Finance Watch

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Lost Momentum: The Evolution and Challenges of Basel III

How to move international banking regulation forward

A Finance Watch Report

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Executive Summary

The global financial crisis of 2007-2008 was meant to be a turning point. For a brief period, roughly five years between 2009 and 2014, a global consensus seemed to emerge, based on the recognition that deregulation of the financial industry had gone too far. The Financial Stability Board (FSB) and the Basel Committee on Banking Supervision (BCBS) were tasked by the G20 group to propose reforms to strengthen the capitalisation of banks, improve supervision, and design structures and processes (the bank recovery and resolution framework) to solve the "too big to fail" (TBTF) conundrum. By 2015, however, the political will to pursue these reforms was largely exhausted. Since then, new crises have come to dominate the headlines: the Covid-19 pandemic, war in Ukraine and the Middle East, polarisation and geopolitical tensions around the globe. Global cooperation has increasingly given way to competition. The crisis of 2007/08 has largely faded from collective memory.

Today it appears somewhat unfashionable to worry about the stability of our financial system. In 2023, European banks reported their most profitable year in decades. Profits and distributions to shareholders are at record highs. Capital ratios are higher than they were in 2007-2008, and neither the Covid-19 pandemic of 2019-2022 nor the collapse of Crédit Suisse and Silicon Valley Bank (SVB) in March 2023 triggered another global meltdown. What could possibly go wrong?

With this report, we try to take a step back and take stock of what has been achieved. To do that we have formulated eight basic questions. They reflect, from the perspective of EU citizens, what we consider to be shortcomings and potential vulnerabilities of the existing Basel III framework.

Our first question (Q.1) focuses on the scope of its application. The Basel framework applies only to "internationally active" banks but does not go on to define this term. Major jurisdictions, especially the EU and US, have come to almost diametrically opposite interpretations. As a result, medium-sized banks, in particular, inhabit a regulatory "grey zone". This has contributed, arguably, to the moment of peril in the US following the failure of SVB. It is difficult for the Basel III framework to be effective if it does not clearly mark out its own perimeter.

The second question (Q.2) asks whether the Basel III framework has perhaps become too complex to be effective. While it is true that the regulatory matter it addresses is complex in many respects, it is equally true that excessive complexity comes at the expense of effectiveness. With Basel III, regulators have not only expanded the range of risks covered by the framework, they have also sought to accommodate a host of jurisdictional specificities as well as political preferences. Ironically, all these concessions have not stopped BCBS members, notably the EU, from watering down key elements of the agreement.

The next two questions (Q.3 and Q.4) revolve around the use of internal models. Originally Intended as an incentive for banks to professionalise their internal risk manage-

ment and address the weaknesses of Basel I by making the calibration of regulatory capital more “risk sensitive”. These models, which are used extensively by large European banks to manage their capital positions, have become one of the most contentious aspects of the Basel III framework. Efforts by the BCBS to realign practices, e.g. with the introduction of an “output floor” for credit risk weights, have met with fierce resistance. It appears that the pursuit of ever more “risk sensitive”, individualised capital requirements has reached its limits and become counter-productive. Moreover, the current practice of requiring supervisors to approve internal models, a task which has proven taxing even for the best-resourced supervisory authorities, exposes them to conflicts of interest and a heightened risk of regulatory capture.

Our next question (Q.5) turns to the subject of buffers. The Basel III framework contains a new set of regulatory capital components, known in the EU as the Combined Buffer Requirement (CBR), which was designed to act as a cushion for banks against specific micro- and macroprudential risks, such as the potential contribution of systemically important institutions to systemic risk, or the build-up of risk throughout the economic cycle. When banks were encouraged during the Covid-19 pandemic to make use of their buffers a lively debate ensued, revealing much uncertainty about the practical use of these buffers. It seems that a degree of ambiguity about the real nature and purpose of individual buffers in the Basel III framework, and the absence of a clear distinction between structural and cyclical components, may have raised unrealistic expectations as to their usability.

We then turn our attention to supervisory practice, which is just as critical to the effectiveness of the Basel III framework as the regulation itself. In Q.6 we pose the question whether the use of information and communication technologies (ICT) in supervision has kept up with the advances elsewhere, e.g. in data transmission and storage capacities, distributed (cloud) computing, (structured and unstructured) big data analytics, real-time data processing, machine learning (ML), and artificial intelligence (AI). We find that there is considerable potential for supervisory technologies (SupTech) to improve the effectiveness of supervision, e.g. by enabling the real-time or near-time supervision of systemically important institutions.

The impact of climate change on the economy has become increasingly obvious in recent years. In Q.7 we ask ourselves whether climate risk is adequately covered by the current Basel III framework. There is widespread recognition that the current architecture, and the calculation of minimum (Pillar 1) requirements in particular, is not well suited to account for these risks, for which there is little historical precedent and which seem to escalate both in frequency and severity. The Pillar 1 framework requires updating.

Our last question (Q.8) strays from the immediate remit of Basel III to investigate the bank recovery and resolution framework. The two are inextricably linked in that the calibration of Basel III capital requirements presupposes that the bank recovery and resolution process works as intended. This has not been the case so far: with only a few exceptions, policymakers and regulators have time and again chosen to bypass

the resolution process. The credibility of the recovery and resolution framework is at risk, which in turn, could undermine the Basel III framework as a whole.

This list does not claim to be either exhaustive or original – many of these issues have been discussed for some time. We would like to see the G20 issue mandates to the FSB and the BCBS for the continuous improvement of the Basel framework. Unfortunately, however, there appears to be little political will among the major G20 powers at present to engage in this process. Against a background of geopolitical tensions and uncertainty, competition, rather than cooperation, tops the agenda. Some of this uncertainty may be temporary, however: 2024 has seen an unprecedented coincidence of key elections across the G20, including the EU, US, France, the UK, India, Indonesia, and Russia. Closure of this electoral mega-cycle may restore a more stable environment, not least in Europe and the US, which could pave the way for a new round of constructive engagement.

In June 2024, EU citizens elected a new European Parliament, and a new Commission is taking office in the autumn. Finance Watch calls upon European policymakers, both at the Union and member-state level, to reinforce their commitment to the Basel process and re-engage proactively with their partners, especially in the US, to prevent a regulatory “race to the bottom”.

Policy Recommendations

1 The Basel framework should incorporate a common set of rules to define its target group and replace the (undefined) term “internationally significant banks”. The current, non-binding proportionality framework should be further refined and, in due course, incorporated into the main Basel standard.

2 The Basel framework should be simplified to achieve an adequate degree of consistency and comparability, and to restore a level playing field. National options and discretions should be reduced to a bare minimum and replaced by a harmonised proportionality framework.

3 The internal model-based approach should be phased out completely from the framework in favour of a standardised, risk-sensitive approach, complemented by a risk-neutral leverage ratio.

4 The Basel framework should restore a clear separation between supervisory and management responsibilities. Supervisors should not be responsible for approving banks’ internal risk models (ex-ante) but concentrate on assessing banks’ risk management (ex-post).

5 The combined buffer framework does not adequately distinguish between ‘structural’ buffers and (counter) cyclical buffers. Only the latter should be releasable. A positive neutral rate would be required to ensure countercyclical buffer capacity is available when needed. The risk-weighted buffer stack should be mirrored in full in the leverage-ratio framework.

6 The Basel Committee should assume a more proactive role in promoting supervisory technologies and develop a roadmap for the adoption of integrated, interoperable platforms with real-time data collection and analysis capabilities.

7 Under the current Basel framework, financial risks related to climate change are not covered by Pillar 1 capital requirements. The macroprudential toolkit should be expanded to include a dedicated buffer calibrated based on a "loan-to-value" threshold on banks' fossil fuel exposures.

8 The Basel framework, in combination with the recovery and resolution framework under the FSB Key Attributes, still has significant shortcomings, as highlighted by the recent failure of Crédit Suisse. Resolution planning, and the calibration and quality of TLAC should be reassessed and updated accordingly.

Abbreviations

AT 1	Additional Tier 1 (Capital)
BCBS	Basel Committee on Banking Supervision
CET 1	Common Equity Tier 1 (Capital)
CCoB	Capital Conservation Buffer
CCyB	Countercyclical Buffer
CRR	Capital Requirements Regulation
CRD	Capital Requirements Directive
D-SIB (EU:O-SII)	Domestic Systemically Important Bank
EBA	European Banking Authority
ECB	European Central Bank
ELA	Emergency Liquidity Assistance
ESM	European Stability Mechanism
ESMA	European Securities and Markets Authority
ESRB	European Systemic Risk Board
F-IRB	Foundation Internal Ratings-Based (Approach)
FOLTF	Failing Or Likely To Fail
FSB	Financial Stability Board
G-SIB (EU:G-SII)	Global Systemically Important Bank
ICAAP	Internal Capital Adequacy Assessment Process
ILAAP	Internal Liquidity Adequacy Assessment Process
IRB-A	Advanced Internal Ratings-Based (Approach)
LR	Leverage Ratio
MREL	Minimum Requirement for Own Funds and Eligible Liabilities
NCWOL	No Creditor Worse Off Than In Liquidation
RWA	Risk-Weighted Assets
SA-CR	Standard Approach to Credit Risk
SIFI	Systemically Important Financial Institution
SRB	Single Resolution Board
SRF	Single Resolution Fund
SREP	Supervisory Review Process
SyRB	Systemic Risk Buffer
TBTF	Too Big To Fail
TLAC	Total Loss-Absorbing Capacity

Introduction

As Basel III staggers wearily across the finishing line and memories of the financial crisis of 2007/08 continue to fade from the collective consciousness, the era of reform of the global prudential framework for banks seems to be drawing to a close. The political will of policymakers around the globe appears to be exhausted. In the EU, Parliament and Council recently settled on a legislative package, known as CRR III[1]/ CRD VI[2], which deviates materially from the agreed Basel III standard – against stern warnings from the Union's most senior regulators and supervisors[3]. In the US, regulators' proposals for implementing the final instalment of Basel III[4] – the "Basel III endgame" in US media parlance – have met with a fierce public backlash from the banking sector (see Graphic 1)[5].

Graphic : "Stop Basel Endgame" campaign website

Source: Bank Policy Institute (December 2023)

The Basel Committee (BCBS) is the primary global standard setter for the prudential regulation of banks and provides a forum for cooperation on banking supervisory matters. Its mandate is to strengthen the regulation, supervision and practices of banks worldwide with the purpose of enhancing global financial stability. Financial stability is

1 Regulation (EU) 575/2013 of the European Parliament and of the Council on prudential requirements for credit institutions and investment firms of 26 June 2013, last amended by Regulation (EU) 2024/1623 of 31 May 2024, OJ L 2024/1623 of 19 June 2024, pgs. 1-189 (4th Capital Requirements Regulation, CRR IV).

2 Directive 2013/36/EU on access to the activity of credit institutions and the prudential supervision of credit institutions, last amended by Directive (EU) 2024/1619 of 31 May 2024, OJ L 2024/1619 of 19 June 2024, pgs. 1-68 (6th Capital Requirements Directive, CRD VI)

3 European Central Bank, *Strong Rules, Strong Banks*: Let's Stick to Our Commitments, Blog post by José Manuel Campa, Chairperson of the European Banking Authority, Luis de Guindos, Vice-President of the ECB and Andrea Enria, Chair of the Supervisory Board of the ECB, The Supervision Blog, 04 November 2022

4 Regulatory Capital Rule: *Large Banking Organizations and Banking Organizations With Significant Trading Activity, Notification of Proposed Rulemaking (NPR)* by the Comptroller of the Currency, the Federal Reserve System, and the Federal Deposit Insurance Corporation, 88 Fed. Reg. 64028 (18 September 2023)

5 Financial Times, *Hearing Highlights Split in Support for 'Basel III Endgame' Bank Rules*, 06 December 2023

a global public good. Given the global nature of the financial system, distress in one region can easily spill over to other parts of the globe. An open global financial system, therefore, requires a consistent global set of prudential standards. In our interconnected world, failing to achieve this could result in regulatory fragmentation, regulatory arbitrage, an uneven playing field for internationally active banks, and increased risks to global financial stability[6].

This report is not a critique of the work of the Basel Committee and its efforts to promote convergence in international banking regulation. Whatever its shortcomings, Basel III was a necessary response to the global financial crisis and marks progress over what went before. Neither does this report attempt to provide a comprehensive analysis of the Basel III framework or reiterate our concerns about the EU's non-compliant implementation. These have been covered in detail in a separate, dedicated report[7]. This report takes a step back and seeks to draw some early lessons from the Basel III process. Some of the issues raised here go back all the way to the early days of Basel III, while others have emerged more recently, prompted by the end of a decade-long monetary policy cycle, the Covid-19 pandemic, new focal points of geopolitical friction, and the ever more obvious effects of climate change.

This report does not claim that there are easy solutions, nor does it pretend to offer up new, original solutions nobody has thought of before. At Finance Watch we are well aware of the complexity of the subject matter. We are also mindful that the interests of ordinary citizens are lost sometimes in all this complexity and a thicket of vested interests. Shortcomings usually do not result from a lack of understanding by practitioners of what ought to be done, but from a lack of political will and/or capacity to implement changes. Policymakers' ability and readiness to enact and enforce new, tighter regulation is highest in the immediate aftermath of a major crisis, and declines rapidly thereafter – until the next crisis strikes. This applies just as much at the international as at the national level. Against this background, the timing of this report may appear inauspicious. It comes at a time when international cooperation, on financial regulation and many other critical issues, appears to be on the wane, not least among the G20 governments who determine the mandates of the Financial Stability Board (FSB) and the Basel Committee. And yet, this is precisely the time when academia, enlightened practitioners, and civil society must persist in asking awkward questions and pointing out whatever unfinished business remains[8].

Financial crises have a habit of repeating themselves – they are part and parcel of our

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6 Basel Committee on Banking Supervision, *Implementing Basel III*. Remarks by Pablo Hernández de Cos, Chair of the Basel Committee on Banking Supervision and Governor of the Bank of Spain at the European Economic and Social Committee Public Hearing on the EU Banking Reform Package, 08 February 2022;

7 Finance Watch, *Cracks in the Pillars* – Financial Stability Loses Out in the EU's Basel III Endgame, 29 March 2022

8 For a perspective on the wider systemic flaws that played a role in the global financial crisis of 2007/08, and which may which not have been fully addressed by post-crisis regulatory reforms, see, e.g., Finance Watch, *Ten Years After: Back to Business as Usual*, 15 September 2018; also: Bayoumi, T., Unfinished Business: The Unexplored Causes of the Financial Crisis and the Lessons Yet to be Learned, Yale University Press (2017)

economic system and, arguably, deeply ingrained in the human psyche[9]. Although each new crisis rarely is a carbon-copy of the one before the root causes tend to be the same: a readiness to let market participants accumulate more risk during the upswing than they have the capacity to absorb when the cycle turns. A resilient system should aim at moderating the extreme peaks and troughs of the cycle – a task that is difficult to manage at the best of times but also implies a forward-looking, counter-cyclical approach that is always bound to be unpopular while the going is good. Left to their own devices, financial markets will always have a tendency to overshoot: as it was put so aptly by the former CEO, Charles "Chuck" Prince in July 2007, already well into the opening stages of the global financial crisis: "*As long as the music plays, you've got to get up and dance. We're still dancing*"[10]. We never know precisely when the music stops, but we know that it will, eventually.

9 e.g., Reinhart, C.M. / Rogoff, K.S., This Time is Different: Eight Centuries of Financial Folly, Princeton University Press (2009); Akerlof, G.A. / Shiller, R.J., Animal Spirits: How Human Psychology Drives the Economy, and Why It Matters for Global Capitalism, Princeton University Press (2009)

10 U.S. Financial Crisis Inquiry Commission, *The Financial Crisis Enquiry Report*, U.S. Government Printing Office, Washington, D.C. (2011), pg. 175;

I. What is an internationally active bank?

Issue: The Basel III framework "*will be applied on a consolidated basis to internationally active banks*" (SCO 10.1). It is customary in regulatory texts to provide definitions of key concepts, especially those that determine the scope of its application; Basel III, though, does not. With the exception of a handful of global systemically important banks (G-SIBs), which are designated as such by the Financial Stability Board and apparently deemed "internationally active" by implication, it is up to member jurisdictions to define this term individually. Member jurisdictions also enjoy discretionary latitude to decide which banks, beyond internationally active ones, should be bound by the Basel framework, and to which degree. Although Section 1 of the Basel Core Principles (BCP) makes reference to the "proportionality concept" or "proportionate approach" (BCP 01.3), the Basel framework currently does not include any binding rules or specific guidance on how that concept should be applied. This leads to inconsistencies in the application of Basel III across jurisdictions, which affect the "level playing field" and creates regulatory "blind spots" where systemic risk can accumulate unnoticed.

