[112] According to the ECB's instructions to the national central banks responsible for ELA within the framework of its mandate in the Eurosystem. Agreement on emergency liquidity assistance, May 17, 2017, para 4(b).

[113] Temporary stays are thus suggested by the FSB Key Attributes. A dry-run exercise once conducted by competent resolution authorities, the Bank of England's Special Resolution Unit in particular, with some G-SIBs to unwind the trading book had to be aborted without success. A relatively high volume of OTC derivatives is tailor-made to customer demand and cannot simply be closed out via a central counterparty like plain-vanilla contracts, but must be held to maturity.

however, the imposition of a debt haircut could undermine rather than bolster market confidence,[114] potentially catalyzing a catastrophic collapse of the financial system.

Fourth, given these considerations, it becomes evident that the bail-in mechanism carries inherent legal risks. The acting politicians confront uncertainty regarding the appropriateness of their actions in light of the proportionality principle—whether they are excessive, insufficient, or inappropriate. Challenging the claim in legal forums that the bail-in mechanism doesn't sufficiently address liquidity needs or is unnecessary could pose considerable challenges.[115] Concurrently, providing evidence for the exact amount of capital needed in the event of a specific bank default remains a complex endeavor. In contrast, instances of excessive bail-in implementations might be subject to legal scrutiny on the grounds of disproportionality. Moreover, the challenge for politicians intensifies when tasked with selecting and potentially disappointing several holders of TLAC eligible liabilities by distributing losses onto them, all while safeguarding specific others. The possibility of making errors and infringing upon the principle of equal treatment, potentially interpreted as strict pari passu, along with the responsibility to uphold the creditor hierarchy as set out in FSB Key Attribute 5, adds a layer of complexity to this delicate balancing act.[116] Since these safeguards have been rightfully incorporated into legal systems, it becomes more challenging for EU courts to justify deviations, as was still possible during the sovereign debt crisis without specific foundations.[117]

[114] Bernanke, Ben S., Geithner, Timothy F., Paulson, Henry M. Jr. Firefighting: The Financial Crisis and Its Lessons. (2019) New York, NY: Penguin, p. 74: “In a systemic crisis a haircut on debt pours oil on the fire, instead of water.”

[115] Cf. considerations of the Single Resolution Board (2017): ”Decision of the Single Resolution Board in its executive session”, 7 June, Article 5; referred to by the BCBS. Evaluation of the impact and efficacy of the Basel III reforms, December 2022, Recital 127.

[116] Refer to the famous Opinion of Judge Thomas P. Griesa in NML Capital Ltd v Republic of Argentina, Nos 08-cv-6978 (TPG), 09-cv-1707 (TPG), 09-cv-1708 (TPG) (SDNY 21 November 2012) for the interpretation of a pari passu clause in the context of pro rata payments.

[117] In the absence of special rules on creditor safeguards, the European Court, Judgment of 7.10.2015, T-79/13, Alessandro Accorinti and others v. ECB, ECLI:EU:T:2015:756, Recital 98, highlights that “...as regards the complaints based on the pari passu clause, it should first be observed that it has not been demonstrated that such a rule exists in the EU legal order.”; Justification for unequal treatment is found in the European Court of Human Rights, Judgment of 21.7.2016, Mamatas and Others v. Greece – 63066/14, 64297/14 and 66106/14, CE:ECHR:2016:0721JUD006306614.

Consequently, it would be prudent to anticipate extended litigation with unpredictable outcomes and potential ramifications on a global scale that politicians would strive to avoid.

Consequently, when financial stability is threatened, political incumbents tend to eschew the inherent hazards and complexities associated with bail-in instruments. They typically gravitate towards the ostensibly secure recourse of a financial bailout instead. The prevailing rationale is that the anticipated fiscal implications borne by taxpayers for such interventions will be less than the unpredictable economic consequences of a bail-in. In a systemic scenario, the acting politicians are left with no alternative but to orchestrate a public bailout. Additionally, their individual political costs (endangered for re-election) should be considered. Conversely, the fiscal burden's impact has less significance for the politician when amortized across a broad spectrum of stakeholders and can be securitized into future fiscal periods, often extending beyond the tenure of the current legislative actors—a phenomenon evocative of what Bernstein once called a 'concentrated benefits–diffuse costs story.'[118] In conclusion, it becomes evident that public decision-makers remain entrenched in the TBTF dilemma.[119]

5.4. Redefining G-SIBs: from Problem to Solution

Once the past financial crisis had passed, EU regulators even called for consolidation within the European banking sector,[120] implying that some member states were overbanked and some banks were too small to provide cost-efficient services. However, comments suggesting that this would increase the TBTF problem[121] have been rejected, and a new narrative is being

[118] Bernstein, Marver H. Regulating Business by Independent Commission. (1955) Princeton, NJ: Princeton.

