Conceptions of Capital, Corporate Governance and Financial Supervision in Systemic Risk Mitigation: Towards an Integrated Approach for Libya

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A thesis submitted for the degree of Doctor of Philosophy (PhD)

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(February 2025)

Abstract

This thesis explains the divergent dynamics of capital adequacy, corporate governance and financial supervision in mitigating systemic risk within financial markets and places particular emphasis on Libya. The doctrinal nature of the research is based on the analysis of legal frameworks, international regulatory standards, and financial oversight mechanisms within the context of the changing global regulatory environment. Drawing on case studies from major financial crises, including the 2008 global financial crisis and the Eurozone debt crisis, the study pinpoints systemic risk vulnerabilities that financial globalisation, market interconnectivity, and regulatory fragmentation have opened up. The central argument presented is that the mitigation of systemic risk necessitates a holistic and integrated approach that aligns the regulation of capital with imperatives of corporate governance and prudential supervision. The study critically analyses international standards, including the Basel Accords, the role of the FSB, and the implementation of macroprudential policies called into being by new developments in international markets, to appraise their efficacy for financial stability. Particular attention is given to the financial system of Libya, where institutionally fragile regulatory gaps are increased by political instability. The thesis underlines the need to adopt an adaptive legal framework that incorporates international best practices while addressing the unique economic and financial constraints facing Libya. The findings suggest that the enforcement of formal reform in financial governance in Libya is indicated, including the mechanisms for corporate governance that improve institutional accountability, risk-based capital adequacy with a home market focus, and supervisory regime against new risks, especially those from financial innovation and FinTech expansion. Therefore, the contribution to systemic risk could be achieved in discussions on the formulation of a more dynamic, multilevel national financial stability regime compatible with modern international regulatory requirements in Libya, for a safer global financial architecture.

"And be conscious of Allah, and Allah will teach you. And Allah has full knowledge of all things." Surah Al-Baqarah (282)

Acknowledgment

To those whose presence fills my life with unwavering strength and boundless inspiration^(S.R.A). To my parents, whose unconditional love and sacrifices have shaped every step of my journey. To my remarkable supervisors, Professor Onyeka Osuji and Dr. Mohammed Alshaleel, for their invaluable guidance, steadfast support, and profound wisdom.

To my friends and colleagues, for their constant encouragement and camaraderie—your belief in me has been a sustaining force.

And to the pursuit of knowledge—may this work be one small but meaningful step toward a greater understanding, and a brighter future for all.

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Abbreviations

AGV Analytical Group on Vulnerabilities

BCBS Basel Committee on Banking Supervision

BCPs Basel Core Principles

BIS Bank for International Settlements

CAR Capital Adequacy Ratio

CBL Central Bank of Libya

CCB Capital Conservation Buffer

CCR Counterparty Credit Risk

CCyB Countercyclical Capital Buffers

CET1 Common Equity Tier 1

CFIM Cooperative Framework for Implementation Monitoring

CDS Credit Default Swaps

CRD Capital Requirements Directive

CRR Capital Requirements Regulation

CVA Credit Valuation Adjustment

CVAs Credit Value Adjustments

DGS Deposit Guarantee Schemes

D-SIBs Domestic Systemically Important Banks

EAD Exposure at Default

EBA European Banking Authority

ECB European Central Bank

ESFS European System of Financial Supervision

ESMA European Securities and Markets Authority

ESRB European Systemic Risk Board

EWE Early Warning Exercises

FATF Financial Action Task Force

FSB Financial Stability Board

FSF Financial Stability Forum

G20 Group of Twenty

GFC Global Financial Crisis

G-SIBs Global Systemically Important Banks

HQLA High-Quality Liquid Assets

IAASB International Auditing and Assurance Standards Board

IAS International Accounting Standards

IASB International Accounting Standards Board

IASC International Accounting Standards Committee

ICAAP Internal Capital Adequacy Assessment Process

IFIs International Financial Institutions

IFRS International Financial Reporting Standards

IMF International Monetary Fund

IOSCO International Organization of Securities Commissions

IRB Internal Ratings-Based

LCR Liquidity Coverage Ratio

LCFIs Large Complex Financial Institutions

LGD Loss Given Default

LSM Libyan Stock Markets

MMFs Money Market Funds

NCBs National Central Banks

NBFI Non-Bank Financial Intermediation

NSFR Net Stable Funding Ratio

PD Probability of Default

RCC Regulatory Cooperation Committee

RWA Risk-Weighted Assets

SA-CCR Standardised Approach for Counterparty Credit Risk

SCAV Standing Committee on Assessment of Vulnerabilities

SIC Standards Implementation Committee

SIFIs Systemically Important Financial Institutions

SRAI Systemic Risk-Adjusted Index

SCSI Standing Committee on Standards Implementation

SRM Single Resolution Mechanism

SSA Shariah Supervisory Authority

SSBs Standard-Setting Bodies

SSM Single Supervisory Mechanism

TBTF Too Big To Fail

VAC Vulnerabilities Assessment Committee

Chapter One: Introduction

1.1 Research Background

The aim of this thesis is to investigate the challenges and importance of systemic risk mitigation while assessing targeted regulatory initiatives' prospective benefits and limitations. The scholarly research into systemic risk within financial markets has notably intensified in response to the United States mortgage crisis that commenced in 2007. This period of financial turbulence, exacerbated by the bankruptcy of Lehman Brothers in September 2008 and the subsequent sovereign debt crisis within the Eurozone, has shed light on the intrinsic fragility of the global financial system. Events such as these, marked by their chaotic nature, trigger a series of interlinked reactions, compromising the stability and predictability qualities essential to the financial system's operation. The gravity of these events has been magnified by the financial sector's growth relative to the overall economy in many nations. As a result of the growth, there is increased globalisation of economic activities; it also marked the start of telematic technologies that have accelerated transactional velocity significantly. This growth has been accompanied by an increased globalization of financial activities and the advent of telematic technologies, which have significantly accelerated transactional velocities.