Impact: When Silicon Valley Bank (SVB) failed in March 2023, its parent company, SVB Financial Group (SVB FG), was classified by its supervisor, the US Federal Reserve, as a Category IV domestic firm (consolidated assets in excess of USD 100 billion). By virtue of the so-called Tailoring Rule[11], introduced by the US regulators in 2019[12], Category IV firms are not subject to the full requirements of the US implementation of the Basel III framework (Enhanced Prudential Standards, EPS). SVB FG therefore only had to meet lower capital and liquidity standards, including a lower Liquidity Coverage Ratio (LCR) and quarterly, instead of monthly, liquidity reporting. While SVB FG had both US and non-US subsidiaries, SVB FG primarily operated in the US through its main operating entity, SVB, which accounted for 90% of the group's consolidated assets of ca. USD 212 billion[13]. Its largest overseas subsidiary, in the UK, had a balance sheet of USD 15 billion (7% of consolidated assets). In sum, the group was not considered a potential systemic risk, neither domestically nor internationally[14], and was therefore allowed to operate under a prudential regime that was not fully Basel III-compliant. When SVB suffered sudden, catastrophic outflows of liquidity in March 2023 both of these assumptions proved flawed: first, contagion

11 *Changes to Applicability Thresholds for Regulatory Capital and Liquidity Requirements*, A Rule by the Comptroller of the Currency, the Federal Reserve System, and the Federal Deposit Insurance Corporation, 84 Fed. Reg. 59230 (2011 January 2019)

12 The Tailoring Rule implements § 401 of the 2018 Economic Growth, Regulatory Relief, and Consumer Protection Act (EGRRCPA), U.S. Public Law No. 115-174 of 24 May 2018, 132 Stat. 1296 (2018).

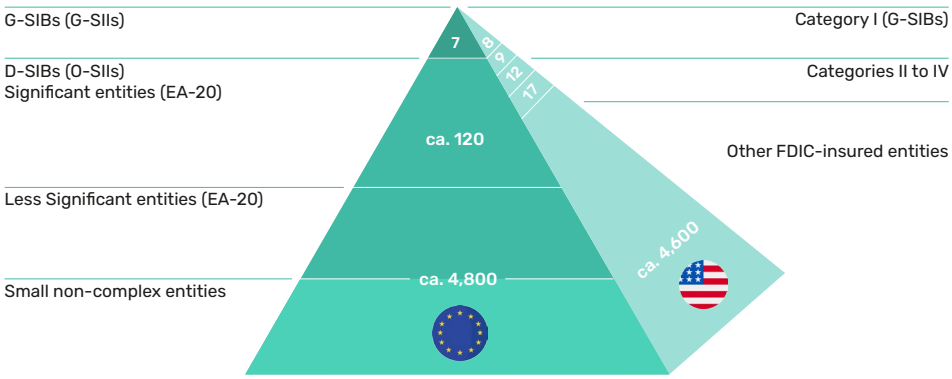
13 Board of Governors of the Federal Reserve System, *Review of the Federal Reserve's Supervision and Regulation of Silicon Valley Bank*, 28 April 2023, pg. 17

14 The US prudential framework does not formally designate "domestic systemically important banks" (D-SIBs) according to SCO 50, and does not provide for a dedicated "D-SIB" buffer. US regulators assert that equivalent measures are already incorporated into the prudential framework applicable to institutions that would meet the designation criteria.

spread to other mid-sized US banks[15] which were seen as operating with a similar business model, and therefore potentially exposed to similar risks as SVB; secondly, the crisis of SVB in the US also forced its UK subsidiary to cease operations, thus freezing the accounts of its 3,300 clients, which included start-ups, venture-backed companies and funds in the UK and Continental Europe[16]. In its post-crisis review, the Basel Committee acknowledged that "*the failure of a bank can have systemic implications through multiple channels, including first- and second- round propagation effects. For example, the distress of relatively small banks (which are not subject to the full Basel III framework) can trigger broader and cross-border systemic concerns and contagion effects*"[17].

Considerations: This episode highlights how different jurisdictions take very different approaches towards implementing the Basel III framework. In the US, the 2010 Dodd-Frank Act[18] originally subjected all bank holding companies and foreign banks with more than USD 50 billion in assets to Enhanced Prudential Standards (EPS). In 2017, the Economic Growth, Regulatory Relief, and Consumer Protection Act (see Note 11) exempted all domestic banks with assets between USD 50 billion and USD 100 billion from EPS and mandated the Federal Reserve to apply EPS selectively to domestic banks with assets between USD 100 billion and USD 250 billion. As a result, some 42 banking groups, including 8 US G-SIBs and 12 US subsidiaries of overseas G-SIBs, are currently designated as Category I to IV institutions and required to comply, to varying degrees, with the Basel III framework.

Chart 1: Prudential classification of banks (EU and US)



Source: European Central Bank, European Banking Authority, Federal Reserve System, Federal Deposit Insurance Corporation (September/October 2023)

15 Signature Bank and First Republic Bank, two mid-sized US banking groups with consolidated assets of USD 110 billion and USD 233 billion, respectively, also suffered catastrophic runs on their deposits immediately after the crisis at SVB became public knowledge. Despite their size, neither of them was subject to the Federal Reserve's Enhanced Prudential Standards (EPS) framework.

16 Financial Times, *UK Prepares Cash Lifeline for Tech Companies Hit by Silicon Valley Bank Collapse*, 12 March 2023

17 Basel Committee on Banking Supervision, *Report on the 2023 Banking Turmoil*, 05 October 2023. pg. 28

18 Dodd-Frank Wall Street Reform and Consumer Protection Act, U.S. Public Law No. 111-203 of 21 July 2010, 124 Stat. 1376-2223 (2010).
The EGRRCPA raised the threshold for the application of the Basel III standards from consolidated banking assets of USD 50 billion to USD 100 billion and introduced a new proportionality framework providing significant regulatory relief for institutions in Categories III and IV (consolidated assets of USD 100–700 billion).

The EU, by comparison, has committed to apply the Basel III framework, *a priori*, to all of its ca. 5,000 credit institutions. This is reflective, to some extent, of the fact that the EU still cannot be considered as a single jurisdiction, even though undeniable progress has been made with the creation of the Banking Union. Even smaller banks are "internationally active", almost by default, even if they only transact cross-border business within the Union. Like the US, the EU's seven G-SIBs, as designated by the FSB, must comply with enhanced prudential rules, including a G-SIB/G-SII buffer and Total Loss Absorbing Capacity (TLAC). Contrary to the US, the EU has designated ca. 120 D-SIBs (Other Systemically Important Institutions, O-SIIs)[19], which are subject to higher prudential standards, including a D-SIB/O-SII buffer (see Q.5 below). D-SIB/O-SII designation is based on a composite score based on quantitative indicators, in line with SCO 50, with the indicative size threshold set at EUR 30 billion of consolidated assets. At the other end of the spectrum, small and non-complex institutions are banks with total assets of EUR 5 billion or less, which fulfil certain criteria and benefit from simplified prudential regulation and less intense supervisory engagement.

Consistency in the application of the framework should be a prime concern of the Basel Committee. Apart from the list of G-SIBs, which is effectively handed down directly from the FSB, major jurisdictions seem to take very different approaches towards defining the scope of application of the Basel III rules domestically. The "mini crisis" in the US in March 2023 was a reminder, if one was needed, that inconsistencies in the application of the prudential framework at the national level could pose a real risk to its effectiveness globally. The global financial crisis of 2007/08, and the sovereign-debt crisis in Europe which followed, demonstrated how even banks with limited international links can spread contagion across borders if they destabilise the financial system of their home country. The Basel Committee is tasked with maintaining global financial stability. To deliver on this mandate the Basel framework should, therefore, apply to all institutions that could potentially threaten global financial stability. A harmonised approach would then be needed to determine which institutions should be expected to comply with the standard, fully and without material exemptions. The original concept of "internationally active banks" may prove of limited use in this context – it is too narrow and one-dimensional to capture the variety of factors that combine in creating systemic risk. More likely, this approach could build upon the existing D-SIB framework, with quantitative indicators representing a range of relevant risk factors, and use a combination of absolute and relative metrics to accommodate the specificities of individual jurisdictions.

While its first priority should be to ensure that the framework is applied by member jurisdictions consistently to all institutions that pose a risk to financial stability, the Committee should also encourage convergence in the way member jurisdictions apply the principle of proportionality to adapt the framework, e.g. to institutions beyond its immediate remit. In its recent consultation draft on the review of the Core Principles for

19 The European Banking Authority's list of O-SIIs (as of December 2022) comprises 168 institutions headquartered in the EU (EU-27); the list includes 48 host-country subsidiaries of other EU groups and ca. 20 subsidiaries of third-country groups, including subsidiaries of non-EU G-SIBs

Effective Banking Supervision (BCP)[20] the Basel Committee proposes to incorporate a new introductory section (BCP 02.9 to 02.13), which references the Committee's July 2022 High-Level Considerations on Proportionality[21]. The proposed amendments to the BCP provide only very generic guidance, however, while the High-Level Considerations themselves are not part of the BCP and do not constitute new standards or guidelines in their own right. In the light of recent events, this nascent proportionality framework should be developed further and integrated, in due course, into the main body of the Basel framework.

Recommendation: The Basel Committee should work with its member jurisdictions on a common approach for determining the scope of application of the Basel framework at the member-state level. It should go beyond the original target group, "internationally active banks", which is no longer adequate, and should instead build on the D-SIB framework, and the process and segmentation metrics set out in Section 1 of the High-Level Considerations[22]. This approach should be incorporated into the SCO standard of the main Basel framework in due course. Moreover, the current, non-binding proportionality framework, as outlined in the High-Level Considerations, should be further refined and, in due course, incorporated into the main BCP standard to encourage jurisdictions to follow consistent practice when adapting Basel standards for smaller institutions.

20 Basel Committee on Banking Supervision, *Consultation on the Core Principles for Effective Banking Supervision*, 06 July 2023, pg. 9

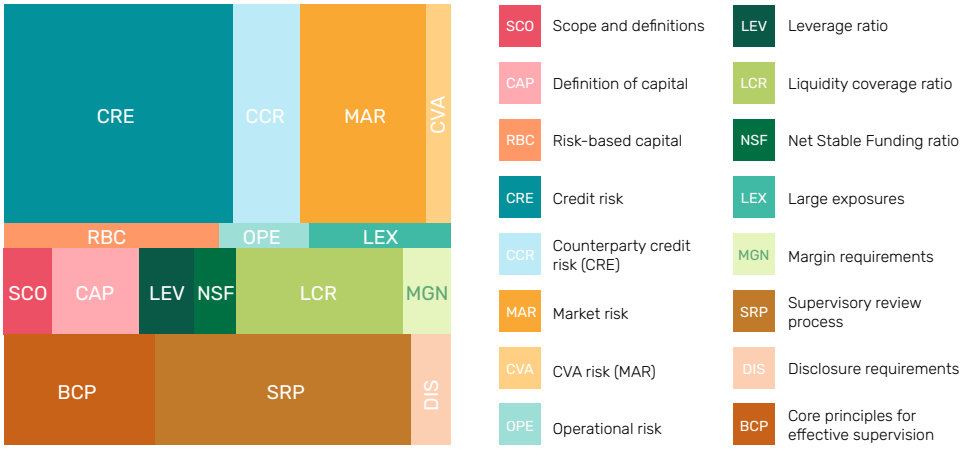
21 Basel Committee on Banking Supervision, *High-Level Considerations on Proportionality*, 07 July 2022

22 Basel Committee on Banking Supervision, High-Level Considerations on Proportionality, pg. 4 ff.

II. Is the Basel III framework too complex?

Issue: In its current form, the Basel III framework[23] contains some 1850 pages of regulation, which is nearly six times the size of the 330 pages of Basel II's last iteration in 2006[24]. The single most frequently heard criticism of the Basel III framework is about its complexity. That criticism is shared by almost all stakeholders, including banks and other financial market participants, legislators, supervisors, professional and academic experts, and the general public, albeit for different reasons. The cost of excessive complexity is reflected in higher compliance costs for banks, more demands on regulators and supervisors, less transparency and comparability for market participants, and a lack of confidence in the robustness of the sector on the part of civil society[25].

Chart 2: Graphic representation of the Basel III framework



Note: individual sections (standards) of the Basel III framework (percentage of total text)

Impact: In its 2022 evaluation of the Basel III framework, the Basel Committee dedicates an entire section to a thorough, and differentiated discussion of the complexity issue. The report argues that "*by construction and intent, Basel III addresses a larger number of risks than did Basel II. In order to more comprehensively address risks, Basel III is a more sophisticated and arguably more complex regulatory framework*"[26]. The report, which was published in December 2022, concluded, confidently, that "*although this study shows that the Basel III framework is likely to be more complex than was Basel II, the increase in complexity should be viewed in the light of the positive effect of Basel III's contributions to banks' resilience as demonstrated throughout this*

23 Basel Committee on Banking Supervision, *Full Version of the Basel Framework*, 30 October 2023

24 Basel Committee on Banking Supervision, *International Convergence of Capital Measurement and Capital Standards: A Revised Framework* (Comprehensive Version), 30 June 2006

25 Basel Committee on Banking Supervision, *The Regulatory Framework: Balancing Risk Sensitivity, Simplicity and Comparability, Discussion Paper*, 08 July 2013, pg. 13 ff.

26 Basel Committee on Banking Supervision, *Evaluation of the Impact and Efficacy of the Basel III Reforms*, 14 December 2022

report"[27]. This comparison was complicated, of course, by the fact that (i) Basel II was still being implemented when the global financial crisis of 2007/08 struck; and (ii) Basel III had not been tested yet by a crisis of a similar magnitude. Three months later, the failures of three medium-sized US banks and the collapse of Crédit Suisse, one of thirty "global systemically important" banking groups (G-SIBs), caused the most significant system-wide banking stress since the global financial crisis of 2007/08. In its review of these events[28], the Basel Committee acknowledged shortcomings, but did not feel compelled to revisit its overall assessment of the framework's performance. In time, this may turn out to be a missed opportunity. The failures of Silicon Valley Bank, Signature Bank, and First Republic Bank in the US, and of Crédit Suisse in Switzerland, all had one thing in common: large-scale systemic contagion was prevented not by the resilience of the banking system but, once again, by public-sector intervention – precisely the scenario that Basel III had set out to prevent.

Considerations: The drawbacks of an overly complex regulatory framework are well known[29]. In its 2022 report, the Basel Committee notes that complex regulations could "*undermine supervisors' ability to effectively assess both the capital adequacy of banks and banks' capital management processes, making consistent and comparable implementation of standards more difficult to achieve. They could also encourage firms to pursue more favourable interpretations of the regulations. All of these factors may undermine market discipline by making it more difficult for stakeholders to understand and compare banks' risk profiles. […] Furthermore, complex rules applied to simple banking activities may limit competition, giving advantages to larger and more complex banks, potentially providing incentives for banks to become even more complex and aggravating the TBTF problem*"[30]. These risks are not merely hypothetical either: in its evaluation, the Basel Committee references a large body of research, both internal and external, which provides empirical evidence of these effects.

In its 2022 evaluation report, the Basel Committee's own assessment comes with an important disclaimer: "*As there is no counterfactual, the discussion that follows does not seek to answer the question of whether the same degree of enhancement in resilience and reduction in systemic risk could be achieved by a less complex framework*"[31]. This may well be true at the aggregate level but a more nuanced approach may still yield useful insights. The Committee lists a number of specific factors that contribute to the incremental complexity of Basel III, which include, in particular, (i) the need to include options and discretions to accommodate a wider, and more diverse membership of the Basel accord, and (ii) the intention to address more types

27 Basel Committee on Banking Supervision, Evaluation of the Impact and Efficacy of the Basel III Reforms, pg. 67

28 Basel Committee on Banking Supervision, *Report on the 2023 Banking Turmoil*, 05 October 2023

29 Basel Committee on Banking Supervision, *The Regulatory Framework: Balancing Risk Sensitivity, Simplicity and Comparability*, Discussion Paper, 08 July 2013

30 Basel Committee on Banking Supervision, Evaluation of the Impact and Efficacy of the Basel III Reforms, pg. 62

31 Basel Committee on Banking Supervision, Evaluation of the Impact and Efficacy of the Basel III Reforms, pg. 61

of risk, and to do so with standards that are more risk-sensitive[32].