[119] Cf. Goodhart, Charles, Avgouleas, Emilios. "A Critical Evaluation of Bail-In as a Bank Recapitalization Mechanism." Discussion paper no. 10065 (2014). SSRN Electronic Journal; Gordon, Jeffrey N., Ringe, Wolf-Georg, "Bank Resolution in Europe: The Unfinished Agenda of Structural Reform." (2015) in Busch, Danny and Guido Ferrarini, eds. European Banking Union. Oxford: Oxford University Press.

[120] Cf. Fernandez-Bollo, Edouard, "Consolidation in the European Banking Sector: Challenges and Opportunities." Lecture. 11 June 2021. The University of Bologna, Bologna. https://www.bankingsupervision.europa.eu/press/speeches/date/2021/html/ssm.sp210611~87256e1f4b.en.html; Enria, Andrea. "The Road towards a Truly European Single Market." Speech at the 5th SSM & EBF Boardroom Dialogue, 30 January 2020. https://www.ebf.eu/prudential-policy-and-supervision/the-road-towards-a-truly-european-single-market-2/.

[121] Garicano, Luis. MEP, Feedback statement, Responses to the public consultation on the draft ECB Guide on the supervisory approach to consolidation in the banking sector, January 2021, page 5 no 2.2.

cultivated. G-SIBs are no longer just part of the problem but are becoming integral to potential solutions. This perspective shift is underscored by instances where G-SIBs stepped in to rescue smaller banks in what is sometimes euphemistically referred to as a 'private sector solution', such as Silicon Valley Bank and First Republic Bank, or even significant competitors like Credit Suisse. Any previously articulated preference for mitigating the TBTF problem now appears inconsistent.

6. Proposal for Enhancements of TLAC-eligible Liabilities

In this study, it has been demonstrated that the complexities of the regulatory process and the changing interests of regulators during times of crisis make it challenging to find a practical solution to the TBTF problem. Taking a realistic perspective, it should be acknowledged that banks will not inherently support planning for their resolution, and policymakers cannot easily extricate themselves from the TBTF quandary. Based on these assumptions, efforts should be made to mitigate the problem by improving the TLAC definition. Therefore, it is recommended to reduce the authorities' control over initiating the resolution process and to introduce a mandatory triggering mechanism with limited discretion.[122]

The contractual approach proposed by the Swiss Commission of Experts to mitigate the economic risks posed by large companies, as outlined in its 2010 final report, needs to be reevaluated in this context. This approach acknowledges that significant resolution measures will be taken during the recovery phase to prevent an event of default, even if not explicitly referred to as such. Moreover, the distinction between going concern capital (Tier 1) and gone concern capital (Tier 2 and TLAC-eligible liabilities) could be eliminated, as it seems artificial unless it can be proven that G-SIBs can be resolved in an orderly manner. To enhance its effectiveness, the approach should incorporate the following amendments to the TLAC term

[122] Advocating for reduced discretion as well: Bolton, Patrick, Jiang, Wei, Kartasheva, Anastasia. "The Credit Suisse CoCo Wipeout: Facts, Misperceptions, and Lessons for Financial Regulation." Journal of Applied Corporate Finance (2023) 35: 66-74. https://doi.org/10.1111/jacf.12553.

sheet which will be detailed below. A market-based trigger, as suggested in the literature before,[123] tied to a penny-stock threshold of share prices on official stock markets and a liquidity trigger that enables the provision of ELA from central banks should be introduced. The approach should aim to clarify the creditor hierarchy, reduce complexity and opacity while mitigating unjustified tax preferences for TLAC-eligible instruments. Furthermore, with regard to the inter-creditor relationship and the ranking with regard to equity shares, a conversion mechanism should be mandatory. Finally, parallel measures should be implemented to impose limitations on asset encumbrance to facilitate the collateralization of ELA.