Over recent decades, the financial sector has transitioned to become a primary driver of economic activity, surpassing the traditional productive sector in some respects.⁵ Specifically,

¹ J V Duca, J Muellbauer and A Murphy, 'Housing Markets and the Financial Crisis of 2007–2009: Lessons for the Future' (2010) 6(4) *Journal of Financial Stability* 203, 205–07.

² Adam Tooze, Crashed: How a Decade of Financial Crises Changed the World (Viking 2018) 41–44.

³ Gary Gorton, Slapped by the Invisible Hand: The Panic of 2007 (OUP 2010) 56–60.

⁴ Saule T Omarova, 'The Quiet Metamorphosis: How Derivatives Changed the "Business of Banking" (2009) 63 *University of Miami Law Review* 1041, 1045.

⁵ Thomas Philippon, *The Great Reversal: How America Gave Up on Free Markets* (Belknap Press 2019) 88.

the financial sector currently drives economic growth through technological advancement, investments, and capital allocation; this is unlike the manufacturing sector which has experienced decreased GDP contribution to the economy. This transition has brought with it a deluge of innovative financial products, placing financial literacy at the forefront of essential competencies for consumers.⁶ The financial sector growth has resulted in technical financial products that require higher knowledge in financial literacy. As such, consumer vulnerability increases since those without adequate knowledge experience more risks including exploitation and poor decision-making. Since the watershed moment of the US mortgage crisis and its subsequent global reverberations, the emphasis on research into systemic risk has grown exponentially. The dramatic failure of Lehman Brothers, along with the sovereign debt crises that rattled the Eurozone, peeled back the layers of the financial system to reveal its substantial susceptibility. These crises laid bare the vulnerabilities that left the system open to potential exploitation by those with malevolent intent.⁹ The events created disorder and initiated a domino effect on two main elements that safeguard stakeholder interest, that is, reliability and trust regarding the effective functioning of the financial sector.¹⁰

The absence of robust and efficient mechanisms to address systemic vulnerabilities represents a profound risk, potentially undermining economic and financial stability on a global scale. ¹¹For example, the collapse of major financial institutions as a result of speculative activities and high-risk lending caused a global economic downturn, showing the relationship between

⁶ Kathryn Judge, 'Investor-Driven Financial Innovation' (2019) 8 Harvard Business Law Review 291, 293.

⁷ Robert F Weber, 'New Governance, Financial Regulation, and Challenges to Legitimacy: The Example of the Internal Models Approach to Capital Adequacy Regulation' (2010) 62 Administrative Law Review 783, 786.

⁸ Adam Tooze, Crashed: How a Decade of Financial Crises Changed the World (Viking 2018) 122–25.

Kathryn Judge, 'Information Gaps and Shadow Banking' (2016) 103 Virginia Law Review 411, 414.
 Julia Black, 'Paradoxes and Failures: "New Governance" Techniques and the Financial Crisis' (2012) 75 Modern Law

¹¹ Steven L Schwarcz, 'Systemic Risk' (2008) 97 Georgetown Law Journal 193, 199.

financial systems and the dangers of insufficient regulation and oversight. The global financial crisis of 2007-2008 starkly revealed the potential for systemic risk events to rapidly cascade through interconnected financial systems.¹² Regulatory architecture proved inadequate to contain systemic contagion, prompting extensive academic analysis on strengthening oversight.¹³ Researchers emphasize the need for holistic surveillance of systemic vulnerabilities across markets.¹⁴ Macroprudential oversight has emerged as a key pillar of post-crisis reforms, though optimal implementation remains debated.¹⁵ By exposing key vulnerability areas in the financial system after the 2008 crisis, oversight became critical in preventing excessive risk-taking and ensuring overall financial stability. As financial innovation accelerates, channels for monitoring and mitigating systemic risks warrant ongoing enhancement.¹⁶ Due to innovation in the financial sector, new technologies and products have resulted, creating unforeseen risks. As such, it is important to consistently enhance monitoring and risk mitigation strategies to maintain system stability and effectiveness in responding to threats.

In the wake of these challenges, international efforts, particularly by the International Monetary Fund (IMF), have been directed towards identifying and addressing the gaps in systemic risk management¹⁷. Despite these initiatives, there remains a significant gap in terms of devising adequate strategies capable of confronting such predicaments, marking a critical area that

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¹² International Monetary Fund, *Global Financial Stability Report: Responding to the Financial Crisis and Measuring Systemic Risks* (IMF 2009) 15–18.

¹³ Robert Hockett, 'Implementing Macroprudential Finance-Oversight Policy: Legal Considerations' (2013) 18 *Indiana Law Review* 211, 214.

¹⁴ Saule T Omarova, 'License to Deal: Mandatory Approval of Complex Financial Products' (2012) 90 *Washington University Law Review* 63, 67.

¹⁵ Kern Alexander, Rahul Dhumale and John Eatwell, *Global Governance of Financial Systems: The International Regulation of Systemic Risk* (Oxford University Press 2006) 103.

¹⁶ Emilios Avgouleas, 'New Governance, the Reform Paradox, and the Financial Crisis' (2009) 17(2) *Columbia Journal of European Law* 215, 218.