On the first factor, the Committee argues that "*since Basel II was published in 2004, the membership of the Committee has expanded from 13 to 28 member jurisdictions, increasing the need to include optionality in the framework in order for banks or jurisdictions to choose between different models and approaches for a given metric.*" This implies that, in exchange for these optionalities, member jurisdictions and banks agree to adhere to the standard in general, keeping variance within an agreed, and predictable range. This bargain breaks down, however, when actual variability exceeds the expected range, and/or when member jurisdictions deliberately deviate from the standard beyond the agreed options and discretions. From the very beginning, national options and discretions provided in Basel III[33] did not keep member jurisdictions from straying beyond its boundaries. As early as 2014, the EU was found to be "materially non-compliant", primarily due to its "permanent partial use" of the standardised approach, which enables EU banks to assign a risk weight of zero to sovereign credit exposures, among others[34]. Around the same time, the Committee appointed a Task Force to investigate how much Basel III optionalities "*contribute to unwarranted variations in capital standards*" and noted that it would then "*consider which of the discretions should be eliminated from the framework […] to increase the comparability of implementation of the standards across jurisdictions*"[35]. This exercise resulted in the final instalment of Basel III, published in December 2019, which eliminated a number of optionalities, introduced the contentious 'output floor', but did not materially reduce complexity overall. Again, even though the 'output floor' was pitched very much at the bottom end of the range, due in large part to lobbying by large EU banks[36], the EU co-legislators finally settled on a text that deviates materially from the agreed standard[37]. In sum, a significant cost of complexity was incurred to encourage compliance, but did not yield a return.

Regarding the second factor, the Committee points out in its 2022 evaluation report that it "*has intentionally revised the framework to address more types of risk, increasing both the comprehensiveness and complexity of the framework. In addition, the Committee's efforts to develop standards that are risk-sensitive have resulted in additional complexity of both the standardised and internally modelled approaches included in the framework*"[38]. Modelling choices, especially for credit risk and market risk, not only contribute most to the incremental complexity of Basel III but are

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32 Basel Committee on Banking Supervision, Evaluation of the Impact and Efficacy of the Basel III Reforms, pg. 62

33 In the EU, national options and discretions to modify risk weights are available under Art. 124 CRR, 164 CRR and 458 CRR, among others (cf. European Central Bank, *ECB Guide on Options and Discretions available in Union Law*. Supervisory authorities are required to notify the ESRB when such measures are taken.

34 Basel Committee on Banking Supervision, *Regulatory Consistency Assessment Programme (RCAP): Assessment of Basel III Regulations* – European Union, 05 December 2014

35 *Basel Committee on Banking Supervision, Basel Capital Framework National Discretions, November 2014*

36 BNP Paribas, *Output Floor: On the Eve of a (Bad) Agreement?*, Economic Research Department: Charts of the Week, 06 December 2017

37 Finance Watch, *EU Co-Legislators Reach Agreement on Basel III*, Press Release, 11 December 2023

38 Basel Committee on Banking Supervision, Evaluation of the Impact and Efficacy of the Basel III Reforms, pg. 62

also the primary sources of divergent practice and regulatory arbitrage (see Q.3)[39]. In Basel II, credit and market risk standards together accounted for ca. 250 pgs; in Basel III, the page count grew by a factor of three, to more than 750 pages. The marginal utility of such complexity, and especially the risk of "over-fitting" that comes with trying to model a multitude of risk parameters with limited data, was questioned from the very beginning. In 2012, Andrew Haldane, at the time Executive Director for Financial Stability at the Bank of England, observed that "*the quest for risk-sensitivity in the Basel framework, while sensible in principle, has generated problems in practice. It has spawned startling degrees of complexity and an over-reliance on probably unreliable models. The Tower of Basel is at risk of over-fitting – and over-balancing*"[40]. This concern proved well-founded: the Committee's regular Basel III monitoring exercises[41] continue to show persistent, and significant divergences, in particular in the calculation of risk-weighted assets, which distort the international "level playing field" – arguably the principal "raison d'être" of the framework. It seems that complexity has not helped narrow the gap, but instead enabled and encouraged divergent practices, which ultimately undermine the credibility of the framework.

Finally, and perhaps most importantly, excessive complexity may also become a distraction: regulators preoccupied with dissecting known risks down to minute details may fail to react in time to new, bigger risks emerging elsewhere. Financial risks arising from climate change could be one case in point (see Q.7).

Recommendation: It is difficult to argue, based on recent developments, that the incremental complexity of the Basel III framework is justified by a commensurate gain in regulatory convergence and effectiveness. Generous options and discretions have not proven successful in preventing member jurisdictions from departing materially from the agreed standards. They should be reduced to the bare minimum that is necessary and appropriate to bridge genuine, material differences between member jurisdictions' financial markets which have a direct bearing on their banks' business and risk profile. To compensate member jurisdictions for the potential loss of flexibility the Committee should seek to refine and further harmonise the proportionality framework (see Q.1. above).

39 Basel Committee on Banking Supervision, The Regulatory Framework: Balancing Risk Sensitivity, Simplicity and Comparability, pg. 9

40 Haldane, A. / Madouros, V., *The Dog and the Frisbee*, Speech at the Federal Reserve Bank of Kansas City's 366th Economic Policy Symposion, Jackson Hole, 31 August 2012

41 Basel Committee on Banking Supervision, *Basel III Monitoring Report*: September 2023, 26 September 2023

III. Does Basel III put too much trust in modelling?

Issue: The Basel III framework relies extensively on the use of quantitative models, especially for the calculation of risk—weighted assets, which determine capital requirements. In many instances, banks are able to choose between three, four, or sometimes five different methodological options ("approaches"), including standardised and internal model-based approaches. Internal model-based approaches, in particular, suffer from known methodological and incentive problems. They rely on sweeping assumptions about the predictive power of models, the value of incremental, privately-held information available from banks, and the feasibility of aligning banks' incentives with regulators' objectives. Risk modelling accounts for the bulk of the Basel III framework and contributes most to its computational and linguistic complexity (see Q.2). Moreover, models are susceptible to regulatory arbitrage and have been found to cause significant unexplained variability in the calculation of risk-weighted assets, and hence regulatory capital ratios.

Chart 3: Modelling options in Basel III

	CRE Banking book	CRE Equities in funds	CRE Securisation	CCR	MAR	CVA	CPE
Standardised approaches	Standardised (SA-CR)	Look-through (LTA)	Standardised (SEC-SA)	Standardised (SA-CCR)	Simplified Standardised (Simplified SA)	BA-CVA	~~Basic Indicator~~ (BIA)
		Mandate-based (MBA)	Standardised External Rating-based (SEC-ERBA)	Comprehensive	Standardised (SA)	Standardised (SA-CVA)	Standardised
		Fall-back (FBA) (1250% r_w)	Fall-back (FBA) (1250% r_w)				
Internal model-based approaches	Foundation Internal Ratings Based (F-IRB)		Internal Assessment (IAA)	Value at Risk (VaR)	Simplified Internal Models (simplified IMA)		~~Advanced Measurement Approach~~ (AMA)
	Advanced Internal Ratings Based (A-IRB)		Securitisation Internal Ratings-Based (SEG-IRBA)	Internal Models Method (IMM)	Internal Models Approach (IMA)		

**) Not available for all banking-book asset classes*

***) Discontinued in the last iteration of the Basel III framework*

Impact: Internal models account for a large proportion of the unexplained variability in risk-weighted assets, which is, in turn, indicative of banks "gaming" the regulatory framework to their advantage. By systematically understating the riskiness of their assets, banks are able to lower their capital requirements and gain a competitive advantage over competitors who use different, more conservative approaches[42]. Moreover, this variability creates a degree of intransparency and opacity which reduces the usefulness of bank's capital ratios as a source of information for supervisors and market participants[43]. Two categories of banks, in particular, have been shown to consistently, and perhaps deliberately, underestimate risk in order to manage capital requirements: one consists of banks that are already capital-constrained, i.e. struggling to raise funds, and whose management is prepared to disregard sound risk management for one last 'roll of the dice'; the other are 'too big to fail' (TBTF) institutions who can rely on being rescued by the state if and when they fail, and therefore benefit from an implicit public guarantee, which lowers their default risk. This 'TBTF subsidy', which was supposed to be eliminated by the post-crisis 'too-big-to-fail' reforms, is still in evidence today[44].

Considerations: Before the introduction of risk-sensitive regulation, the regulatory environment was considered to be too coarse: Basel I, which did not link capital requirements to asset risk, was perceived to distort banks' incentives and encourage a preference for high-risk assets[45]. Internal-model-based approaches, which were first implemented in Basel II and continue to shape Basel III, are based on the expectation that (i) internal models produce more accurate, and unbiased, estimates of risk than standardised models; and (ii) this more accurate quantification of risk translates, again without bias, into a more accurate calibration of capital requirements. Conceptually, this reasoning is often associated with the perception that capital is a scarce resource, and that it is in the interest of society, and the economy at large, if banks strive to minimise its use, i.e. to maximise leverage. In this view, frequently espoused by the banking sector, regulators and supervisors share a degree of responsibility with the firms they regulate for ensuring the economical use of capital. Capital requirements they impose on banks therefore have to be benchmarked, and justified against the banks' own internal models, giving these models authority to determine what is an adequate and economical use of that scarce resource. This subjective perspective is very much at odds with the prudential perspective, however, where capital requirements are merely a regular and legitimate cost of doing business that should be determined by an external, objective, and holistic assessment of risk and, secondly, by a fair allocation of the cost of insuring that risk between market participants.

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42 Behn, M. / Haselmann R. / Vig, V., *The Limits of Model-Based Regulation*, ECB Working Paper Series No 1928, July 2016

43 Bastos e Santos, E. / Esho, N. / Farag, M. / Zuin, C., *Variability in Risk-Weighted Assets: What Does the Market Think?*, BIS Working Paper No. 844, 25 February 2020

44 The funding cost advantage (FCA) of 'too big to fail' banks has not declined materially compared to pre-crisis levels; cf. Financial Stability Board, Evaluation of the Effects of Too-Big-To-Fail Reforms. Final Report, pgs. 34-39.

45 Behn, M. / Haselmann R. / Vig, V., *The Limits of Model-Based Regulation*, ECB Working Paper Series No 1928, July 2016

In practice, the shortcomings of financial risk models in general, and internal models in particular, tend to fall into three categories: methodological flaws, data problems, and misdirected incentives[46].

Prudential models, like all statistics, attempt to draw conclusions and predictions from a body of data based on simplified assumptions about the real world[47]. They are limited to modelling risks if (i) they are identified/acknowledged as such; and (ii) sufficient historical data is available. They are susceptible to "over-fitting" on the one hand, and to failing to capture relevant information on the other[48]. Risks that cannot be readily modelled, such as systemic risk associated with "too big to fail" institutions or financial risk related to climate change, tend to be dismissed as "externalities". On the other hand, attempts to capture more risk factors by increasing the number of variables, add to the complexity of models but do not always result in higher precision – very often, hoped-for marginal gains in accuracy are more than off-set by the concomitant increase in model risk, i.e. the risk that the limitations of the model itself could lead to material divergence between the predicted and actual outcomes[49]. There are many well-documented precedents where a quest for precision has led to costly modelling errors[50]. Finally, statistical models based on time series are, by definition, backward-looking, prone to path-dependency, and tend to cope poorly with non-linear processes.

The validity of models depends critically on the availability of a sufficient body of correct, unbiased input data. Unfortunately, prudential modelling tends to face challenges with the quantity as well as with the quality of available data. Consistent, granular long-term data series that map an entire business cycle are difficult to obtain. Even when such data is available, mapping patterns from one cycle onto the next tends to be of limited use as other environmental variables may have changed in the interim. When data is available it may not be of the required quality, e.g. in terms of completeness, granularity, accuracy or bias. With internal models, the issue of data selection becomes even more acute due to the information asymmetry between banks and supervisors.

Finally, internal model-based approaches are fraught with incentive problems. The concept of internal modelling is predicated largely on the expectation that banks have private information about the risk profile of their assets, which is not in the public domain and not readily accessible to regulators and supervisors. In order to mobilise this information and incorporate it into their cost-of-capital calculation, the internal

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46 Behn, M. / Haselmann R. / Vig, V., *The Limits of Model-Based Regulation*, ECB Working Paper Series No 1928, July 2016

47 Basel Committee on Banking Supervision, Evaluation of the Impact and Efficacy of the Basel III Reforms, pg. 62

48 Haldane, A. / Madouros, V., *The Dog and the Frisbee*, Speech at the Federal Reserve Bank of Kansas City's 366th Economic Policy Symposion, Jackson Hole, 31 August 2012

49 Basel Committee on Banking Supervision, The Regulatory Framework: Balancing Risk Sensitivity, Simplicity and Comparability, pg. 16

50 Basel Committee on Banking Supervision, The Regulatory Framework: Balancing Risk Sensitivity, Simplicity and Comparability, pg. 11

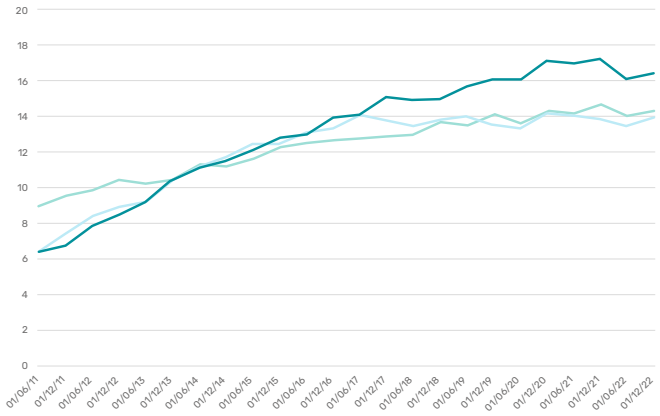
model-based approach seeks to encourage banks to make their own quantitative risk assessments. In return for investing in internal models they are offered a reward in terms of funding costs. In this view, the advantage in funding costs for IRB banks – still as much as 27.5%, even if the Basel III 'output floor' (72.5%) is implemented – is justified as a 'subsidy' for an investment that improves risk management at the bank, and therefore financial stability on the whole. In reality, however, incentives of banks and regulators are not aligned: banks and bank staff stand to gain significant economic benefits from using internal model-based approaches to minimise regulatory capital.

By way of illustration, the latest BCBS monitoring report[51] shows that the leverage ratios of European banks were, on average, nearly 100 bps lower than those of their American peers (5.1% vs. 6.1%). European banks, especially G-SIBs and large (Group 1) institutions, are heavy users of internal model-based approaches and not yet constrained by an 'output floor' (unlike US banks, which are bound by the Collins Amendment). Over the last ten years, while the Basel III framework was introduced, the (risk-neutral) leverage ratio of European banks has constantly been between 100 and 150 bps lower, on average, than that of their American peers'. Meanwhile their (risk-weighted) Tier 1 ratio, which was near parity in 2012, was ca. 250 bps higher, on average, at the end of 2022. In other words, the average risk weight applied to the assets of European banks (the risk-weight density) has been ca. 30% lower throughout this period compared to their international peers. This could be interpreted in two ways: either European banks hold substantially lower-risk assets than their peers – which appears less plausible since the banks in this sample tend to be large global groups whose business models and risk profiles are very similar to those of their overseas competitors; or European banks are making full use of internal model-based approaches to manage down their risk-sensitive capital requirements (Tier 1 ratio), so that they are effectively constrained by the non-risk-sensitive Leverage Ratio. The mechanism behind that second scenario was foreshadowed by Adrian Blundell-Wignall, OECD Deputy Director for Financial and Enterprise Affairs, already in 2010: "*… banks' ability to arbitrage the capital weights to reduce capital and expand leverage is very extensive. If the leverage ratio is set too high (capital required too low), banks will have an incentive to arbitrage the weights to ensure they do not hold any more capital than needed. This is a cost minimization exercise for banks that will see regulators effectively setting maximum rather than minimum capital ratios in Pillar 1.*"

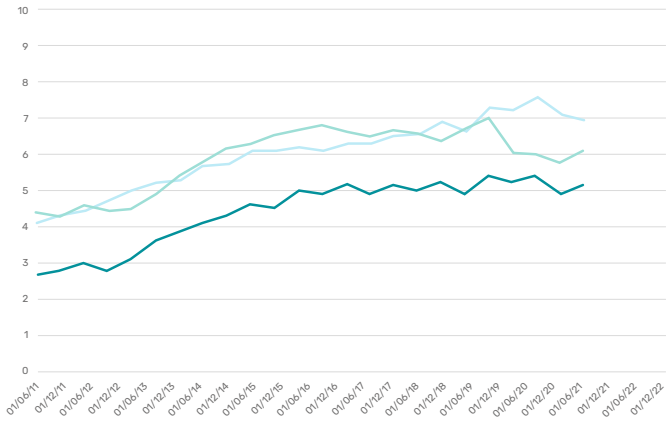
51 Basel Committee on Banking Supervision, *Basel III Monitoring Report*: September 2023, 26 September 2023

Table 1: Leverage and Tier 1 Ratios by Region (31 Dec 2022)

Tier 1 Ratio



Leverage Ratio



Europe *Americas* *Other*

Source: Basel Committee on Banking Supervision (September 2023)

Note: sample of Group 1 banks, incl. G-SIBs (LR: 77; T1: 57); Europe includes EU, UK and Switzerland; Americas includes USA, Brazil, and Mexico.