6.1. Share Price Trigger

The trigger mechanism should be designed to align with scenarios like an eroding market confidence, resulting in a dynamic decline in share prices and liquidity deficiencies. While share price triggers are commonly used in mandatory convertible bonds or knock-out certificates, they face criticism when applied to a large volume of AT1 instruments. Despite concerns about the potential risks of abuse and a 'death spiral' associated with using a market-based trigger,[124] as well as pricing uncertainty and wealth transfer from debt to equity,[125] these concerns should be given less weight in comparison to the safety and effectiveness benefits of TLAC-eligible liabilities being triggered during a resolution event. The share price trigger should be set at a level where the bank's shares reach penny-stock levels, as any abuse or misconduct that drives the share price to such low levels should be relatively unlikely.

[123] Flannery, Mark J. (2005), "No Pain, No Gain? Effecting Market Discipline via 'Reverse Convertible Debentures'", in Hal S. Scott (ed.), Capital Adequacy beyond Basel: Banking, Securities, and Insurance, Oxford University Press.

[124] Cf. Goodhart, Charles, Are CoCos from Cloud Cuckoo-Land? 10 June 2010 https://cepr.org/voxeu/columns/are-cocos-cloud-cuckoo-land; AFME Prevention and Cure: Securing Financial Stability After the Crisis. September 2010, p. 48.

[125] Sundaresan, Suresh and Wang, Zhenyu, On the Design of Contingent Capital with a Market Trigger. The Journal of Finance, 70 (2015): 881-920. Zhenyu Wang, CoCo Bonds: Are They Debt or Equity? Do They Help Financial Stability? — Lessons from Credit Suisse NT1 [AT1] Bonds, 6 April 2023 https://www.ecgi.global/blog/.

Furthermore, meeting stock price thresholds would not directly trigger a catastrophic event for the respective bank but would instead lead to an automatic increase in equity capital through the triggering of TLAC-eligible liabilities. Apprehensions of adverse market reactions should not impede the implementation of a market-based trigger mechanism. It is an inevitable outcome that the share price may decline without effective mitigation strategies. The proposed market-based trigger offers banks a higher degree of solvency assurance by utilizing the declining share price to counteract negative risk perception. Establishing this mechanism would enhance transparency and reinforce the understanding of the TLAC investor base that this unique kind of hybrid instruments operates similarly to equity and is exposed to associated risks of losses in a financial crisis. To mitigate the potential misuse of this mechanism, it is advisable to incorporate contractual safeguards, such as the inclusion of grace periods, or floor prices.

6.2. Liquidity Trigger

It is recommended to introduce an additional trigger specifically for situations in which central banks provide unconventional ELA without sufficient reassurance. The notion that a capital increase is unsuitable for addressing liquidity issues has been disproven in the Credit Suisse case. As demonstrated earlier, despite being distinct in theory, liquidity and capital are interconnected in practice. As central banks only grant ELA to financially sound banks, a capital increase indirectly contributes to enhancing the liquidity position. During liquidity crisis, implementing a debt haircut or a debt-to-equity swap establishes the necessary conditions for accessing public liquidity facilities. However, holders of instruments eligible for TLAC shall not benefit from the unconventional ELA provided to banks. When banks do not receive liquidity assistance during a crisis scenario, the creditors would still experience declining asset values due to fire sales when banks are no longer operational, and they would bear the liability. The PONV clause for regulatory capital should be clarified in a similar manner. Thus, the price of TLAC-eligible liabilities on stock markets during a crisis will reflect the public perception of the liquidity situation.

6.3. Rank, Transparency, Event of Default, and Tax Preference

The equal ranking of TLAC-eligible liabilities with Tier 2 instruments is advocated to reduce opacity and fragmentation of the creditor hierarchy. It is crucial to establish a well-defined subordination requirement and ensure transparency of TLAC-eligible liabilities in the TLAC term sheet. The transparency regarding the issuing structure and disclosure of capital and risk, as per Basel II pillar 3, should be expanded to encompass the issuing entities on a standalone (solo) basis. Triggering of TLAC-eligible liabilities should not be considered as an event of default since the purpose of such liabilities is precisely to mitigate the risks associated with this event for the stability of the financial system. An event of default threatens to trigger early termination rights. This applies in particular to OTC derivatives, which are of significant concern for financial stability and are only held up for a short time by any temporary stay, as suggested by the FSB Key Attributes. Extending the application of the Tier 1 standards as laid down in Basel III paragraphs 53.6 and 55.7(b) to encompass any TLAC-eligible liabilities (including Tier 2), thereby leveling the distinction between going and gone concern capital, is suggested as a more favorable approach compared to imposing temporary stays on early termination rights. Furthermore, it no longer provides incentives to drive down the stock price in order to generate profits from credit default swaps on TLAC-eligible liabilities. While achieving harmonization of the tax treatment of debt, a prevailing concern, poses a significant challenge, any tax preferences under TLAC should be offset by a reduction in eligibility using a regulatory filter. This will promote a more equitable international regulatory environment by addressing the disparate tax incentives offered by individual countries to their domestic industries. It should further be recognized that the legal requirement to hold sufficient TLAC alone should serve as adequate motivation for compliance and should not necessitate additional incentivization measures.