¹⁷ W C M S Nabar, 'The Global Economic Recovery 10 Years after the 2008 Financial Crisis' (IMF Working Paper, 26 April 2019) https://www.imf.org/en/Publications/WP/Issues/2019/04/26/The-Global-Economic-Recovery-10-Years-After-the-2008-Financial-Crisis-46711 accessed 28 February 2023.

demands effective mitigation.¹⁸ The Group of Twenty (G20) has notably been at the forefront of the efforts, especially evident during the 2008 financial crisis.¹⁹ Its role in managing the crisis underscored the limitations of traditional international institutions like the IMF in responding to emergencies, highlighting the need for a more unified and robust international approach to financial stability.²⁰ The G20's involvement emphasized the importance of advancing global financial cohesion and developing comprehensive solutions to challenges that extend beyond national capacities.²¹

However, the journey towards a robust understanding and mitigation of systemic risk is hindered by the absence of a universally accepted definition of systemic risk.²² This lacuna significantly complicates the development and implementation of strategic frameworks aimed at bolstering the resilience of financial institutions against systemic vulnerabilities within a rapidly evolving regulatory landscape.²³ While laws and policies designed to fortify institutions' defences against systemic risks signify progress, the lack of a cohesive understanding of systemic risk itself poses a formidable challenge to achieving regulatory efficacy.²⁴

The situation, however, is not devoid of opportunities for improvement. The increased attention to systemic risk has spurred numerous positive developments in understanding financial market

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¹⁸ Robert Hockett, 'Implementing Macroprudential Finance-Oversight Policy: Legal Considerations' (2013) 18 *Indiana Law Review* 211, 215.

¹⁹ Chris Brummer, 'How International Financial Law Works (and How It Doesn't)' (2011) 99 *Georgetown Law Journal* 257, 259.

²⁰ Eric Helleiner, 'The Contemporary Reform of Global Financial Governance: Implications of and Lessons from the Past' in G20 at 10: Progress, Prospects and Policy Options (UNCTAD, G-24 Discussion Paper No 55, April 2009) https://unctad.org/system/files/official-document/gdsmdpg2420092_en.pdf accessed 28 February 2023.

²¹ Sungjoon Cho and Claire R Kelly, 'Promises and Perils of New Global Governance: A Case of the G20' (2012) 12 *Chicago Journal of International Law* 491, 493.

²² Steven L Schwarcz, 'Regulating Complexity in Financial Markets' (2009) 87 Washington University Law Review 211, 213

²³ Julia Black, 'Managing Regulatory Risks and Defining the Parameters of Blame: A Focus on the Australian Prudential Regulation Authority' (2006) 28 *Law & Policy* 1, 4.

²⁴ Saule T Omarova, 'License to Deal: Mandatory Approval of Complex Financial Products' (2012) 90 Washington University Law Review 63, 66.

dynamics and the mechanisms of risk mitigation.²⁵ A clear example is the stress testing framework that was developed after the 2008 crisis to evaluate vulnerabilities. The framework improved understanding regarding market changes and enabled proactive measures for risk avoidance, resulting in strong financial resilience. Nevertheless, the absence of a universally endorsed conceptual framework for systemic risk renders the task of formulating effective regulatory measures particularly challenging, especially in the throes of financial crises.²⁶ The global financial turmoil of 2007-2008 served as a harsh reminder of the inadequacies in the global financial sector's readiness and response capabilities, revealing a glaring deficiency in the tools available for managing systemic risk.²⁷

Addressing systemic risk, therefore, requires a comprehensive and multifaceted approach that not only focuses on bolstering capital adequacy, corporate governance, and financial supervision but also seeks to cultivate a deeper, more nuanced understanding of systemic risk itself.²⁸ This entails leveraging the collaborative frameworks provided by international coalitions such as the G20, the Basel Accords and the operations of the Financial Stability Board (FSB) as well as drawing on the expertise and resources of established institutions like the IMF.²⁹ The Basel Accords, with their successive iterations, have been instrumental in setting international standards for banking regulation, focusing on capital adequacy, stress testing, and market liquidity risk. These standards aim to fortify banks against the types of systemic shocks that precipitated the global financial crisis, advocating for a more resilient banking sector

²⁵ Robert F Weber, 'New Governance, Financial Regulation, and Challenges to Legitimacy: The Example of the Internal Models Approach to Capital Adequacy Regulation' (2010) 62 *Administrative Law Review* 783, 784.

²⁶ Kathryn Judge, 'Information Gaps and Shadow Banking' (2017) 103 Virginia Law Review 411, 415.

²⁷ Gary Gorton, Slapped by the Invisible Hand: The Panic of 2007 (OUP 2010) 23.

²⁸ Dirk A Zetzsche and others, 'Regulating FinTech Innovation: A Balancing Act' (2017) 12 European Business Organization Law Review 663, 666-672.

²⁹ Charles Goodhart, *The Basel Committee on Banking Supervision: A History of the Early Years 1974–1997* (CUP 2011) 112–15.

capable of withstanding future financial upheavals and more resilient and proactive global financial infrastructure in general.³⁰

Similarly, the Financial Stability Board (FSB) plays a crucial role in the global financial governance landscape, aiming to promote international financial stability by coordinating national financial authorities and international standard-setting bodies as they work toward developing robust regulatory, supervisory, and other financial sector policies.³¹ The FSB's efforts in enhancing the strength of financial systems globally underscore the importance of international cooperation and the sharing of best practices in the face of systemic vulnerabilities.³²

Research is essential to provide evidence to guide reforms. Economists, for example, have extensively analysed regulatory failures contributing to the global financial crisis.³³ The failures include lax oversight of mortgage lending, excessive bank leverage, flawed credit rating agency models, and an over-reliance on self-regulation. Learning from these mistakes can shape smarter regulations going forward.³⁴ Developing theoretical models that capture systemic risk transmission channels can also inform policy design. For instance, the network models show the interconnection between financial institutions, showcasing how a failure in the model can

³⁰ Kern Alexander, Rahul Dhumale and John Eatwell, *Global Governance of Financial Systems: The International Regulation of Systemic Risk* (Oxford University Press 2006) 107.

³¹ Financial Stability Board, 'About the FSB' https://www.fsb.org/about/ accessed 28 February 2023.

³² Pierre-Hugues Verdier, 'The Political Economy of International Financial Regulation' (2013) 88 *Indiana Law Journal* 1405, 1410.