The flaws of the internal-model-based approach have been researched extensively since 2012 and there is a large body of empirical studies, including work conducted by or on behalf of the Basel Committee[52]. Many observers, Finance Watch among them, believe that the pursuit of internal model-based approaches has taken a fundamentally useful concept – a risk-sensitive approach that benchmarks a bank's capital requirements against the risk profile of its underlying exposures – to an unhealthy and

52 e.g. Bastos e Santos, E. / Esho, N. / Farag, M. / Zuin, C., *Variability in Risk-Weighted Assets: What Does the Market Think?*, BIS Working Paper No. 844, 25 February 2020; Huizinga, H., *Banks' Internal Rating Models - Time for a Change?* The»System of Floors as Proposed by the Basel Committee, In-Depth Analysis provided at the request of the Economic and Monetary Affairs Committee of the European Parliament (ECON), Directorate General for Internal Policies (DG IPOL), PE (2016) 587365, November 2016; Behn, M. / Haselmann R. / Vig, V., *The Limits of Model-Based Regulation*, ECB Working Paper Series No 1928, July 2016; Basel Committee on Banking Supervision, *Reducing Excessive Variability in Banks' Regulatory Capital Ratios*: A Report to the G20, November 2014; Mariathasan, M. / Merrouche, O. (2014), The Manipulation of Basel Risk Weights, Journal of Financial Intermediation, vol. 23 (2014), pgs. 300–321; Le Leslé V. / Avramova S., Revisiting Risk-Weighted Assets: *Why Do RWAs Differ Across Countries and What Can Be Done About It?*, IMF Working Paper No. 12/90, March 2012

counter-productive extreme. Already in 2011, the final report of the U.S. Congress Investigative Committee on the Financial Crisis cited the criticism of the Federal Reserve's then Director of Banking Supervision and Regulation, Rick Spillenkothen, regarding the premises of the Basel II framework, which he described as displaying "*an excessive faith in internal bank risk models, an infatuation with the specious accuracy of complex quantitative risk measurement techniques, and a willingness (at least in the early days of Basel II) to tolerate a reduction in regulatory capital in return for the prospect of better risk management and greatewr risk-sensitivity*"[53]. In 2012, Andrew Haldane, suggested to "*take a more sceptical view of the role and robustness of internal risk models in the regulatory framework. These are the main source of opacity and complexity. With thousands of parameters calibrated from short samples, these models are unlikely to be robust for many decades, perhaps centuries, to come. It is close to impossible to tell whether results from them are prudent*"[54]. Whereas some of his suggestions, such as the use of a risk-neutral leverage ratio and, more recently, the 'output floor', have since been adopted into the framework in some form, his main concern still appears pertinent today.

There can be no doubt that internal models are important and useful instruments to inform banks' risk, capital and liquidity management functions. They have a role to play as platforms for banks' internal capital and liquidity planning processes (ICAAP and ILAAP) and supervisors should, of course, continue to assess, and review banks' internal risk management structures and processes as part of the supervisory review process (SREP). This is very different, however, from entrusting banks with creating internal models to calibrate their own Pillar 1 capital requirements.

Recommendation: With the implementation of Basel III in progress, the Basel Committee should incorporate into its work programme a review cycle to streamline and simplify the framework. Finance Watch would support the adoption of an updated framework which combines a standardised risk-based approach and a risk-neutral leverage ratio but abandons the use of internal models. This would preserve the fundamental architecture of Basel III but substantially simplify the prudential framework, limit regulatory arbitrage, and make regulatory capital ratios more transparent and comparable.

53 Financial Crisis Inquiry Commission, *The Financial Crisis Enquiry Report*: Final Report of the National Commission on the Causes of the Financial and Economic Crisis on the United States, U.S. Government Printing Office, Washington (D.C.), January 2011, pg. 171;

54 Haldane, A. / Madouros, V., *The Dog and the Frisbee*, Speech at the Federal Reserve Bank of Kansas City's 366th Economic Policy Symposion, Jackson Hole, 31 August 2012

IV. Should supervisors approve internal models?

Issue: Like its predecessor, Basel II, the Basel III framework encourages banks to adopt internal risk models for the purposes of calculating their Pillar 1 regulatory capital requirements[55]. Supervisors have to formally approve the use of internal models and are expected to monitor their use on a continuous basis, e.g. by analysing and back-testing model validation data and carrying out on-site inspections and model investigations[56]. These activities absorb a significant amount of highly-skilled supervisory resources, sometimes well in excess of what is available, and come at a significant expense. Moreover, the practice of involving supervisors in detailed reviews of banks' internal models poses a real risk of compromising their impartiality, which could give rise to very real conflicts of interest.

Impact: Basel III, like its predecessor Basel II, blurs the line between the bank's internal risk management structures and processes and prudential supervision and oversight. Strictly speaking, supervisors are only called upon to approve the use of internal models. In practice however, because each model is, by definition, bespoke to the institution, supervisors effectively end up approving the actual model itself. As such, they are susceptible to taking on a degree of co-ownership of the model, which may colour their judgement when shortcomings of that model surface at a later stage.

Considerations: This question is, of course, closely linked to the previous section (see Q.3 above). If internal models are accepted as an essential element of the prudential framework, as is currently the case, it stands to reason that they will have to be reviewed by supervisors to ensure they are fit for purpose and comply with the applicable rules.

Supervisory capacity is a valuable, limited resource. Most authorities already face constraints in their day-to-day activities due to a shortage of qualified staff[57]. Typically, the risk management and compliance units of major banks vastly outnumber their counterparts on the supervisory side. At the ECB, which is mandated with the direct supervision of 113 'significant' banking groups in the Eurozone, the unit tasked with on-site and internal-model inspections (OSIs and IMIs) numbers ca. 150 staff[58]. IMIs are assigned Joint Supervisory Teams (JST), where one ECB staff member is joined typically by up to ten members from national supervisory authorities. On average the ECB conducts ca. 100 internal-model investigations every year[59]. According to a recent report by the European Court of Auditors, the ECB was unable to staff 26% of prioritised internal-model investigations in 2021. When supervisors are deployed to

55 see CRE 20.2 (credit risk – IRB), CRE 53 (counterparty credit risk), MAR 30.1 (market risk)

56 European Central Bank, *Guide to On-site Inspections and Internal Model Investigations*, September 2018

57 European Court of Auditors, *EU Supervision of Banks' Credit Risk*, Special Report 12/2023, March 2023, pg. 21

58 European Court of Auditors, *EU Supervision of Banks' Credit Risk*, Special Report 12/2023, March 2023, pg. 21

59 European Central Bank, *Annual Report on Supervisory Activities 2022*, March 2023, pg. 44;

approve or validate a bank's internal models the principal beneficiary of that engagement tends to be the bank itself, which stands to earn a 27.5% advantage in funding costs. Based on the empirical work on the subject (see Q.3 above) it is difficult to argue that there is a corresponding public benefit, e.g. for financial stability, which would justify this use of supervisory capacity; if any, such benefit would appear to be very limited. Almost certainly, however, competitors of the bank, which do not benefit from the use of internal models, will be at a competitive disadvantage in the marketplace. It is questionable then whether it is in the public interest to employ a finite number/capacity of highly-trained supervisors in an exercise that (i) primarily benefits the banks themselves and (ii) ultimately contributes to un-levelling the playing field[60]. Even if some of the direct costs are recovered through supervisory fees charged to the institutions, this process absorbs valuable supervisory resources for no tangible gain to the general public or the economy at large.

The deployment of internal models is inherently fraught with information asymmetry. Internal models are constructed by the banks, often with the support of professional advisory firms who provide both models and implementation advice. The banks therefore control both the data source and the algorithm used to process the data. While deviations between the results produced by internal models and regulatory benchmarks may be discovered relatively easily, much more effort is required to track down the source of these divergences, understand why they occur, and devise – and agree – ways to remedy them.

The involvement of supervisory staff in reviewing and approving internal models invites regulatory capture and co-option. Supervisors are called upon to review and approve models that were constructed by banks, on their own account and under their sole responsibility. Having signed off on these models they, and the competent authority, become invested in them, and thus understandably reluctant to acknowledge issues when they come to light only later on, e.g. at a time of economic stress. This is rarely a matter of outright manipulation or malicious intent but merely a natural reflection of the fact that highly-skilled professional staff tend to identify particularly strongly with their work. The practice of rotating assignments does not fundamentally address this problem because the risk is not related to the supervised entity but to the work and professional credibility invested by the supervisor in his/her assignment with that entity.

Recommendations: The Basel Committee should consider re-establishing a stricter separation between the respective spheres of responsibility of the supervisor and the supervised entity. This would imply two reforms: (i) internal models should become once again a tool for banks' internal risk management only; and (ii) supervisors should no longer be called upon to approve the use of banks' internal models, but should instead concentrate on reviewing the banks' regulatory capital calculations, based on standardised regulatory parameters.

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60 European Commission, Report from the Commission to the European Parliament and the Council on the Single Supervisory Mechanism, COM(2023) 212 (final), 18 April 2023, pg. 4

V. What are 'buffers' and how can they be used?

Issue: The Basel III framework introduced a set of capital buffers, collectively known as the Combined Buffer Requirement (CBR). These buffers come on top of the Pillar 1 capital requirement and are designed to absorb losses in times of stress, so that banks are not forced to drastically reduce the provision of credit and other critical services to the real economy. Moreover, capital buffers are meant to increase the overall resilience of the banking system and mitigate the impact of the financial cycle. In March 2020, in the early stages of the Covid-19 pandemic, the first major global economic shock since the global financial crisis of 2007/08, regulators and supervisors in the EU and other major jurisdictions authorised the release of these buffers for the first time. They found, however, that only very few banks took up this option. There were indications that banks might have been reluctant to dip into their capital buffers, even if the need arose[61]. Given that the buffer framework had been designed precisely to address a scenario of this kind, the Basel Committee initiated a review to identify potential design flaws that might have prevented the instrument from functioning as intended and impeded the usability of buffers[62]. In the EU, the European Commission also issued a review of its macroprudential framework, which transposes the Basel III buffer framework into EU law.

Impact: The Covid-19 crisis in March 2020 offered the first opportunity to assess how the macroprudential buffer framework performed in a major global crisis. In the event, their use was not truly tested, as massive fiscal and monetary support provided for borrowers, along with extensive regulatory relief for institutions, mitigated the need to draw on these buffers. Nonetheless, the experience raised important questions, in particular about buffer levels, buffer usability, and the interaction between different parts of the prudential framework.

Banks are required to simultaneously comply with three categories of capital requirements: (i) risk-weighted capital requirements, which includes the CBR; (ii) the leverage ratio (LR) which may include a G-SIB buffer element; and (iii) where applicable, additional requirements related to recovery and resolution (total loss absorption capacity, TLAC)[63]. Within each category, capital requirements are usually additive, i.e. the same unit of capital cannot be used to cover two separate requirements. Banks can, however, use the same capital to comply with requirements across different categories[64]: CET1 capital may be used, for instance, to meet the minimum CET1 ratio of 4.5% as well as the minimum LR of 3%. With respect to buffers, this could imply, by way of

61 Basel Committee on Banking Supervision, *Early Lessons from the Covid-19 Pandemic on the Basel Reforms*, 06 July 2021

62 Basel Committee on Banking Supervision, *Buffer Usability and Cyclicality in the Basel Framework*, 05 October 2022

63 Leitner et al., How usable are capital buffers?, pg. 3

64 European Systemic Risk Board, *Report of the Analytical Task Force on the Overlap Between Capital Buffers and Minimum Requirements*, 17 December 2021, pg. 18

illustration, that a bank may find that it cannot make use of a fully funded, theoretically available buffer because it would breach its minimum LR requirement in doing so. This would be an instance of limited buffer usability.

At the same time, capital ratios are also an important indicator of financial health and therefore a key metric for capital market investors to assess the risk profile of a financial institution. For a bank to dip into its capital buffers could be interpreted by the capital markets as a sign of distress, which may prompt investors and intermediaries, such as rating agencies, to apply significantly higher risk premia. As a result, the institution would face a lasting increase to its cost of capital. Surveys of bank management and market participants indicate that this "market stigma" could be one of the main reasons why institutions are reluctant to make use of buffers, even if they are available and useable[65]. There is limited empirical evidence to unequivocally confirm the existence of the "stigma" effect, mainly because it has proven difficult to separate the pure signalling effect of using the buffer from other pieces of information which may by themselves suggest that the institution's financial position has in fact deteriorated.

Considerations: Before trying to answer the question of how buffers could be made more usable it would appear advisable to pause and rephrase the question. As the Basel Committee observes in its 2022 report, the countercyclical buffer (CCyB) is the "*only designated releasable buffer*" in the Basel III framework[66]. In this discussion the terms "usable" and "releasable" are often used interchangeably, which is not correct. To draw a meaningful distinction it is necessary to consider the Basel III and the FSB recovery and resolution frameworks as a continuum. Different buffers play different roles along this spectrum, i.e. they have different uses. "Structural" buffers, such as the capital conservation buffer (CCoB) and the G/D-SIB buffers, are meant to (i) provide headroom for preparing and implementing corrective action (supervisory intervention, recovery, resolution) (CCoB) and (ii) account for the additional contribution to systemic risk emanating from G/D-SIBs. They are not meant to be released in response to an exogenous shock. "Cyclical" buffers, essentially the countercyclical buffer (CCyB) and, in the EU only, the systemic risk buffer (SyRB), are designed to improve the resilience of banks in times of elevated stress, either sectorally or across the economy at large. To fulfil their intended anti-cyclical purpose they must be deployed when conditions are favourable, not afterwards.

This more differentiated approach to the buffer framework suggests that any investigation of "buffer usability" should focus on improving cyclical buffers, which are meant to be "usable", and refrain from "releasing" structural buffers, which have a different purpose. Cyclical buffers can be useful to dampen the usual peaks and troughs of the economic cycle. To be effective in the depths of a deep downturn, and to prevent

65 Basel Committee on *Banking Supervision, Buffer Usability and Cyclicality in the Basel Framework*, 05 October 2022, pg. 14

66 Basel Committee on Banking Supervision, Buffer Usability and Cyclicality in the Basel Framework, 05 October 2022, pg. 17

it from turning into a fully-fledged crisis, buffer capacity must be available when it is needed. The discussion about 'buffer usability' in the wake of the Covid-19 pandemic was pointless, to a large extent, because only very few jurisdictions, in the EU at least, had imposed countercyclical buffers on their banks during the preceding 15-year upswing, which would have provided a logical first layer of defence during the downturn. This is why a positive neutral rate for the countercyclical capital buffer, as is being discussed at the moment, could be critical to rendering it a more effective macroprudential tool[67].

If cyclical buffers are designed to respond to changes in external variables that are outside the control of regulators and banks, such as the economic cycle, then structural buffers are tied to other parameters that are not external but, for instance, determined by the individual bank's business model and its strategic choices. This would be the case for the G/D-SIB buffer, which is intended to mitigate the potential systemic risk emanating from a G/D-SIB. It may not be within the means of every bank to become a G/D-SIB but it is very much possible for a bank to strategically adjust its risk profile to become less 'systemically important'. Arguably, structural buffers, such as the G/D-SIB buffer are, in reality, incremental capital requirements. Unlike cyclical buffers, it seems difficult to envisage a scenario when these buffers could, or should, be safely "released". They are needed especially in a stressed environment to ensure that distress signals are triggered early, and that loss absorbing capacity is preserved.

A clear distinction between structural and cyclical buffers, and the availability of a positive neutral countercyclical buffer, would also provide better guidance to capital markets investors. It would draw a clear line for capital markets, and supervisors, to distinguish between cyclical effects, which would be compensated through the use of the CCyB, and an unexpected breach of the structural elements of the CBR, which could signal the onset of distress. A negative market reaction would appear more likely in the latter case than in the former, not because of "stigma" but as an adjustment to new information signalling increased default risk.