6.4. Interplay between Creditors and Shareholders

In the context of Credit Suisse, the discourse revolved rather on the interplay between creditors and shareholders than on the appropriateness of assigning losses to AT1 instruments. From a regulatory perspective, the central concern lies in the efficacy of loss absorption, while granting a degree of flexibility in the contractual arrangement between the bank and investors aligns with a philosophy of restrained regulation.

However, this regulatory stance may overlook the relative weakness in creditor governance, which surfaced even in Credit Suisse's dealings with professional investors. Thus, it becomes imperative to recognize that Credit Suisse, similar to several other G-SIBs, did not genuinely employ CoCos to fulfill the AT1 criteria. Instead, they utilized write-offs without conversion into shares, lacking any upside, as seen in temporary write-downs with a subsequent write-up option, thereby missing the essence of a 'principle of hope.' The bank's shareholders were opposed to dilution resulting from CoCo conversions into new shares and sought to avoid the complexities associated with contingent capital through shareholder resolutions.[126]

After triggering the PONV clause in the case of Credit Suisse in March 2023, there were complaints that suggested wiping out all shares before holding AT1 instruments liable to restore an assumed stacking order, according to which AT1 instruments should in any case rank senior to shares.[127] This thesis poses several questions given the specific contractual terms of the instruments qualifying for AT1. When discussing the wealth transfer from write-offs to equity shares during a trigger event, it might be worth assessing whether the total return on AT1 write-offs (including coupon and repayment at notional value if called) over the past decade effectively surpassed the net return on the bank's equity shares (dividends minus the loss from

[126] Cf. Deutsche Bundesbank Monthly Report, Vol. 70 No. 3 (2018), 60; Avdjiev, Stefan, Bogdanova, Bilyana, Bolton, Patrick, Jiang, Wei, Kartasheva, Anastasia (2017), CoCo issuance and bank fragility, BIS Working Papers No. 678.

[127] On this, see "ECB Banking Supervision, SRB and EBA statement on the announcement on 19 March 2023 by Swiss authorities." Joint press release of 20 March 2023: https://www.bankingsupervision.europa.eu/press/pr/date/2023/html/ssm.pr230320~9f0ae34dc5.en.html.

a declining share price). However, the following consideration is crucial. If AT1 instruments consist solely of write-offs, then eliminating all shares before holding them accountable would result in no equity shares being available for ownership and governance. This would not be feasible. Thus, write-offs are effectively subordinated to equity shares,[128] unless the competent authority overrides the contractual write-off mechanism and grants new shares to write-off holders through a statutory order.[129]

From a regulatory standpoint, the preference is against adopting any write-downs paired with write-up features, as they may create undesirable incentives for premature redemption.[130] The contractual approach proposed in this study, will however, not necessarily entail any authoritative wipe-out of shares. Thus, ensuring equality in the treatment of shares and TLAC-eligible liabilities at the point of non-viability may be safeguarded through dilution only. Consequently, contemplating the integration of an authentic conversion feature, or at least a minimum compensation linked to the share price in the TLAC design appears pivotal to safeguarding equitable outcomes and circumventing adverse implications for loss absorbency.

6.5. Restrictions on Asset Encumbrance

In the case of liquidity assistance for Credit Suisse, an issue was exposed regarding the insufficiency of unencumbered assets to serve as collateral, which failed to meet the requirements for sound ELA provision. An 'additional emergency liquidity assistance,' or 'ELA+,'[131] of CHF 100 billion was thus granted based on a newly introduced emergency law,[132]

[128] This has already been described in 2018, cf. Lendermann, Urs, Banking Union Essential Terms, a study requested by the ECON Committee of the European Parliament, IP/A/ECON/2016-07 PE 619.028 as of July 2018, at p. 58. https://www.europarl.europa.eu/RegData/etudes/STUD/2018/619028/IPOL_STU(2018)619028_EN.pdf .

[129] As per Art. 60 of the Bank Recovery and Resolution Directive, and the respective implementation acts.