³³ Robert A Jarrow, 'The Role of ABS, CDS and CDOs in the Credit Crisis and the Economy' in Alan S Blinder, Andrew W Lo and Robert M Solow (eds), *Rethinking the Financial Crisis* (Russell Sage Foundation 2011) 210–235.

³⁴ Kathryn Judge, 'Information Gaps and Shadow Banking' (2017) 103 *Virginia Law Review* 411, 420.

result in a whole system contagion. By understanding the transmission channels, policymakers can develop targeted interventions and regulations to improve stability and mitigate crises.³⁵

At the same time, regulations should not stifle beneficial financial innovation that expands access, lowers costs, and enables risk-sharing.³⁶ Striking the right balance remains contentious. Research on the costs and benefits of reforms can make this debate more constructive.³⁷ There are also important behavioural factors influencing individual and institutional risk-taking. Insights from behavioural finance on bubbles, manias, and panic dynamics can enhance systemic risk monitoring.³⁸ Behavioural perspectives highlight the tendency of financial institutions toward herd behaviour in markets, with implications for systemic stability.³⁹

A cross-cutting issue is the political economy challenges for regulators and coordination internationally. Constituencies that benefit from light regulation lobby forcefully against reforms. This regulatory capture risk needs to be counteracted through stakeholder engagement, transparent policymaking, and strong oversight mechanisms ensuring that regulations benefit the general public rather than special interest. An Researchers can clarify the societal benefits of financial stability to strengthen public support for judicious regulation. Fostering shared understandings internationally around key risks is also crucial in fostering coordinated

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³⁵ Daron Acemoglu, Asuman Ozdaglar and Alireza Tahbaz-Salehi, 'Systemic Risk and Stability in Financial Networks' (2015) 105 *American Economic Review* 564, 566.

³⁶ John Armour and others, *Principles of Financial Regulation* (OUP 2016) 22–25.

³⁷ Julia Black, 'Paradoxes and Failures: "New Governance" Techniques and the Financial Crisis' (2012) 75 *Modern Law Review* 1037, 1041.

³⁸ Andrei Shleifer, *Inefficient Markets: An Introduction to Behavioural Finance* (OUP 2000) 55.

³⁹ Saule T Omarova, 'Wall Street as Community of Fate: Toward Financial Industry Self-Regulation' (2012) 159 *University of Pennsylvania Law Review* 411, 415.

⁴⁰ James R Barth, Gerard Caprio Jr and Ross Levine, *Guardians of Finance: Making Regulators Work for Us* (MIT Press 2012) 89.

⁴¹ John C Coffee Jr, 'Extraterritorial Financial Regulation: Why E.T. Can't Come Home' (2014) 99 *Cornell Law Review* 1259, 1261-1265.

responses, improving financial stability globally and mitigating the chances of economic contagion.⁴²

While systemic risk has been acknowledged as a phenomenon requiring mitigation for financial stability, definitional and conceptual ambiguities that persist pose regulatory challenges. The lack of consensus around a precise conceptual framework for systemic risk creates challenges for crafting effective regulations and policies. Although recognition of systemic risk has grown since the global financial crisis, the ongoing absence of an unambiguous theoretical understanding and measurement toolbox hampers consistent, rigorous regulatory approaches. The crisis revealed major gaps in prevailing risk models, as both regulators and firms were unprepared when systemic contagion erupted. Existing oversight focused narrowly on individual exposures, proving insufficient to identify system-wide vulnerabilities and interlinkages enabling localized shocks to cascade globally. In the aftermath, policymakers have underscored the need to incorporate macroprudential perspectives attentive to systemic connections and spillovers. However, translating this conceptual recognition into concrete policies, tools, and processes remains incomplete. Refining systemic risk models to match the complexity and dynamism of modern finance through ongoing research is imperative for

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⁴² Pierre-Hugues Verdier, 'The Political Economy of International Financial Regulation' (2013) 88 *Indiana Law Journal* 1405, 1412.

⁴³ Steven L Schwarcz, 'Regulating Complexity in Financial Markets' (2009) 87 Washington University Law Review 211, 214.

⁴⁴ Julia Black, 'The Rise, Fall and Fate of Principles-Based Regulation' (LSE Law, Society and Economy Working Papers 17/2010, 2010) 3.

⁴⁵ Kathryn Judge, 'Information Gaps and Shadow Banking' (2017) 103 Virginia Law Review 411, 422.

⁴⁶ Robert F Weber, 'New Governance, Financial Regulation, and Challenges to Legitimacy: The Example of the Internal Models Approach to Capital Adequacy Regulation' (2010) 62 *Administrative Law Review* 783, 790.

⁴⁷ International Monetary Fund, *Global Financial Stability Report: Risk Taking, Liquidity, and Shadow Banking* (IMF 2014) 33–36.

⁴⁸ Eric J Pan, 'Challenge of International Cooperation and Institutional Design in Financial Supervision: Beyond Transgovernmental Networks' (2010) 11 *Chicago Journal of International Law* 243, 245.

stability.⁴⁹ Through continued research, understanding of capital structure is enhanced alongside corporate governance, and financial supervision thereby enhancing a holistic approach to systemic risk mitigation in countries like Libya.

1.2 Research Problems

In light of the background to the research detailed above, it becomes essential to assess the potential roles of capital adequacy, corporate governance, and financial oversight in the context of systemic risk reduction within the dynamic sphere of international regulatory regimes. The rationale stems from the realisation, as noted in the previous subsection, that the global financial system has shown a marked vulnerability, laid bare by the collapse of Lehman Brothers and the ensuing sovereign debt crises in the Eurozone. These events precipitated widespread uncertainty and a cascade of reactions, thereby undermining the stability crucial to the operational efficacy of the international financial system. As noted, stability is imperative for safeguarding the interests of all economic participants, including adherence to policies of market responsiveness, self-regulation, and non-intervention. Consequently, mirroring the strides made by the International Monetary Fund, the World Bank, and the Group of Twenty (G20), it has been observed that the absence of comprehensive strategies to manage such financial disruptions poses a substantial risk in the realm of monetary markets.