Other than a lack of actual buffer capacity, as mentioned previously, the most significant constraint on buffer usability, according to empirical studies by the ECB[68], is the leverage ratio. Banks with low average risk weights (low risk-weight density), in particular, are likely to find themselves unable to make full use of available buffers because they would breach their minimum LR requirement. This applies, in particular, to banks which use internal model-based approaches to calculate their Pillar 1 capital requirements (see Q.3 above). Under Basel III, the full set of buffers currently only exists in the risk-weighted category of capital requirements. The leverage ratio only incorporates the equivalent of the G-SIB buffer (at 50% of the risk-weighted buffer rate) but

67 Behn, M. / Pereira, A. / Pirovano, M. / Testa, A., *A Positive Neutral Rate for the Countercyclical Capital Buffer – State of Play in the Banking Union*, ECB Macroprudential Bulletin No. 22 (July 2023);

68 Leitner, G. / Dvořák, M. / Magi, A. / Zsámboki, B., *How usable are capital buffers? An empirical analysis of the interaction between capital buffers and the leverage ratio since 2016*, ECB Occasional Paper Series No. 329, 20 September 2023;

does not account for the CCoB or CCyB. This inconsistency should be addressed soon, in the same way as with the G-SIB buffer, by applying an add-on of 50% of the risk-weighted buffer rate to the basic leverage ratio. Besides the additional buffer headroom and improved buffer usability this combined leverage buffer would also act as a more robust, and methodologically consistent backstop to the risk-weighted Tier 1 ratio.

Recommendations: The Basel Committee should adopt a more differentiated approach to buffer usability. Regulators and supervisors should be encouraged to make use of cyclical buffers, especially the CCyB. A positive neutral CCyB would increase the total buffer capacity of the CBR overall and hence support buffer usability in all periods. The risk-weighted buffer stack should be mirrored in full in the leverage-ratio framework.

VI. Could supervisors make better use of technology?

Issue: The use of ICT in regulatory reporting and supervision still lags well behind its now near-ubiquitous adoption in banks' front-office operations. In most jurisdictions, supervisors continue to rely on regulatory reporting, which is submitted infrequently (monthly or quarterly) and therefore tends to be out of date by the time it is received. Moreover, data is often inflexible (template-based), aggregated (lacks granularity), and inconsistent (data formats are different, legacy systems not interconnected, data models not standardised, both within and across different banks)[69]. Shortcomings still exist on both sides: on the one hand, fragmented IT infrastructure and legacy systems remain a major challenge for many banks to establish sound risk data aggregation and reporting practices, let alone to supply real-/near-time data[70]; (ii) on the other hand, regulatory and supervisory authorities lack systems that can collect, process, and distribute supervisory data in real-/near-time.

Impact: As of today, the ability of regulators and supervisors in most major jurisdictions to collect information and monitor risks in a timely manner is still severely limited. While regulatory theory calls for a forward-looking, proactive, counter-cyclical approach, regulatory authorities today continue to operate with information that is either not sufficiently granular or out of date. These shortcomings were brought into sharp relief during the banking crisis of March 2023, first when it came to assessing unrealised losses in held-to-maturity portfolios in the banking book of medium-sized US banks, and then when it came to monitoring liquidity risk at banks that were suffering rapid, and ultimately fatal outflows of deposits. Instead of having to embark upon ad hoc data collection exercises to support such analysis, modern ICT solutions could make this information available to regulators and supervisors in real-time or near-time, and enable them to be more proactive in their response. Combined with analytical tools, supervisory technology (Suptech) may also help to identify potential systemic risks or risk correlations, which can be more difficult to detect[71].

Moreover, important parts of the regulatory toolset, such as Early Intervention Measures (EIM), remain severely under-utilised at present, mainly because authorities do not have the necessary factual basis (real-time or near-time data) to trigger them in a timely manner. Key elements of the recovery and resolution framework, such as the exercise of authorities' powers to convert or write down capital instruments outside of resolution, the valuations required as part of the resolution process – especially

69 BIS Innovation Hub, *Project Ellipse: An Integrated Regulatory Data and Analytics Platform*, Bank for International Settlements, 31 March 2022;

70 Basel Committee on Banking Supervision, *Progress in Adopting the Principles for Effective Risk Data Aggregation and Risk Reporting*, 28 November 2023, pg. 13

71 European Central Bank, *Technology, Data and Innovation – Shaping the Future of Supervision*, Speech by Elizabeth McCaul, Member of the Supervisory Board of the ECB, at the ECB Supervision Innovators Conference 2023, Frankfurt, 20 September 2023;

Valuation 1 and 2, which determine the failing-or-likely-to-fail (FOLTF) decision and the choice of resolution tools, respectively – and the FOLTF decision itself, rely critically on the availability of up-to-date data.

Considerations: Concerns among regulators and supervisors about the robustness of banks' ICT systems and processes to manage risk are not new. Ten years ago, in January 2013, the Basel Committee issued its 'Principles for Effective Risk Data Aggregation and Risk Reporting' (BCBS 239). In its introduction, the Committee noted: "*One of the most significant lessons learned from the global financial crisis that began in 2007 was that banks' information technology (IT) and data architectures were inadequate to support the broad management of financial risks. Many banks lacked the ability to aggregate risk exposures and identify concentrations quickly and accurately at the bank group level, across business lines and between legal entities. Some banks were unable to manage their risks properly because of weak risk data aggregation capabilities and risk reporting practices. This had severe consequences to the banks themselves and to the stability of the financial system as a whole*"[72]. Nearly ten years after the initial publication of the Principles and seven years after the expected date of compliance, the Committee's 2022 compliance assessment[73] shows that even then only two of the 31 banks assessed were fully compliant with all the Principles. It goes on to observe that "*the overall pace of banks' progress in implementing sustainable risk data aggregation and risk reporting capabilities is occurring at a slower pace than envisaged. This is largely because several banks have persistent challenges with fragmented IT landscapes, legacy systems and manual processes that are not fit for purpose. Data architecture and IT infrastructure improvements can take some time to implement due to the complexity of banks' operating environments globally. IT roadmaps affect many domains, business areas and subsidiaries and are often subject to changes or delays. Several banks still lack a common taxonomy and complete data lineage, which further complicates banks' ability to harmonise systems and detect data defects. Also, at certain banks, board and senior management lack awareness/attention to data issues, and therefore do not ensure appropriate budget, resources and accountability for risk data aggregation and reporting initiatives*"[74].

At present, Basel III regulatory reporting and disclosure standards (DIS) are built around data templates, which are submitted at specific intervals, usually on a quarterly, sometimes on a semi-annual or annual basis. Most of the time, this process is still manual and involves Excel files being uploaded to a data portal provided by the supervisor[75]. Whereas this approach is flexible – as it does not require any direct interaction with banks' own information systems, and pragmatic – in that it aligns prudential re-

72 Basel Committee on Banking Supervision, *Principles for Effective Risk Data Aggregation and Risk Reporting*, January 2013

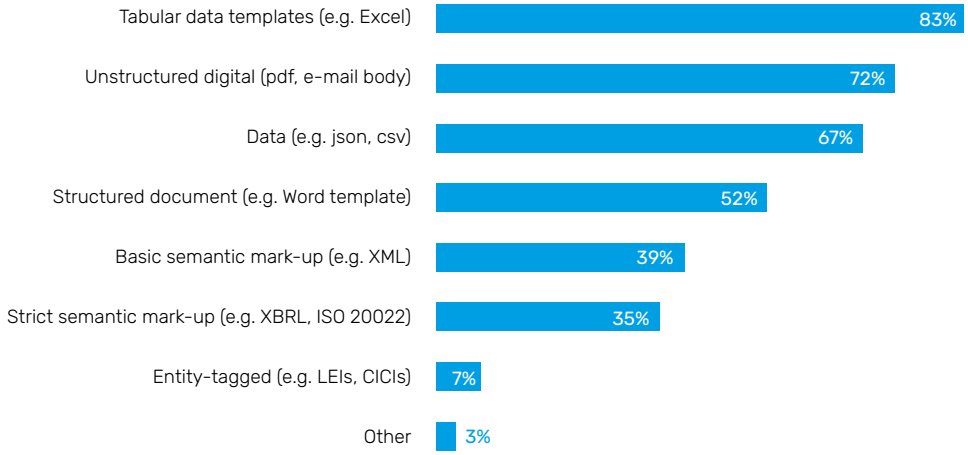
73 Basel Committee on Banking Supervision, *Progress in Adopting the Principles for Effective Risk Data Aggregation and Risk Reporting*, 28 November 2023

74 Basel Committee on Banking Supervision, Progress in Adopting the Principles for Effective Risk Data Aggregation and Risk Reporting, pg. 5

75 *Cambridge SupTech Lab State of SupTech Report 2023*, University of Cambridge Centre for Alternative Finance (CCAF), February 2024, pg. 48

porting with banks' other financial reporting obligations, e.g. to market authorities and shareholders, it arguably no longer meets the requirements of an industry that is by now largely digitalised and increasingly capable of harnessing large amounts of data and computing capacity to conduct its business in real-time or, at least near real-time.

Table 2: Collection of supervisory data (by format)



Source: Cambridge SupTech Lab (2023); n=54

The adoption of Suptech solutions by regulatory and supervisory authorities has generally lagged behind developments in the corporate world. In recent years, many financial institutions have invested in regulatory technology (Regtech) to alleviate a rising regulatory compliance burden and take advantage of the growing availability of big data and AI tools. In a 2019 study, the Financial Stability Institute (FSI) suggested that "*the relatively late embrace of Suptech may be ascribed to (i) concerns among financial authorities about the uncertain value and risks of Suptech; (ii) resource constraints; and (iii) a limited product offering for Suptech solutions from a small pool of specialised technology vendors. The inertia inherent in legacy IT systems is another factor*"[76]. While these factors are still very much in evidence today, the Covid-19 pandemic provided a new impetus. Financial authorities were forced to adapt their processes to remote working and move on-site supervisory activities and interactions with financial institutions online. ICT infrastructures had to be upgraded to allow for remote access to databases, while new Suptech tools were developed and deployed to assist with qualitative scrutiny and risk assessments[77].

As of today, there is no shortage of suitable technological standards, protocols and platforms. Technical standards for the exchange of machine-readable data exist and are already widely used: already today, most corporate filings with the Securities and Exchange Commission (SEC) in the US, the European Securities and Markets Autho-

76 Di Castri, S. / Hohl, S. / Kulenkampff, A. / Prenio, J., *The SupTech Generations, Bank for International Settlements, FSI Insights on Policy Implementation* No. 19, 17 October 2019

77 Beerman, K. / Prenio, J. / Zamil, R., *Suptech Tools for Prudential Supervision and Their Use During the Pandemic*, FSI Insights on Policy Implementation No. 37, 02 December 2021

rity (ESMA) in the EU, as well as tax authorities and commercial registers in the UK and Japan, for instance, are delivered in the Inline XBRL (iXBRL) format. Under the European Single Electronic Format (ESEF) initiative[78], companies that are listed on a regulated market in the EU are requested to file annual reports in iXBRL. According to the most recent "State of SupTech" report published by the University of Cambridge Centre for Alternative Finance (CCAF), the digital capabilities of banks and other supervised institutions still vary widely, however. Only 6% of entities prepare and deliver supervisory data in a fully automated fashion, while 33% prepare data for submission via semi-automated systems. The remaining 61% operate with systems that are either not compatible or, at best, only partially integrated but not automated, requiring different degrees of manual intervention. In these institutions, records are received in various formats across different modules (such as product, customer, core banking, mobile, etc.) and then manually imported, exported, or calculated as needed[79].

The Basel institutions, the Committee, the Financial Stability Institute and the BIS Innovation Hub, already play a leading role in identifying global "best practice"[80] and promoting the adoption of state-of-the-art Suptech tools. In its experimental proof-of-concept for an integrated regulatory data and analytics platform, Project Ellipse, the BIS Innovation Hub found that "*regulatory reporting requirements can be expressed in unambiguous machine-readable logical reporting instructions underpinned by a consistent data model. Programmatic specifications of the steps for generating regulatory reports can also be published alongside regulations to ensure a clear understanding of the expected data at the most granular level. With additional logical instructions based on the same data model, supervisors could also automatically query the underlying transaction data and generate regulatory metrics referencing that standardised data*"[81].

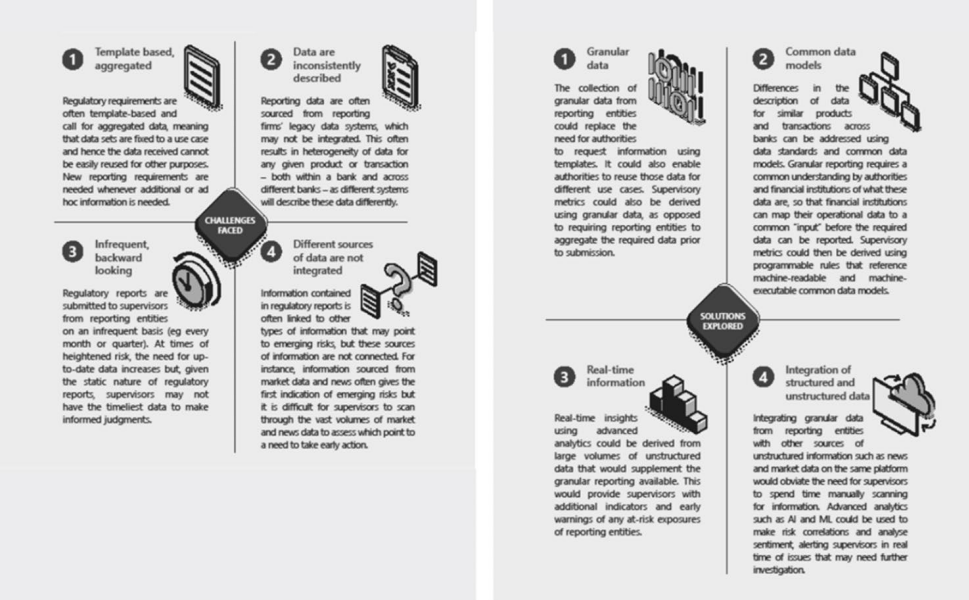
78 Commission Delegated Regulation (EU) 2019/815 of 17 December 2018 supplementing Directive 2004/109/EC of the European Parliament and of the Council (Transparency Directive) with regard to Regulatory Technical Standards on the Specification of a Single Electronic Reporting Format (RTS on ESEF), OJ L143/2019, pg. 1

79 Cambridge SupTech Lab, State of SupTech Report 2023, pg. 45

80 Broeders, D. / Prenio, J., *Innovative Technology in Financial Supervision (SupTech) – The Experience of Early Users, Bank for International Settlements*, FSI Insights on Policy Implementation No. 9, 16 July 2018

81 BIS Innovation Hub, *Project Ellipse: An Integrated Regulatory Data and Analytics Platform*, Bank for International Settlements, 31 March 2022

Table 3: BIS Project Ellipse challenges and solutions



Source: BIS Innovation Hub (2022)

In some jurisdictions, such as Austria (AuRep)[82] and the Philippines (CRT)[83], tools for the automated collection and analysis of prudential data are already operational. In 2022, the European Central Bank (ECB) also embarked on an ambitious initiative, Project Olympus, which aims to build the foundations for a shared and integrated IT landscape for the ECB and the national supervisors[84]. *The ECB's ambition is to develop a "single supervisory platform or cockpit where supervisors have direct access to most of the IT applications they need, receive alerts and data notifications from relevant internal and external data sources*"[85].

All these initiatives currently proceed in parallel, at their own pace and without a common strategic framework, agreed standards, and timelines. Whereas a degree of competitive tension may be useful to stimulate innovation, it seems that promoting the rapid roll-out of modern, performant and, ideally, interoperable Suptech solutions is the more pressing matter. The cases of Crédit Suisse and Silicon Valley Bank have proven, once again, that regulators and supervisors cannot be expected to intervene in a timely fashion unless they have real-time – or at least near-time – access to key prudential data. The Basel Committee, together with the FSI and the BIS Innovation

82 Piechocki, M. / Dabringhausen, T., *Reforming Regulatory Reporting: From Templates to Cubes, Presentation at the IFC Workshop on «Combining Micro and Macro Statistical Data for Financial Stability Analysis»*, Warsaw, 14-15 December 2015

83 *Cambridge SupTech Lab, State of SupTech Report 2022*, University of Cambridge Centre for Alternative Finance (CCAF), January 2023, pgs. 64 ff.