[130] Basel III Paragraph 55 criterion 4.

[131] The designation "ELA+" (if the cross is read as an algebraic plus sign) suggests an improvement over regular ELA; however, it is an impediment.

[132] Ordinance on Additional Liquidity Assistance Loans and the Granting of Federal Default Guarantees for Liquidity Assistance Loans from the Swiss National Bank to Systemically Important Banks of 16 March 2023, amended by Ordinance on Additional Liquidity Assistance Loans and the Granting of Federal Default Guarantees for Liquidity Assistance Loans from the Swiss National Bank to Systemically Important Banks Amendment of 19 March 2023, both based on the Swiss Federal Constitution, article 184 paragraph 3

without any state guarantee or collateral.[133] This problem is due to the fact that introducing TLAC requirements—as predicted in the FSB TLAC working group before—incentivizes banks to adapt the funding strategy to cheaper covered bonds. To counteract this, it is proposed to combine the required liquidity buffer composed of high-quality liquid assets (as prescribed by the liquidity coverage ratio requirement) with a limit on the pledging of the bank's assets, thereby transforming existing EU reporting obligations[134] into a concrete requirement which goes beyond the liquidity buffers based on the LCR.

7. Conclusions

In the aftermath of the 2007–2009 financial crisis, amid asymmetric information, varying political influence, and regulatory powers, the market for bank regulation reached an equilibrium. G-SIBs and regulators successfully resolved their shared task of addressing the TBTF issue—presenting a credible solution to the public. Subsequently, the newly introduced bail-in became a euphemistic antonym for a public bailout of failing banks, creating ambiguity. This ambiguity arises from the time inconsistency of responsible politicians who find themselves trapped in this state, thereby rendering a bail-in conceptually compatible with a bailout—an observation that highlights the presence of cognitive dissonance.

It was shown, that TLAC, the complementary term, has led to the issuance of opaque bail-in bonds, marketed as loss-absorbing capacity in a bank resolution to both home and host regulators, while being presented to investors and tax authorities as debt instruments. These bonds can retain funding cost advantages over regulatory capital, even when the implicit state

("safeguarding the interests of the country"), and article 185 paragraph 3 ("counter existing or imminent threats of serious disruption to public order or internal or external security").

[133] It shall be added, that during the banking crisis in spring 2023, the Federal Reserve System accepted certain types of securities as collateral at 100 percent of par value under the Bank Term Funding Program of 12 March 2023, without considering any lower true and fair value. Federal Reserve System. Board of Governors. Press Release and Term Sheet on the Bank Term Funding Program, 12 March 2023. https://www.federalreserve.gov/newsevents/pressreleases/monetary20230312a.htm

[134] See Art. 443 Regulation (EU) 575/2013; EBA/GL/2014/03 of 27 June 2014; European Systemic Risk Board (ESRB) Recommendation ESRB/2012/2 of 20 December 2012 OJ C 119, 25.4.2013, p. 1 on the funding of credit institutions.

guarantee curtailed. Hyperbolically, it can be argued that the current bail-in concept effectively serves its intended objectives as long as its activation remains unnecessary.

Drawing upon these findings, this study acknowledges the enduring nature of the TBTF dilemma and highlights that the existing regulatory processes may not sufficiently address or alleviate it. In response to this challenge, this study advocates for a reduction in the authorities' discretion when activating the additional loss-absorbing mechanism from TLAC. This can be achieved by implementing a mandatory, market-based trigger design that takes inspiration from the contractual approach advocated by the Swiss Commission of Experts in its 2010 final report.

The primary concern surrounding bank failures lies in the erosion of market confidence, as evidenced by declining stock prices and liquidity shortages. To align with these manifestations, this study recommends incorporating a share price trigger linked to predetermined stock market thresholds and establishing a liquidity trigger as a condition for ELA provisioning by central banks. Furthermore, to enhance clarity and reduce complexity associated with the fragmented creditor hierarchy, equal ranking should be established for Tier 2 instruments and TLAC-eligible liabilities (other than Tier 1 instruments). It is suggested to amend the TLAC terms accordingly, explicitly specifying that the occurrence of a triggering event should not be construed as an event of default. Introducing this provision would remove the artificial distinction between going and gone concern capital, which proves ineffective for banks that cannot be resolved in an orderly manner. This approach ensures that TLAC effectively contributes to financing resolution, while providing central banks with the necessary confidence to offer ELA. Ultimately, these measures aim to restore market discipline and safeguard the stability of the financial system.

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