Given the problems, further investigation is warranted into whether the lack of a definitive systemic risk understanding impedes mitigation efforts amid evolving global finance. Despite

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⁴⁹ Saule T Omarova, 'License to Deal: Mandatory Approval of Complex Financial Products' (2012) 90 *Washington University Law Review* 63, 70.

⁵⁰ Adam Tooze, Crashed: How a Decade of Financial Crises Changed the World (Viking 2018) 311.

⁵¹ Luci Ellis, Andrew Haldane and Fariborz Moshirian, 'Systemic Risk, Governance and Global Financial Stability' (2014) 45 *Journal of Banking and Finance* 175, 178-182; International Monetary Fund, *Global Financial Stability Report:* Responding to the Financial Crisis and Measuring Systemic Risks (IMF 2009) 22–24.

systemic risk's recognized importance for regulating markets and upholding stability, no universal conception exists. This ambiguity complicates oversight and policy responses.⁵² However, examining systemic risk mitigation's significance provides vital context. Effective systemic risk management promotes financial system stability, accountability, and resilience. It enables prudent governance and operations that reduce institutional and societal risks.⁵³ The 2008 crisis demonstrated how systemic threats like contagion can severely damage global economies lacking in vigilance and planning.⁵⁴ Therefore, research insights are needed on systemic risk factors and mitigation approaches even without consensus definitions. 55 The 2008 meltdown also revealed regulatory gaps despite years of guidance and oversight. By exposing the regulatory gaps, the 2008 crisis showed a lack of adequate oversight of risky activities; it also disclosed the desire for comprehensive reforms towards improving financial stability. This highlights the potential utility of governance, capital, and supervisory interventions, which merit analysis given persistent preparedness shortfalls.⁵⁶ Well-designed initiatives could bolster transparency, risk monitoring, and crisis response while balancing innovation.⁵⁷ However, the advantages and disadvantages of utilizing such tools must also be weighed given complex tradeoffs. Implementing reforms without sufficient evidence risks unintended consequences.⁵⁸ For example, whereas stress testing and regulations improve economic stability, they slow growth

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⁵² Julia Black, 'The Rise, Fall and Fate of Principles-Based Regulation' (LSE Law, Society and Economy Working Paper 17/2010, 2010) 5-8.

⁵³ Saule T Omarova, 'License to Deal: Mandatory Approval of Complex Financial Products' (2012) 90 Washington University Law Review 63, 70.

⁵⁴ Adam Tooze, Crashed: How a Decade of Financial Crises Changed the World (Viking 2018) 310.

⁵⁵ Steven L Schwarcz, 'Regulating Complexity in Financial Markets' (2009) 87 Washington University Law Review 211, 214, 217-218.

⁵⁶ Robert F Weber, 'New Governance, Financial Regulation, and Challenges to Legitimacy: The Example of the Internal Models Approach to Capital Adequacy Regulation' (2010) 62 *Administrative Law Review* 783, 790.

⁵⁷ Anat R Admati and Martin F Hellwig, *The Bankers' New Clothes: What's Wrong with Banking and What to Do About It* (Princeton UP 2013) 44.

⁵⁸ John C Coffee Jr, 'Systemic Risk after Dodd-Frank: Contingent Capital and the Need for Regulatory Strategies beyond Oversight' (2011) 111 *Columbia Law Review* 795, 801.

and limit lending. Thus, embracing reforms without proper evidence can result in unintended consequences, possibly fuelling financial instability rather than mitigating it.

This expertise is particularly beneficial in Libya's pursuit of an appropriate supervision model.⁵⁹ The ensuing dialogue on the choice of a supervisory model underscores Libya's responsibility to orchestrate regulatory actions that pre-empt financial crises, recognizing that such calamities no longer remain confined within national boundaries.⁶⁰

Examining the roles of governance, capital, and supervision can provide insights to inform policy despite systemic risk ambiguities.⁶¹ The goal is to elucidate potential stabilization pathways that account for complex modern financial systems and evolving risks. Evidence-based analysis can help bridge the gap between academic uncertainties and real-world regulatory priorities during periods of flux.⁶²

1.3 Research Questions

This research elucidates the roles and limitations of capital, corporate governance, and financial supervision in systemic risk mitigation in an evolving regulatory landscape. The overarching research question is therefore: To what extent can capital, corporate governance and financial supervision contribute to effective systemic risk mitigation in an evolving international financial and regulatory landscape? While systemic risk is recognized as a key priority,

⁵⁹ Central Bank of Libya, 'Strategic Plan of the CBL' (Institutional Information) https://cbl.gov.ly/en/strategic-plan/ accessed 12 March 2022.

⁶⁰ Dirk Schoenmaker and Sander Oosterloo, 'Financial Supervision in an Integrating Europe: Measuring Cross-Border Externalities' (2005) 8 *International Finance* 1, 4-7.

⁶¹ Steven L Schwarcz and Iman Anabtawi, 'Regulating Systemic Risk: Towards an Analytical Framework' (2011) 86 Notre Dame Law Review 1349, 1352.

⁶² Julia Black, Restructuring Global and EU Financial Regulation: Capacities, Coordination and Learning (LSE Law, Society and Economy Working Paper 18/2010, London School of Economics and Political Science) 6.

preparedness gaps persist following the Global Financial Crisis. This research evaluates targeted interventions that could potentially improve vigilance and resilience despite definitional ambiguity. The main research question is,

To what extent can capital, corporate governance and financial supervision contribute to effective systemic risk mitigation in an evolving international financial and regulatory landscape?

The suggested subsidiary research questions are:

- a) How can capital, corporate governance and financial supervision be conceptualised to facilitate systemic risk mitigation?
- b) What is the role of international institutions and standards in systemic risk mitigation?
- c) To what extent are there effective legal and institutional frameworks for capital, corporate governance and financial supervision in Libya?
- d) How can an integrated approach improve systemic risk mitigation in Libya?