84 European Central Bank, Annual Report on Supervisory Activities 2022, pg. 98

85 European Central Bank, *Technology, Data and Innovation – Shaping the Future of Supervision*, Speech by Elizabeth McCaul, Member of the Supervisory Board of the ECB, at the ECB Supervision Innovators Conference 2023, Frankfurt, 20 September 2023

Hub, could play a prominent role in framing and coordinating a concerted global effort in this area.

Recommendations: The Basel Committee should develop a strategic roadmap for the adoption of a set of global standards for real/near-time prudential reporting and on-demand data access. These standards should govern common data formats and protocols for the collection and exchange of structured, quantitative data and should be incorporated into the Disclosures (DIS) section of the Basel framework in due course. This should be accompanied by a governance framework setting out rights and responsibilities of supervisory authorities when accessing firms' prudential data. The Basel Core Principles (BCP) would have to be updated or supplemented with a new, dedicated set of principles.

VII. Should capital requirements cover financial risk from climate change?

Issue: The banking sector continues to fund activities that are universally recognised as contributing to climate change and being incompatible with the international community's agreed targets of reducing carbon emissions. In 2023 alone, sixty leading global banks provided USD 706 billion of funding to the fossil fuel sector, including USD 347 billion for exploration and expansion projects[86]. Based on projections by the IPCC and the Carbon Tracker Initiative, the carbon emissions budget could be exhausted in 2.5-9 years if emissions continue at the present level[87]. If the global community were to align its carbon emissions budgets with the Paris Agreement, and transition away from fossil fuels in line with the COP 28 agreement, a significant percentage of the already existing fossil fuel extraction capacity would become stranded[88]. At present, the risk of such assets becoming 'stranded' is still seen as an 'externality' and therefore not adequately reflected in banks' capital requirements. The FSB and the Basel Committee have refrained so far from incorporating climate risk into their Pillar 1 capital requirements model, leaving it to individual jurisdictions and regulators to take appropriate action. Predictably, all major jurisdictions have been reluctant to move first due to concerns about potentially putting their banks at a competitive disadvantage. As a result, the global banking sector remains exposed to a very substantial risk.

Impact: There is no scenario where the banking system is not exposed to climate-related financial risks. If countries honour their Paris Agreement commitments, we should expect governments to implement the necessary policies to decarbonise energy systems and reduce carbon emissions in other sectors of the economy. In this case, companies which have not made efforts to transition their business models and reduce their emissions, will experience higher transition-related losses. The drivers of these losses could be related to higher carbon and energy prices, stranding assets as new energy sources and technologies arrive. As fossil fuels are at the heart of carbon emissions, the industry will bear the primary impact of transition efforts, as projected by the International Energy Agency (IEA) and the IPCC. Fossil fuel firms may have little to no time before they face economic losses in both income and wealth, which naturally translates into credit risk for financial institutions. In any case, a "too-late-too-sudden" transition is recognised to cause the largest losses for financial institutions and poses a greater risk of financial instability. A sudden, unexpected tightening of carbon emission policies would not only lead to an economic shock due to large

86 Rainforest Alliance Network et al., *Banking on Climate Chaos: Fossil Fuel Finance Report 2024*, April 2024

87 Finance Watch, *Finance in a Hot House World*: A Call for Economic Models That Do Not Mislead, Scenario Analyses That Prepare the Market, and a New Prudential Tool, 31 October 2023, p. 39

88 Beyene, W. / Delis, M. / Ongena, S., *Financial Institutions' Exposures to Fossil Fuel Assets*. An Assessment of Financial Stability Concerns in the Short Term and in the Long Run, and Possible Solutions, Study provided at the request of the Economic and Monetary Affairs Committee (ECON) of the European Parliament, Directorate General for Internal Policies (DG IPOL), PE (2022) 699.532, June 2022

swings in asset prices, but second-round effects would further amplify volatility in financial markets[89].

On the other hand, in the case of delayed and insufficient transition efforts or no transition at all (the so-called "hot house world" scenario), climate change-related extreme weather events and associated disruptions of the global climatic system could bring dramatic consequences to human societies (such as the destruction of production capacities, supply chains, mass migrations and conflict). Finance Watch coined the concept of *disruption risk* in its report "Breaking the climate-finance doom loop" report, published in June 2020, defining it as the risk of major perturbations and crises in the financial system resulting from the economic and societal disruptions caused by climate change.

In 2022, Finance Watch estimated that the sixty largest global banks have around USD 1.35 trillion of credit exposures to fossil fuel assets[90]. The current practice of not treating banks' fossil fuel exposures as higher risk assets under the Basel framework, not only encourages the continued build-up of prudential risk, but is also effectively a subsidy from banks to the fossil fuel industry, which we estimated to be worth around USD 18 billion a year (for the year 2021). Since climate-related risks are not reflected in bank capital rules, banks have not started building the necessary loss-absorption capacity to cover future losses.

Considerations: Regulators and supervisors have recognised the increasing financial stability risks resulting from climate change, warning of potentially devastating losses from a disorderly transition. As fossil fuels are the main contributors to accelerating climate change, and many of the assets associated with the fossil fuel industry will need to be abandoned before the end of their economic life (stranded) to achieve the transition to a carbon-neutral economy, banks' exposures to fossil fuel assets should be a priority for prudential regulation.

In July 2021, the Financial Stability Board (FSB) published a comprehensive Roadmap for Addressing Climate-Related Financial Risks[91], which was endorsed by the G20 and revolves around four blocks - firm-level disclosures; data; vulnerabilities analysis and regulatory and supervisory tools. Importantly, measures under the latter block foresee a holistic review of the Basel Framework to "assess the materiality gaps" and "*consider the need for regulatory measures to address climate-related financial risks*", as well as "the need for additional macro prudential tools to address additional issues impacting financial stability". In its Final Report on Supervisory and Regulatory Approaches to Climate-related Risks, published in October 2022, the FSB outlines that a system-wide approach to climate related risks would draw on a number of measures, including "[m]acroprudential tools and policies, or tools and policies with a macropru-

89 Beyene, W. / Delis, M. / Ongena, S., Financial Institutions' Exposures to Fossil Fuel Assets, pg. 9

90 Finance Watch, *A Safer Transition for Fossil Banking: Quantifying Capital Needed to Reflect Transition Risk*, 03 October 2022

91 Financial Stability Board, *FSB Roadmap for Addressing Financial Risks from Climate Change*, 7 July 2021

dential dimension, such as potential regulatory capital measures, concentration limits on exposures, or ways to account for indirect exposures to address systemic financial risks"[92].

So far, the BCBS, as well as many national regulatory and supervisory authorities, have advanced work on Pillar 2 and Pillar 3 measures to promote market integrity and institution-specific approaches to assessing and managing climate-related financial risks. The BCBS Principles for the effective management and supervision of climate-related financial risks[93], and the update of the Basel Core Principles for effective banking supervision[94], represented major milestones in the development of the banking prudential framework. The Committee has also advanced the work on the prudential disclosures of climate related financial risks[95] and climate scenario analyses[96]. However, adoption of Pillar 1 capital measures to tackle climate-related financial risks is outstanding[97].

In the meantime, in the EU, the European Banking Authority (EBA) has received a mandate to "*assess whether the dedicated prudential treatment of exposures related to assets or liabilities, subject to the impact of environmental or social factors is to be adjusted*"[98]. The first EBA report, released under this mandate in October 2023[99], demonstrated the conceptual challenges faced by the regulators and supervisors when trying to apply the Pillar 1 framework to climate-related risks. These challenges are rooted in the design of the existing prudential capital standards and the nature of climate-related financial risks.

On the one hand, the EBAt noted that "risks stemming from environmental and social issues are changing the risk picture for the financial sector. […] Through their effect on traditional categories of financial risks, such as credit, market and operational risks, environmental and social factors are expected to more significantly contribute to risks to both individual institutions and financial stability as a whole. This highlights the need to enhance the prudential framework to better account for environmental and social risks. Whereas the EBA reiterates that market transparency under Pillar 3 and risk management and supervision under Pillar 2 should continue to play a major role in addressing environmental and social risks to institutions, the report goes on to propose "targeted enhancements to the current Pillar 1 framework, which can be

92 FSB, Supervisory and Regulatory Approaches to Climate-related Risks: Final report, October 2022

93 BCBS, *Principles for the effective management and supervision of climate-related financial risks*, 15 June 2022

94 BCBS, *Core Principles for effective banking supervision*, 25 April 2024

95 BCBS, *Disclosure of climate-related financial risks*, Consultative document, 14 March 2024

96 BCBS, *The role of climate scenario analysis in strengthening the management and supervision of climate-related financial risks*, Discussion paper

97 As per the updated FSB Roadmap, the holistic review of the Basel Framework, including capital standard, is due by the end of 2024. Yet, due to major unfinished pieces such as climate risk disclosures and scenario analyses, as well as unfavourable political landscape, delays are most likely to be expected.

98 Article 501c of the revised Regulation (EU) No 575/2013 as regards requirements for credit risk, credit valuation adjustment risk, operational risk, market risk and the output floor (Capital Requirements Regulation)

99 EBA, *Report on the role of environmental and social risks in the prudential framework*, October 2023

implemented in the short term" as well as "medium- to long-term actions, including more comprehensive revisions to the framework that could be considered, flagging the cases where, considering the very fundamental nature of such revisions, international cooperation at BCBS level is important"[100].

Yet, the EBA did not yet suggest any concrete revisions of the Pillar 1 capital rules to incorporate climate risk, stating that:

- For the credit risk standardised approach: "it would be premature to include explicit adjustments to the qualitative factors calibrating the ECAI mappings given the lack of sufficient evidence, and potential risks of double-counting, once environmental risks are better captured at the level of external credit assessments".
- For the internal ratings-based approach to credit risk: "The integration of E&S risks beyond what is supported by observations would likely result in a deterioration of model performance". "As such, further incorporation of forward-looking elements in the Pillar 1 framework for credit risk, for which there is limited room under the current framework, should be anchored in available empirical evidence on the impact of climate change and environmental degradation".

The EBA report exemplifies the tensions between the specific features of climate-related financial risks[101] and the existing Basel Framework, which was designed to deal with "traditional" risk types. The Framework mostly relies on historical data to predict future risk performance, as well as continuous distributions of risk parameters, which do not account for the radical uncertainty of climate change, presence of tipping points and the resulting "cliff effects" (i.e. abrupt materialisations of risks leading to sudden asset repricing). Microprudential capital requirements under the Basel Framework operate with risk parameters mostly estimated over short-term horizons: Credit risk assessment (rating) is largely done with a one-year time horizon[102], i.e. a credit rating estimates the probability of a borrower defaulting within the next year based on their past performance.

Given that the sustainable transition has not yet happened and, in most parts of the world, GHG emissions have continued to increase, the empirical evidence of transition risk is not likely to come via historical data. Moreover, banks do not see transition risks materialising in the future either, as governments have yet to implement, or even clearly signal, economic policies which would lead the economy on a credible transition pathway. This results in the underpricing of transition risks. In the meantime, growing carbon emissions and continued warming of the planet mean that the systemic risk of climate change is growing too. Yet, as future climate-related disruptions

100 European Banking Authority, Report on the Role of Environmental and Social Risk in the Prudential Framework, pg. I

101 These have been first clearly described in the BIS book "The Green Swan" and since then distinctly identified in the academic literature and by supervisors themselves. See also Finance Watch, A Silver Bullet Against Green Swans, October 2021.

102 Basel Framework, *CRE - Calculation of RWA for credit risk*

are not reflected in the historical data and, therefore, not reflected in calibrations of the macroeconomic models, the cost of climate change to the economy and the financial system continues to be underestimated[103].

Overcoming the limitations of the Basel Framework to address financial risks related to climate change requires an evolution of the prudential rules towards a forward-looking precautionary approach - extending time horizons under consideration and including forward-looking information, which should be derived based on scientifically sound climate scenarios and transition planning at different levels. Finance Watch has argued that the existing prudential framework is not well suited to address the specific features of climate-related financial risks. Relying solely on Pillar 2 and Pillar 3 measures, without adjusting the Pillar 1 requirements, is not likely to result in consistent and reliable outcomes across the financial sector, in terms of managing the risk and ensuring that banks have the necessary loss-absorption capacity[104]. Notwithstanding the importance of the Pillar 2 and Pillar 3 measures, very different levels of jurisdictional ambition in implementing and enforcing these measures clearly support the call for Pillar 1 adjustments. Whilst in the Eurozone, the ECB has pioneered its Guide on climate-related and environmental risks[105] and followed through with detailed supervisory review and corrective measures[106], the level of regulatory ambition in the USA remains very low: The Fed's "Principles for Climate-Related Financial Risk Management for Large Financial Institutions" were only published in October without concrete follow-up measures indicated.

Notwithstanding incremental advancements of financial institutions and supervisors in adapting the governance, risk management and internal control systems to identify and assess these risks, the industry remains far from being able to quantify the risks in order to price and capitalise them: For instance, expansion of fossil fuel exploration continues to be financed by the banks despite being at odds with any scientifically grounded net zero scenario. Equally, the baseline financial planning scenarios of financial institutions and scenarios used for supervisory scenario analyses still assume the baseline scenario of no major economic disturbances due to climate change, whereas scientific evidence tells us that the current mitigation policies across jurisdictions set the planet on a 3°C global warming scenario, which implies crossing the climate tipping points and associated major disruptions to the global economy.

The future development of physical and transition-related climate risks features an important path dependency: The longer the transition is delayed, the less transition-related risk financial institutions face, yet, the larger the physical impacts of climate

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103 Finance Watch, *Finance in a Hot House World: A Call for Economic Models That Do Not Mislead, Scenario Analyses That Prepare the Market, and a New Prudential Tool*, 31 October 2023

104 Finance Watch, *A Silver Bullet Against Green Swans*, November 2021

105 ECB, *Guide on climate-related and environmental risks: Supervisory expectations relating to risk management and disclosure*, November 2020

106 Frank Elderson, Member of the Executive Board of the ECB and Vice-Chair of the Supervisory Board of the ECB, "*You have to know your risks to manage them – banks*' materiality assessments as a crucial precondition for managing climate and environmental risks", 8 May 2024

change at the systemic level. Banks are not mere risk-takers (as assumed in the microprudential approach): they influence the transition path of the economy and the possible routes to decarbonisation by allocating capital to certain sectors and companies. To address these risks, taking into account the interaction between the financial institutions and their environment, macroprudential tools can be deployed. Macroprudential instruments are conceived to be forward-looking, aimed at preventing the build-up of risks in the financial system. This makes their deployment in the short-term feasible and pragmatic.

Whilst policymakers broadly agree that climate risk is a systemic threat to banks, which calls for a deployment of macroprudential measures, the specific features of climate-related financial risks would require the calibration of a dedicated tool. In response, some experts have proposed adapting existing macroprudential tools, such as the systemic risk buffer and concentration limits, to link directly to climate risk[107],[108]. Finance Watch supports this approach and suggests extending it with a new 'loan-to-value' (LTV) tool for banks' exposures to fossil fuels. This would trigger a capital surcharge once a certain threshold of climate-related risk has been reached. The LTV threshold Finance Watch proposes would be set in proportion to the amount of fossil fuels to which a bank is exposed that can be safely exploited within the carbon budget for a given temperature increase[109]. The proposed LTV tool would combine borrower-based and capital-based features, activating the capital feature in direct proportion to the additional systemic risk caused by the loan. It would follow transparent rules and metrics and focus on the highest-emitting activities at risk of stranding. Lending for new fossil fuel exploration creates even higher systemic risks and should be managed differently, we suggest either with a lending cap or full equity funding[110], in line with the International Energy Agency's (IEA) recommendation not to expand existing fossil fuel reserves[111].

Recommendation: The Basel Committee should expand Pillar 1 of the risk-based prudential framework to account for financial risk related to climate change. To capture systemic risk arising from banks' continued exposure to fossil fuel assets and activities, the Basel Committee should consider adapting existing macroprudential tools, such as the systemic risk buffer, which could be supplemented with the introduction of a 'loan-to-value' threshold on banks' fossil fuel exposures.

Further, the BCSB should reflect on a possible evolution of the microprudential capital requirements in order to account for the specificities of climate-related financial

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107 P.Monnin, P. Hiebert, *Climate-related systemic risks and macroprudential policy*, INSPIRE August 2023

108 F.Bartsch et al. Designing a macroprudential capital buffer for climate-related risks, Working Paper Series No2943, ECB, May 2024

109 Finance Watch, *Finance in a Hot House World: A Call for Economic Models That Do Not Mislead, Scenario Analyses That Prepare the Market, and a New Prudential Tool*, 31 October 2023

110 Finance Watch, *A Silver Bullet Against Green Swans: Incorporating Climate Risk into Prudential Rules*, 23 November 2021

111 Finance Watch, *Finance in a Hot House World: A Call for Economic Models That Do Not Mislead, Scenario Analyses That Prepare the Market, and a New Prudential Tool*, 31 October 2023

risks. Such an evolution would allow for the consideration of longer time horizons for risk materialisation and the incorporation of forward-looking information, which could be extracted, for instance, from transition plans. This would, however, require a concerted international effort to establish a global baseline (standard) for transition planning, which should increase the reliability of information and respective risk assessments.