1.4 Central Arguments

For the thesis, the central argument revolves around the evolving problems experienced in mitigating systemic risk within financial institutions, due to a low understanding of systemic risk across the world markets. Based on the empirical and doctrinal analysis, the study argues that the lack of cohesive and globally accepted frameworks for understanding and managing system risks has turned out to be a major obstacle towards financial stability⁶³. In order to

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⁶³ C A Harun and I Gunadi, 'Financial Stability and Systemic Risk' in Perry Warjiyo and Solikin M Juhro (eds), *Central Bank Policy Mix: Issues, Challenges, and Policy Responses* (Springer 2022) https://doi.org/10.1007/978-981-16-6827-2_5 accessed 12 March 2022.

support these arguments, the thesis combines doctrinal legal analysis with a structured form of qualitative empirical inquiry. This empirical dimension is not based on surveys or econometric modelling, but rather on a systematic review of legislative, regulatory, and institutional materials. First, the thesis analyses Libyan statutes such as Law No. 23 of 2010 on Commercial Activity and Law No. 1 of 2005 on Banking, as well as regulatory circulars issued by the Central Bank of Libya, including Circular No. 11/2022 on liquidity requirements and Circular No. 2/2023 on corporate governance. Second, it draws on institutional and policy reports published by the IMF, the World Bank, and the Financial Stability Board, which provide diagnostic evidence of supervisory gaps and comparative benchmarks for assessing Libya's regulatory capacity. Third, the thesis undertakes a thematic review of governance disclosures and annual reports from major Libyan banks to evaluate the extent to which regulatory requirements are reflected in practice. This combined empirical base ensures that the normative arguments of the thesis are grounded in observable institutional realities and framed against international standards, thereby enhancing both the rigour and the relevance of the analysis.⁶⁴ With continuous shifts in the global financial and regulatory landscape, the fragmented understanding has added to increased difficulty in reducing risks emanating from market volatility and the interconnection between financial systems.⁶⁵

The main premise of this argument is that corporate governance, capital adequacy, and financial supervision are key pillars in mitigating systemic risks. Nonetheless, the three are only effective

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⁶⁴ Terry Hutchinson and Nigel Duncan, 'Defining and Describing What We Do: Doctrinal Legal Research' (2012) 17 Deakin Law Review 83, 87-92; John W Creswell and Vicki L Plano Clark, Designing and Conducting Mixed Methods Research (3rd edn, SAGE Publications 2017) 89-112.

⁶⁵ Luc Laeven and Ross Levine, 'Bank Governance, Regulation, and Risk Taking' (2009) 93(2) *Journal of Financial Economics* 259, 261.

when properly integrated into the wider regulatory frameworks.⁶⁶ For example, whereas capital requirements intend to act as a buffer against financial shocks, this can also impact risk-taking behaviours either through initiating caution or promoting excess borrowing when financial institutions seek higher returns to attain such conditions.⁶⁷ Based on historical events like the 2008 financial crisis and the Eurozone contagion, misaligned or inadequate capital regulations can increase systemic vulnerabilities.⁶⁸

Further, the thesis argues that that corporate governance performs a key role in enhancing transparency, accountability, and stakeholder-management alignment. In this case, robust governance results in enhanced risk management and avoidance of crisis through strategic decision making and improved monitoring of internal processes.⁶⁹ In contrast, weak governance structures are likely to result in excessive risk-taking, poor decision making and lack of oversight, factors that heighten the possibilities for systemic disruption.⁷⁰

The third critical thesis argument is financial supervision which is a critical element in identifying emerging risks within the changing financial markets; this also ensures that financial institutions adhere to sound practices.⁷¹ Nevertheless, the supervision needs to be proactive and

⁶⁶ European Central Bank, 'Systemic Risk Mitigation: The Roles of Capital and Corporate Governance' (ECB Banking Supervision, 17 March 2017) https://www.bankingsupervision.europa.eu/press/speeches/date/2017/html/se170317.en.html accessed 20 March 2022.

⁶⁷ M Duygun, D Ladley and M Shaban, 'Challenges to Global Financial Stability: Interconnections, Credit Risk, Business Cycle and the Role of Market Participants' (2020) 112 *Journal of Banking and Finance* 105735
https://doi.org/10.1016/j.jbankfin.2020.105735 accessed 22 March 2022.

⁶⁸ K Seal, C Ferreira, L Dordevic and M Kitonga, *Strengthening Bank Regulation and Supervision* (IMF Departmental Paper 21/005, 2021) https://doi.org/10.5089/9781513566658.087 accessed 17 March 2022.

⁶⁹ D Cucinelli and M G Soana, 'Systemic Risk in Non-Financial Companies: Does Governance Matter?' (2023) 87 *International Review of Financial Analysis* 102601 https://doi.org/10.1016/j.irfa.2023.102601 accessed 24 March 2022.

⁷⁰ M Ivanyna and A Salerno, *Governance for Inclusive Growth* (IMF Working Paper 21/098, 2021) https://doi.org/10.5089/9781513582467.001 accessed 17 March 2022.

⁷¹ D Saidane, B Sène and K D Kanga, 'Pan-African Banks, Banking Interconnectivity: A New Systemic Risk Measure in the WAEMU' (2021) 74 *Journal of International Financial Markets, Institutions and Money* 101405, 101408.

dynamic, embracing changes in market structures, financial products and regulations to prevent systemic shocks in time.⁷²

International financial institutions and standards are important in managing systemic risk mitigation globally. Through entities like the International Monetary Fund (IMF), the Financial Stability Board (FSB), and the Basel Committee on Banking Supervision (BCBS), globally recognized standards are established that enhance transparency and cooperation across world financial systems.⁷³ The institutions set guidelines regarding the management of liquidity, capital adequacy, and stress testing, factors that are critical in retaining resilience among the financial institutions even during a crisis. However, ensuring the standards are effective relies on continuous adoption and implementation of jurisdictions across the world. This is considering that varying regulatory practices between countries can result in increased vulnerabilities, specifically in emerging markets like Libya, where financial regulations may not be consistent with international standards.⁷⁴ As a result, integrating international standards with national ones is important for the robust mitigation of systemic risks, specifically in interconnected financial systems globally.

In the context of Libya, institutional and legal frameworks for corporate governance, capital regulation, and financial supervision are still growing.⁷⁵ Highly affected by the political instability alongside economic challenges, the country experiences a significant gap in

⁷² N A M Alabi and others, 'Risk Management in Africa's Financial Landscape: A Review' (2023) 5(8) *International Journal of Advanced Economics* 239, 242.

⁷³ Jaime Caruana, 'Systemic Risk: How to Deal with It?' (Bank for International Settlements, 12 February 2010) https://www.bis.org/publ/othp08.htm accessed 27 March 2022.

⁷⁴ International Monetary Fund, *IMF Country Report* (2023) 202 https://doi.org/10.5089/9798400244070.002 accessed 8 February 2024.

⁷⁵ A Corbacho and S J Peiris, *The ASEAN Way* (IMF eBook, 2018) https://doi.org/10.5089/9781513558905.071 accessed 2 December 2022.

regulatory oversight. The current frameworks are not comprehensive in addressing systemic risks, specifically in areas like corporate governance practices and capital requirements. Libya experiences weakened corporate governance due to limited accountability and transparency, a factor that derails the alignment of managerial incentives with shareholder interest. The country also suffers from a lack of sufficient expertise and resources to conduct robust financial supervision. Therefore, strengthening the framework is critical in ensuring resilience within its financial structures to prevent systemic risks that may result from its amalgamation into world markets.

In general, embracing an integrated approach combining corporate governance, capital regulation, and improved financial supervision can significantly enhance the mitigation of systemic risk in Libya. The holistic approach, aligning national policies to international ones while observing Libya's political and economic context, will see the country create a robust means for preventing systemic risks. In an example, the regulations, while considering the international standards on capital regulations, need to align with unique risks experienced by the Libyan financial sector like exposure to political instability and volatile oil revenue. Secondly, corporate governance needs to focus on improving accountability and transparency within financial firms in Libya to enhance country-specific risk management. Finally, for effective financial supervision, then there is a need for international cooperation, capacity-

⁷⁶ H Alnaas, 'The Barriers of Adoption: The E-Banking in the Libyan Banks—A Case Study of Commercial Banks in Tobruk City' (2022) 10(1) *Open Journal of Business and Management* 501, 503.

⁷⁷ M Elgnaidi and M Toprak, 'Interconnectedness of Libyan Financial and Real Sectors' (29 December 2023) *Quantrade Journal* https://dergipark.org.tr/en/pub/quantrade/issue/81261/1344943 accessed 15 November 2023.

⁷⁸ A Corbacho and S J Peiris, *The ASEAN Way* (IMF eBook, 2018) https://doi.org/10.5089/9781513558905.071 accessed 2 December 2022.

⁷⁹ A N Berger, J Cai, R A Roman and J Sedunov, 'Supervisory Enforcement Actions Against Banks and Systemic Risk' (2021) 140 *Journal of Banking and Finance* 106222, 106225.

⁸⁰ D Cucinelli and M G Soana, 'Systemic Risk in Non-Financial Companies: Does Governance Matter?' (2023) 87 *International Review of Financial Analysis* 102601.

strengthening, and adoption of forward-looking frameworks. When integrated, Libya will improve its effectiveness in managing and controlling systemic risks, attaining financial stability in the long run.⁸¹

1.5 Research Objectives

This thesis sought to bridge academic and policy perspectives on utilizing oversight, governance, and capital tools amidst systemic risk uncertainties. Although definitive solutions remain elusive, incremental improvements may be possible. The analysis intended to elucidate potential benefits, limitations, and recommendations based on transparent reasoning and available evidence. An interdisciplinary approach examined technical complexities as well as political economy constraints. While ambiguities persisted, attention focused on strengthening the financial ecosystems society depends upon. This thesis identified the critical roles that capital adequacy, corporate governance, and financial supervision play in the context of systemic risk mitigation, particularly within the framework of a regulatory environment that is in a state of constant flux. The primary aim was to cultivate a nuanced understanding of how these three pillars — capital, governance and supervision - contribute to fortifying the financial system against systemic vulnerabilities.

To achieve this primary aim, the thesis set forth several secondary objectives, each building upon the last to create a comprehensive analysis. The first of these objectives was to demystify the concept of systemic risk. This involved dissecting the term to understand its implications

⁸¹ B Stellinga, 'The Open-Endedness of Macroprudential Policy: Endogenous Risks as an Obstacle to Countercyclical Financial Regulation' (2019) 22(1) *Business and Politics* 224, 227.

for the financial markets and the broader economy, thereby setting the stage for a discussion on mitigation strategies.

Further, the thesis identified and analysed the factors that precipitate systemic risk in financial markets. Recognizing these contributing elements was crucial for developing effective mitigation techniques which allowed for targeted and proactive risk management strategies. This exploration extended to evaluating the significance of systemic risk mitigation efforts, particularly in fostering a regulatory environment capable of adapting to new challenges. An in-depth examination of capital supervision is then conducted to underscore its pivotal role in systemic risk mitigation. This includes an exploration of why capital adequacy is fundamental to the stability of the financial system and how it can be effectively regulated to prevent systemic failures.

Similarly, the thesis delves into the realm of corporate governance supervision, evaluating its importance in mitigating systemic risk. This involves scrutinizing the mechanisms through which robust governance structures can safeguard against systemic vulnerabilities, thereby contributing to the overall resilience of the financial sector. Financial supervision is also critically assessed for its role in systemic risk mitigation. The thesis aims to clarify the objectives of financial supervision, highlighting its indispensability in maintaining the integrity of the evolving regulatory environment.