VIII. Does bank resolution work in the real world?

Issue: The creation of a dedicated regulatory framework for managing the orderly winding-up of a large bank in distress was perhaps the most significant and innovative of all post-Crisis policies. It was intended as an alternative to the structural separation of commercial and investment banking, the model practised in the US between 1933[112] and 1999[113]. The creation of a regulatory framework was supported by a large section of policymakers and the general public, including Finance Watch, as a regulatory response to the 'Too Big To Fail' (TBTF) problem, and the resulting 'bank-sovereign nexus', which had proven so costly in the 2007-09 Crisis. In particular, the new framework introduced the concept of 'open-bank bail-in' whereby a distressed bank would be recapitalised by way of a compulsory, pre-packaged debt-to-equity swap ('bail-in'), ideally over the course of a single 'resolution weekend', while carrying on its day-to-day business.

The collapse of Crédit Suisse in March 2023, the first G-SIB to fail since the 2007-09 Crisis, seems to confirm the doubts of those who felt that the notion of resolving a G-SIB in a safe and orderly manner, without government intervention, was still far from reality. The Swiss Finance Minister, Karin Keller-Sutter, commented at the time that she "*had come to the conclusion that a global systemically important bank cannot be readily put into resolution according to its TBTF [resolution] plan*"[114]. While the resolution of G-SIBs is likely to remain elusive, at least for the time being, doubts continue to linger also over the resolution of D-SIBs. Since the publication of the FSB's 'Key Attributes of Effective Resolution Regimes for Financial Institutions'[115] and the 'TLAC Term Sheet'[116], the new framework has been tested on a number of occasions, particularly in Europe and the US. More often than not, however, home-country governments felt compelled to 'bail out' distressed banks, primarily for political reasons. Distressed institutions were recapitalised with public funds and/or guarantees (Monte dei Paschi, 2013-17[117]; Nord/LB, 2019), and some were sold on to a suitable private-sector acquiror shortly thereafter (Veneto Banca and Banca Popolare di Vicenza, 2017; Crédit Suisse, 2023). The only cases so far where European banks were resolved in conformity with the resolution framework were Banco Popular Español (2017) and the much smaller Slovenian and Croatian subsidiaries of the Russian-controlled Sberbank

112 Enactment of the United States Banking Act of 1933 ('Glass-Steagall Act'), U.S. Public Law No. 73-66 of 16 June 1933, 48 Stat. 162 (1933)

113 Formal repeal of the 'Glass-Steagall Act' by the Financial Services Modernization Act of 1999, (Public Law 106–102 of 12 November 1999, 113 Stat. 1338 (1999)

114 Neue Zürcher Zeitung, *Keller-Sutter zur CS-Rettung: 'Dass viele eine Wut im Bauch haben, verstehe ich gut'*, 25 March 2023

115 Financial Stability Board, *Key Attributes of Effective Resolution Regimes for Financial Institutions*, October 2011 (updated and re-issued in October 2014)

116 Financial Stability Board, *Principles on Loss-Absorbing and Recapitalisation Capacity of G-SIBs in Resolution*. Total Loss-Absorbing Capacity (TLAC) Term Sheet, 09 November 2015

117 Stiefmueller, C.M., *Failing or Likely to Fail, Finance Watch – The Blog*, 13 January 2017

Europe group (2022). To a large extent this is, once again, a sign of the unresolved political ambivalence towards bank resolution: at best, it could be seen as reflecting a desire to maintain a degree of 'constructive ambiguity' towards bail-outs to forestall speculative attacks by market participants on banks perceived as weak; at worst, it may be read as an admission that the resolution framework is in fact perceived as a 'Potemkin village', constructed in the wake of the financial crisis mainly to placate public opinion, and to restore a semblance of stability.

Impact: As a result, the bank resolution framework lacks credibility, both with financial markets and with the general public. In its 2021 review of the resolution framework[118], well before the collapse of Crédit Suisse, the FSB concluded that the funding cost advantages of (G/D-)SIBs[119] "*remain higher than before the global financial crisis*", an indication that market participants still firmly believe that (G/D-)SIBs enjoy an implicit guarantee from their governments. This hypothesis was tested, and confirmed, in March 2023 when the Swiss government intervened in support of Crédit Suisse shareholders and senior bondholders. When the bank was sold to its Swiss rival, UBS, in an unprecedented inversion of the loss-bearing order of equity and debt, Crédit Suisse shareholders were offered to exchange their holdings into shares in UBS worth ca. CHF 3 bn while Crédit Suisse AT 1 securities with a nominal value of CHF 14 bn were not converted into equity but written off in full. The bank's resolution plan, which had foreseen the separation of the profitable Swiss commercial bank from its scandal-hit global investment bank, Crédit Suisse First Boston, was not activated.

Considerations: Strictly speaking, recovery and resolution is not part of the Basel III framework. The FSB 'Key Attributes' and the 'TLAC Term Sheet' are stand-alone regulatory publications that exist alongside the actual Basel III corpus, although the two are, of course, closely related and mutually interdependent. The requirement for G-SIBs to hold loss-absorbing ('bail-inable') debt (Total Loss-Absorbing Capacity, TLAC) in addition to regulatory capital requirements, is incorporated into the Basel III framework by way of reference to the 'TLAC Term Sheet' (CAP 30.2).

It is worth remembering that the EU led the way in May 2014 with the Bank Recovery and Resolution Directive (BRRD)[120] where it introduced a minimum requirement for own funds and eligible liabilities (MREL), to be calibrated for each bank individually, as well as a 'burden-sharing threshold' of 8% of (unweighted) total liabilities and own funds (TLOF). The 'burden-sharing threshold' was meant to indicate the minimum amount of capital and liabilities that would have to be written off by the bank's investors before any third-party funding (e.g. from the EU's Single Resolution Fund, SRF) would be permitted. The rationale linking the two, which suggests that MREL should

118 Financial Stability Board, *Evaluation of the Effects of Too-Big-To-Fail Reforms*. Final Report, 01 April 2021, pg. 45

119 The funding cost advantage of systemically important banks, also known as the 'implicit TBTF subsidy' or 'credit uplift', reflects investors' expectations that these institutions benefit from an implicit government guarantee, which limits their losses in the event of distress.

120 Directive 2014/59/EU of the European Parliament and of the Council of 15 May 2014 establishing a Framework for the Recovery and Resolution of Credit Institutions and Investment firms (Bank Recovery and Resolution Directive, BRRD), OJ L 173, 12 June 2014, pgs. 190–348

be set at 8% in order to create a continuous pathway for funding in resolution, was rejected by the Commission, however, against the advice of the EBA[121]. Since the FSB agreed, in November 2015, to pitch its TLAC for G-SIBs at the lower level of 6.75% of the leverage ratio (LR) denominator, the 'burden-sharing threshold' has become increasingly difficult to uphold. It has been hollowed out gradually with each subsequent revision on the BRRD framework – most recently with the proposal to allow contributions from deposit guarantee schemes to be counted towards the 8% threshold[122]. Experience so far indicates that the loss-absorbing and recapitalisation capacity under the 'TLAC Term Sheet' is not sufficient. Even the amount of TLAC held by Crédit Suisse (15% at year-end 2022, which was well above both Swiss and FSB minimum requirements[123]) was evidently not sufficient to restore stability and buy enough time for the implementation of an orderly resolution process. A bill submitted to the Swiss Parliament in June 2021[124] did indeed call for an increase in the regulatory capital of Swiss G-SIBs to 15% (LR, unweighted) but was not adopted.

In addition to the lack of capacity the current framework also suffers from a lack of quality. For resolution to work banks must be funded with a combination of equity and debt that is balanced in such a way as to fulfil both of its intended purposes, to absorb losses in full, and to recapitalise the entity to the required level so that it may resume its (restructured) activities post-resolution. The latter is particularly difficult to achieve in practice as the funding position of the distressed institution often has been depleted by losses well before the resolution process begins. Much faith has been put in 'contingent convertible' (CoCo) bonds, designated as Additional Tier 1 instruments (AT 1), which were designed specifically to be converted into equity capital when a bank is in distress and close to breaching its regulatory capital requirements. In theory, these instruments should encourage increased scrutiny and monitoring by investors of the bank's capital position[125], act as an early-warning system for distress, help improve governance by imposing market discipline, and absorb losses on a 'going concern' basis[126]. In practice, these expectations – which were not universally shared to begin with[127] – have not been met: prices have proven unsuitable as a lead indicator of distress and these instruments were usually written down or converted only after

121 Finance Watch, TLAC/MREL: *Making Failure Possible?*, 01 March 2016, pgs. 8-10

122 Finance Watch, *European Parliament ECON Committee Passes Crisis Management and Deposit Insurance* (CMDI) Package, Press Release, 21 March 2024

123 Credit Suisse Group, Annual Report 2022, pgs. 115-119 and 125-126. The so-called 'Swiss finish' imposed by the Swiss authorities on their G-SIBs required a minimum TLAC of 9.5% of the leverage ratio (LR) denominator, comprising 3.5% of CET 1, 1.5% of AT 1 (CoCo bonds) and 5% of bail-inable debt securities.

124 Schweizer Nationalrat, *Höhere Eigenkapitalanforderungen an global tätige Grossbanken. Motion der Sozialdemokratischen Fraktion*, 18 June 2021

125 Unlike conventional convertible bonds, coupon payments on these instruments are not cumulative, i.e. banks may skip individual coupon payments to investors, e.g. in a stressed liquidity situation, without triggering default. Moreover, conversion into equity would deprive investors of all future coupon payments and of their claim on repayment of the principal amount at maturity.

126 CoCo bonds may be written down in value or converted into equity when the CET 1 ratio of the issuing bank falls below a given 'trigger' level, usually 5.125% of RWA ('low-trigger' CoCo) or 7.0% of RWA ('high-trigger' CoCo). This implies that they could be written down or converted before the bank becomes 'failing or likely to fail' (FOLTF) and has to be placed into resolution, i.e. they could serve as a 'last minute' source of loss-absorbing capital to stave off insolvency.

127 Finance Watch, TLAC/MREL: *Making Failure Possible?*, 01 March 2016, pgs. 8-10

the issuing bank had gone into resolution. For some time, especially during the low-interest environment between 2014 and 2022, their comparatively high coupon rates were attractive to investors looking for fixed-income returns. However, their complex design, which renders accurate valuation difficult, has been found to be prone to mis-pricing. AT 1 investors were hit hard in the demise of Crédit Suisse, where their bonds were written down in full while equityholders were able to preserve some of the value of their investment. This outcome effectively turned their CoCo bonds into a kind of 'junior equity' instrument. Nonetheless, CoCo bonds seem to have recovered well in the aftermath of Crédit Suisse, with EU supervisors and policymakers rallying to their support. There has been very little appetite to examine the underlying frailty of the 'contingent convertible' (CoCo) bond design.

In the current resolution framework, the lead role in a 'bail-in' has been assigned to senior unsecured debt instruments ('bail-inable debt'), which should, in principle, provide the bulk of the funds needed to recapitalise the new, restructured entity as it emerges from resolution. In practice, these bonds should be clearly separated from the claims of other creditors, especially general creditors of the bank, who are not investors. Unlike investors who purchase a bond, and who should take an informed view on the risk profile of their investee company – including the risk of being 'bailed in', general creditors, such as utility firms or other suppliers, are merely engaged in trading goods and services. It seems obvious that these two groups should be treated differently in insolvency. The claims of investors, who have consciously extended a loan to the bank, should bear more of the associated credit risk than general creditors. It would stand to reason, therefore, that senior unsecured bondholders' claims should be subordinated by default, i.e. legally, to general unsecured creditors. This is not what was decided in the EU, however, where most senior unsecured bonds continue to rank *pari passu* with general unsecured creditors unless they are specifically subordinated ('senior non-preferred'). Apart from a distinct lack of fairness this approach also significantly complicates the resolution process, all for the price of a few basis points saved[128] – a poor outcome for financial stability and, yet again, a form of implicit subsidy for the banking industry.

Finally, neither the Basel III framework nor the FSB 'Key Attributes' address the need to provide liquidity to a bank in resolution, a role which would typically fall to the central bank as the 'lender of last resort'. The FSB 'Key Attributes' suggest that liquidity assistance, like any other temporary funding provided by third parties (e.g. a central bank, resolution fund or deposit guarantee scheme), should be recovered *ex post* from the banking industry. The U.S. FDIC and the Bank of England already have such arrangements in place. In the EU, the provision of Emergency Liquidity Assistance (ELA) to a bank in resolution is complicated on a number of counts. First, the central bank has to draw the line between injecting liquidity temporarily to facilitate resolution,

128 Senior non-preferred bonds tend to be priced at a premium of 30-50 bps, on average, over standard senior unsecured debt with similar characteristics.

and providing *de facto* public support to a failed bank[129]. Second, central banks in the EU are obliged to extend credit, including ELA, only against adequate collateral, which is difficult to find in a bank that is already short of financing options and may not be able to access the market for some time. The Single Resolution Fund (SRF) may extend funding to member-state institutions but is limited by its size[130]. A proposal to increase the capacity of the SRF by means of a backstop provided by the European Stability Mechanism (ESM), which had been agreed previously between member states, has since been scuppered by one member state's refusal to ratify the required treaty change[131].

Recommendation: The Basel framework, in combination with the recovery and resolution framework under the FSB Key Attributes, still has significant shortcomings, as highlighted recently by the failure of Crédit Suisse. Resolution planning, and the calibration and quality of TLAC should be re-assessed and updated accordingly. To provide a credible basis for absorbing losses and recapitalising a major bank as a 'going concern', TLAC/MREL for (G/D-)SIBs should be set at a level well above the current 6.75% (unweighted). With the quality of TLAC/MREL being as much of a concern as its calibration, CoCo bonds should be phased out altogether in favour of conventional preferred shares without solvency triggers. Additionally, senior unsecured bonds should be 'non-preferred', i.e. subordinated to general creditors, by default.

129 European Central Bank, *The Limits of Central Bank Financing in Resolution, Speech by Yves Mersch at Goethe University Frankfurt*, 30 January 2018

130 EUR 78 bn (as of 31 December 2023)

131 Arnal, J., *Why Holding Up the ESM Treaty's Ratification is a Missed Risk-Sharing Opportunity for the Banking Union*, Centre for European Policy Studies (CEPS) Explainer 2023-17

Conclusion

When policymakers and regulators embarked on the Basel III process in the wake of the global financial crisis of 2007/08 a promise was made to the general public: the banking sector should once again live within its means. Banks should no longer be able to rely on their "too big to fail" status and draw on unlimited public guarantees in the event of a crisis. Basel III, and the FSB's "Key Attributes of Effective Resolution Regimes for Financial Institutions" were to become the embodiments of that promise.

Fifteen years later it seems that this post-crisis agreement seems to have been silently abandoned by both sides. Policymakers on both sides of the Atlantic have responded to insistent lobbying from a resurgent banking sector by watering down what had been agreed at the negotiating table in Basel. The general public, faced with multiple crises, including the aftermath of the CoVID pandemic, has largely lost interest in financial stability, a remote and abstract topic at the best of times.

Our review of the status quo of Basel III concludes with a reminder that all is not well. The mini-crisis of March 2023 in the U.S., triggered by the collapse of Silicon Valley Bank (SVB) and a number of other medium-sized institutions, was stopped only by the decisive intervention of the FDIC, once again with the backing of the U.S. Treasury. The collapse of Crédit Suisse, and its forced merger with UBS, was underwritten by the Swiss taxpayer. Even before, EU member states showed great ingenuity in finding ways to sidestep the recently adopted resolution framework and deploy public funds instead to rescue failed banks.

For all the (undeniable) progress made, Basel III and the recovery and resolution framework still have not fully addressed the key problems which plagued its predecessor, Basel II and which contributed so much to the global financial crisis of 2007/08. The principle of "risk sensitivity", first introduced with Basel II and pursued with doctrinary fervour in Basel III, has reached its limits. In the wake of the global financial crisis of 2007/08 a veteran supervisor, Richard Spillenkothen[132] noted that one of the regulators' biggest mistakes at the time was their acceptance of Basel II premises, which he described as displaying "*an excessive faith in internal bank risk models, an infatuation with the specious accuracy of complex quantitative risk measurement techniques, and a willingness (at least in the early days of Basel II) to tolerate a reduction in regulatory capital in return for the prospect of better risk management and greater risk-sensitivity*"[133][2]. It seems that this lesson is waiting to be re-learnt.

Many of the complexities baked into the current Basel framework were designed originally to accommodate national and regional specificities, e.g. regarding market struc-

132 Richard Spillenkothen was Head of Banking Supervision and Regulation at the U.S. Federal Reserve from 1991 to 2006.

133 U.S. Financial Crisis Enquiry Commission, *Financial Crisis Inquiry Report: Final Report of the National Commission on the Causes of the Financial and Economic Crisis in the United States*, U.S. Government Printing Office, Washington, D.C. (2011), pg. 171

tures, practices, and banks' business models. It appears, however, that they have by now overshot their target. Instead of helping to overcome such differences, and to restore a 'level playing field', some of them have become the bone of contention themselves. Since the Basel III framework was declared complete in December 2017, cooperation between the G20 powers has given way increasingly to competition, including a new spate of deregulatory reforms. In the U.S., the Economic Growth, Regulatory Relief, and Consumer Protection Act (EGRRCPA) of 2018 excluded a number of medium-sized U.S. banks, such as SVB, from the full extent of Basel III – a move that is now widely seen as the root cause of the mini-crisis in the U.S. in March 2023. In the EU, the implementation of the final instalment of the Basel III framework, known as CRR and CRD adopted numerous transitional provisions that are not in conformity with the Basel III standards, and effectively reserved the right to make these deviations permanent. Besides, EU legislators unilaterally extended the phase-in period to 2032.

The incoming European Parliament and Commission will have to take a view on the EU's commitment to the Basel III framework, and to the BCBS as a forum for regulatory cooperation altogether. The Basel process is by no means perfect, but it is the best we have. When international cooperation breaks down, and the principal global economies embark on a regulatory "race to the bottom", everybody stands to lose – most of all taxpayers, who will eventually foot the bill (again).

Bibliography

Admati, A. / Hellwig, M., The Bankers' New Clothes: What's Wrong with Banking and What to Do about It, 2nd ed., Princeton University Press (2024)

Akerlof, G.A. / Shiller, R.J., Animal Spirits: How Human Psychology Drives the Economy, and Why It Matters for Global Capitalism, Princeton University Press (2009)

Basel Committee on Banking Supervision, Progress in Adopting the Principles for Effective Risk Data Aggregation and Risk Reporting, 28 November 2023 (https://www.bis.org/bcbs/publ/d559.pdf)

Basel Committee on Banking Supervision, Full Version of the Basel Framework, 30 October 2023 (https://www.bis.org/baselframework/BaselFramework.pdf)

Basel Committee on Banking Supervision, Report on the 2023 Banking Turmoil, 05 October 2023 (https://www.bis.org/bcbs/publ/d555.pdf)

Basel Committee on Banking Supervision, Basel III Monitoring Report: September 2023, 26 September 2023 (https://www.bis.org/bcbs/publ/d554.pdf)

Basel Committee on Banking Supervision, Consultation on the Core Principles for Effective Banking Supervision, 06 July 2023 (https://www.bis.org/bcbs/publ/d551.htm)

Basel Committee on Banking Supervision, Evaluation of the Impact and Efficacy of the Basel III Reforms, 14 December 2022 (https://www.bis.org/bcbs/publ/d544.pdf)

Basel Committee on Banking Supervision, Buffer Usability and Cyclicality in the Basel Framework, 05 October 2022 (https://www.bis.org/bcbs/publ/d542.pdf)

Basel Committee on Banking Supervision, High-Level Considerations on Proportionality, 07 July 2022 (https://www.bis.org/bcbs/publ/d534.htm)

Basel Committee on Banking Supervision, Implementing Basel III. Remarks by Pablo Hernández de Cos, Chair of the Basel Committee on Banking Supervision and Governor of the Bank of Spain at the European Economic and Social Committee Public Hearing on the EU Banking Reform Package, 08 February 2022 (https://www.bis.org/speeches/sp220208.htm)

Basel Committee on Banking Supervision, Early Lessons from the Covid-19 Pandemic on the Basel Reforms, 06 July 2021 (https://www.bis.org/bcbs/publ/d521.pdf)

Basel Committee on Banking Supervision, Regulatory Consistency Assessment Programme (RCAP): Assessment of Basel III Regulations – European Union, 05 December 2014 (https://www.bis.org/bcbs/publ/d300.pdf)

Basel Committee on Banking Supervision, Basel Capital Framework National Discretions, November 2014 (https://www.bis.org/bcbs/publ/d297.htm)

Basel Committee on Banking Supervision, Reducing Excessive Variability in Banks' Regulatory Capital Ratios: A Report to the G20, November 2014 (https://www.bis.org/bcbs/publ/d298.pdf)

Basel Committee on Banking Supervision, The Regulatory Framework: Balancing Risk Sensitivity, Simplicity and Comparability, Discussion Paper, 08 July 2013 (https://www.bis.org/publ/bcbs258.pdf)

Basel Committee on Banking Supervision, Principles for Effective Risk Data Aggregation and Risk Reporting, January 2013 (https://www.bis.org/publ/bcbs239.pdf)

Basel Committee on Banking Supervision, International Convergence of Capital Measurement and Capital Standards: A Revised Framework (Comprehensive Version), 30 June 2006 (https://www.bis.org/publ/bcbs128.pdf)

Bastos e Santos, E. / Esho, N. / Farag, M. / Zuin, C., Variability in Risk-Weighted Assets: What Does the Market Think?, BIS Working Paper No. 844, 25 February 2020 (https://www.bis.org/publ/work844.pdf)

Bayoumi, T., Unfinished Business: The Unexplored Causes of the Financal Crisis and the Lessons Yet to be Learned, Yale University Press (2017)

Beerman, K. / Prenio, J. / Zamil, R., Suptech Tools for Prudential Supervision and Their Use During the Pandemic, FSI Insights on Policy Implementation No. 37, 02 December 2021 (https://www.bis.org/fsi/publ/insights37.htm)

Behn, M. / Pereira, A. / Pirovano, M. / Testa, A., A Positive Neutral Rate for the Countercyclical Capital Buffer – State of Play in the Banking Union, ECB Macroprudential Bulletin No. 22 (July 2023); (https://www.ecb.europa.eu/pub/financial-stability/macroprudential-bulletin/html/ecb.mpbu202304_01~6eef01bb6a.en.html)

Behn, M. / Haselmann R. / Vig, V., The Limits of Model-Based Regulation, ECB Working Paper Series No 1928, July 2016 (https://www.ecb.europa.eu/pub/pdf/scpwps/ecbwp1928.en.pdf)

Beyene, W. / Delis, M. / Ongena, S., Financial Institutions' Exposures to Fossil Fuel Assets. An Assessment of Financial Stability Concerns in the Short Term and in the Long Run, and Possible Solutions, Study provided at the request of the Economic and Monetary Affairs Committee (ECON) of the European Parliament, Directorate General for Internal Policies (DG IPOL), PE (2022) 699.532, June 2022 (https://www.europarl.europa.eu/RegData/etudes/STUD/2022/699532/IPOL_STU(2022)699532_EN.pdf)

BIS Innovation Hub, Project Ellipse: An Integrated Regulatory Data and Analytics Platform, Bank for International Settlements, 31 March 2022 (https://www.bis.org/publ/othp48.pdf)

Board of Governors of the Federal Reserve System, Review of the Federal Reserve's Supervision and Regulation of Silicon Valley Bank, 28 April 2023, pg. 17 (https://www.federalreserve.gov/publications/review-of-the-federal-reserves-supervision-and-regulation-of-silicon-valley-bank.htm)

BNP Paribas, Output Floor: On the Eve of a (Bad) Agreement?, Economic Research Department: Charts of the Week, 06 December 2017 (https://economic-research.bnpparibas.com/pdf/en-US/Output-floor-agreement-12/6/2017,30476)

Broeders, D. / Prenio, J., Innovative Technology in Financial Supervision (SupTech) – The Experience of Early Users, Bank for International Settlements, FSI Insights on Policy Implementation No. 9, 16 July 2018 (https://www.bis.org/fsi/publ/insights9.pdf)

Cambridge SupTech Lab State of SupTech Report 2023, Cambridge Centre for Alternative Finance (CCAF), University of Cambridge (https://lab.ccaf.io/state-of-suptech-report-2023/)

Cambridge SupTech Lab State of SupTech Report 2022, Cambridge Centre for Alternative Finance (CCAF), University of Cambridge (https://lab.ccaf.io/state-of-suptech-report-2022/)

Di Castri, S. / Hohl, S. / Kulenkampff, A. / Prenio, J., The SupTech Generations, Bank for International Settlements, FSI Insights on Policy Implementation No. 19, 17 October 2019 (https://www.bis.org/fsi/publ/insights19.pdf)

European Banking Authority, Report on the Role of Environmental and Social Risk in the Prudential Framework, EBA/REP/2023/34, 12 October 2023 (https://www.eba.europa.eu/sites/default/files/document_library/Publications/Reports/2023/1062711/Report%20on%20the%20role%20of%20environmental%20and%20social%20risks%20in%20the%20prudential%20framework.pdf)

European Central Bank, Technology, Data and Innovation – Shaping the Future of Supervision, Speech by Elizabeth McCaul, Member of the Supervisory Board of the ECB, at the ECB Supervision Innovators Conference 2023, Frankfurt, 20 September 2023 (https://www.bankingsupervision.europa.eu/press/speeches/date/2023/html/ssm.sp230920_1~9315562707.en.html)

European Central Bank, Annual Report on Supervisory Activities 2022, March 2023, pg. 44; (https://www.bankingsupervision.europa.eu/press/publications/annual-report/pdf/ssm.ar2022~e4b57f3b89.en.pdf)

European Central Bank, Strong Rules, Strong Banks: Let's Stick to Our Commitments, Blog post by José Manuel Campa, Chairperson of the European Banking Authority, Luis de Guindos, Vice-President of the ECB and Andrea Enria, Chair of the Supervisory Board of the ECB, The Supervision Blog, 04 November 2022 (https://www.bankingsupervision.europa.eu/press/blog/2022/html/ssm.blog221104~52d1c3a8e1.en.html)

European Central Bank, Guide to On-site Inspections and Internal Model Investigations, September 2018 (https://www.bankingsupervision.europa.eu/ecb/pub/pdf/ssm.osi_guide201809.en.pdf)

European Court of Auditors, EU Supervision of Banks' Credit Risk, Special Report 12/2023, March 2023 (https://www.eca.europa.eu/en/publications?ref=SR-2023-12)

European Systemic Risk Board, Report of the Analytical Task Force on the Overlap Between Capital Buffers and Minimum Requirements, 17 December 2021, pg. 18 (https://www.esrb.europa.eu/pub/pdf/reports/esrb.ATFreport211217_capitalbuffers~a1d4725ab0.en.pdf)

Finance Watch, EU Co-Legislators Reach Agreement on Basel III, Press Release, 11 December 2023 (https://www.finance-watch.org/press-release/finance-watch-statement-eu-co-legislators-reach-agreement-on-basel-iii/)

Finance Watch, Finance in a Hot House World: A Call for Economic Models That Do Not Mislead, Scenario Analyses That Prepare the Market, and a New Prudential Tool, 31 October 2023 (https://www.finance-watch.org/wp-content/uploads/2023/10/report-finance-in-a-hot-house-world.pdf)

Finance Watch, A Safer Transition for Fossil Banking: Quantifying Capital Needed to Reflect Transition Risk, 03 October 2022 (https://www.finance-watch.org/publication/a-safer-transition-for-fossil-banking/)

Finance Watch, Cracks in the Pillars – Financial Stability Loses Out in the EU's Basel III Endgame, 29 March 2022 (https://www.finance-watch.org/publication/policy-brief-cracks-in-the-pillars-financial-stability-loses-out-in-the-eus-basel-iii-endgame/)

Finance Watch, A Silver Bullet Against Green Swans: Incorporating Climate Risk into Prudential Rules, 23 November 2021 (https://www.finance-watch.org/wp-content/uploads/2021/11/A-Silver-Bullet-Against-Green-Swans-capital-requirements-climate-risk.pdf)

Finance Watch, Breaking the Climate-Finance Doom Loop: How Banking Prudential Regulation Can Tackle the Link Between Climate Change and Financial Instability, 08 June 2020 (https://www.finance-watch.org/wp-content/uploads/2020/06/Breaking-the-climate-finance-doom-loop_Finance-Watch-report.pdf)

Finance Watch, Ten Years After: Back to Business as Usual, 15 September 2018 (https://www.finance-watch.org/wp-content/uploads/2018/09/10YA-FW-report.pdf)

Financial Stability Board, FSB Roadmap for Addressing Financial Risks from Climate Change: Progress Report, 13 July 2023 (https://www.fsb.org/wp-content/uploads/P130723.pdf)

Financial Stability Board, FSB Roadmap for Addressing Financial Risks from Climate Change, 07 July 2021 (https://www.fsb.org/wp-content/uploads/P070721-2.pdf)

Financial Times, Hearing Highlights Split in Support for 'Basel III Endgame' Bank Rules, 06 December 2023 (https://www.ft.com/content/ea983bf2-6c73-4694-9125-b31ad48ee133)

Financial Times, UK Prepares Cash Lifeline for Tech Companies Hit by Silicon Valley Bank Collapse, 12 March 2023 (https://www.ft.com/content/1819b977-a0af-476e-9f7b-df635d-d3a304)

Haldane, A. / Madouros, V., The Dog and the Frisbee, Speech at the Federal Reserve Bank of Kansas City's 366th Economic Policy Symposion, Jackson Hole, 31 August 2012 (https://www.bis.org/review/r120905a.pdf)

Huizinga, H., Banks' Internal Rating Models - Time for a Change? The"System of Floors as Proposed by the Basel Committee, In-Depth Analysis provided at the request of the Economic and Monetary Affairs Committee of the European Parliament (ECON), Directorate General for Internal Policies (DG IPOL), PE (2016) 587365, November 2016 (https://www.europarl.europa.eu/RegData/etudes/IDAN/2016/587365/IPOL_IDA(2016)587365_EN.pdf)

Le Leslé V. / Avramova S., Revisiting Risk-Weighted Assets: Why Do RWAs Differ Across Countries and What Can Be Done About It?, IMF Working Paper No. 12/90, March 2012 (https://www.imf.org/external/pubs/ft/wp/2012/wp1290.pdf)

Leitner, G. / Dvoř ák, M. / Magi, A. / Zsámboki, B., How usable are capital buffers? An empirical analysis of the interaction between capital buffers and the leverage ratio since 2016, ECB Occasional Paper Series No. 329, 23 November 2023 (https://www.ecb.europa.eu/pub/pdf/scpops/ecb.op329~60b6f9aa26.en.pdf)

Mariathasan, M. / Merrouche, O. (2014), The Manipulation of Basel Risk Weights, Journal of Financial Intermediation, vol. 23 (2014), pgs. 300–321

Piechocki, M. / Dabringhausen, T., Reforming Regulatory Reporting: From Templates to Cubes, Presentation at the IFC Workshop on “Combining Micro and Macro Statistical Data for Financial Stability Analysis”, Warsaw, 14-15 December 2015 (https://www.bis.org/ifc/publ/ifcb41o.pdf)

Rainforest Alliance Network et al., Banking on Climate Chaos: Fossil Fuel Finance Report 2023, April 2023 (https://www.bankingonclimatechaos.org/banking-on-climate-chaos-2023-report/)

Reinhart, C.M. / Rogoff, K.S., This Time is Different: Eight Centuries of Financial Folly, Princeton University Press (2009)

U.S. Financial Crisis Inquiry Commission, The Financial Crisis Enquiry Report, U.S. Government Printing Office, Washington, D.C. (2011), pg. 175; (https://www.govinfo.gov/app/details/GPO-FCIC)

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Finance Watch is an independently funded public interest association dedicated to making finance work for the good of society. Its mission is to strengthen the voice of society in the reform of financial regulation by conducting advocacy and presenting public interest arguments to lawmakers and the public. Finance Watch's members include consumer groups, housing associations, trade unions, NGOs, financial experts, academics and other civil society groups that collectively represent a large number of European citizens. Finance Watch's founding principles state that finance is essential for society in bringing capital to productive use in a transparent and sustainable manner, but that the legitimate pursuit of private interests by the financial industry should not be conducted to the detriment of society. For further information, see www.finance-watch.org

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