One of the key ambitions of this thesis is to weigh the advantages and disadvantages associated with the roles of capital adequacy, corporate governance, and financial supervision. This balanced appraisal is intended to shed light on the strengths and limitations of current regulatory practices, offering insights into areas that require further refinement or enhancement. Finally, the thesis proposes a set of recommendations aimed at bolstering the effectiveness of capital,

corporate governance, and financial supervision in the face of systemic risk. These recommendations are designed with an eye towards enhancing the resilience of the financial system, ensuring that it is better equipped to navigate the complexities of a dynamically evolving regulatory landscape. Through this comprehensive approach, the thesis aims not only to contribute to the academic discourse on systemic risk mitigation but also to provide practical insights that can inform policy development and regulatory reforms.

1.6 Original Contributions and Significance

This thesis makes several contributions to the discourse on systemic risk mitigation by dissecting the pivotal roles played by capital, corporate governance, and financial supervision within the context of a regulatory landscape that is continuously in change. This conceptual inquiry is of paramount importance, particularly as it addresses the notable absence of a universally agreed-upon definition of systemic risk, a gap that complicates both the mitigation and the regulatory oversight of such a risk.⁸² The significance of this research lies in its proposition that the absence of a definitive systemic risk framework should not preclude the development and implementation of more rigorous regulatory measures aimed at circumventing the recurrence of financial crises akin to the one experienced in 2007-2008.⁸³

In the realm of capital management, the thesis posits that strategic capitalization levels can serve as a lever to influence managerial decisions within financial markets, predicated on the understanding that effective risk management inherently benefits all stakeholders involved.⁸⁴

⁸² Steven L Schwarcz, 'Regulating Complexity in Financial Markets' (2009) 87 Washington University Law Review 211, 216.

⁸³ Julia Black, 'Paradoxes and Failures: "New Governance" Techniques and the Financial Crisis' (2012) 75 Modern Law Review 1037, 1040.

⁸⁴ Anat R Admati and Martin F Hellwig, *The Bankers' New Clothes: What's Wrong with Banking and What to Do About It* (Princeton UP 2013) 102.

This thesis underscores the necessity of risk management in ensuring the seamless execution of corporate initiatives, enhancing the distribution of favourable outcomes, streamlining decision-making processes, delineating risk ownership, and fostering advanced communication alongside bolstering confidence in decision-making. Analysts contend that the ability to identify and seize attractive opportunities can transform potential risks into avenues for corporate growth. However, this assertion is compared against concerns that excessively stringent capital requirements may inadvertently encourage banking institutions to embrace higher-risk ventures, potentially jeopardizing both individual stakeholders and the broader economic framework.

On the corporate governance front, this thesis argues for the development of a robust governance framework that could incentivize investors and controlling entities towards engage in risk-aware practices, diverging from the norm of complacency.⁸⁷ While acknowledging that debt governance emerges as a critical concern in systemic risk mitigation, the thesis also warns against the potential downsides of intrusive regulatory interventions, which could either undermine or enhance the drive for corporate entities to eschew unethical behaviours.⁸⁸

Furthermore, the evolution of financial supervision in the aftermath of the 2007-2008 financial crisis is examined, highlighting the introduction of diverse policies and legislative actions by central banks aimed at overseeing financial stability and pre-empting future crises.⁸⁹ The

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⁸⁵ John Armour and others, Principles of Financial Regulation (OUP 2016) 30.

⁸⁶ Steven L Schwarcz, 'Regulating Complexity in Financial Markets' (2009) 87 Washington University Law Review 211, 220

⁸⁷ Cary Coglianese, Adam M Finkel and David Zaring, 'The Role of Government in Corporate Governance' (2008) 1 New York University Journal of Law and Business 219, 221.

⁸⁸ Saule T Omarova, 'Wall Street as Community of Fate: Toward Financial Industry Self-Regulation' (2012) 159 *University of Pennsylvania Law Review* 411, 418.

⁸⁹ Pierre-Hugues Verdier, 'The Political Economy of International Financial Regulation' (2009) 88 *Indiana Law Journal* 1405, 1415.

development signifies a paradigm shift towards more dynamic supervisory practices, underscoring the importance of a well-distributed supervisory duty in ensuring the efficient operation of financial markets.⁹⁰ This includes ensuring that regulatory mandates are fulfilled, thereby affirming the efficacy of implemented measures.⁹¹

In synthesizing the financial supervision elements, the thesis articulated a comprehensive analysis that not only probes the foundational aspects of systemic risk mitigation but also explores the intricate interplay between capital requirements, governance structures and supervisory mechanisms. Through this lens, the thesis contributed to a deeper understanding of systemic risk and its implications for the financial sector, offering recommendations that could enhance the resilience of the financial system against future crises within Libya. This research stands as a testament to the need for an integrated approach to systemic risk management within the country, one that harmonizes the principles of capital adequacy, corporate governance, and financial supervision to safeguard against the vulnerabilities that precipitate financial instability. Sa

1.7 Statement of Methodology

In addressing the methodological underpinnings of this thesis, the employment of a doctrinal methodology emerges as profoundly apt. This choice is driven by the methodology's intrinsic

⁹⁰ Kern Alexander, Rahul Dhumale and John Eatwell, *Global Governance of Financial Systems: The International Regulation of Systemic Risk* (Oxford University Press 2006) 109.

⁹¹ Eric J Pan, 'Challenge of International Cooperation and Institutional Design in Financial Supervision: Beyond Transgovernmental Networks' (2010) 11 *Chicago Journal of International Law* 243, 246.

⁹² Steven L Schwarcz and Iman Anabtawi, 'Regulating Systemic Risk: Towards an Analytical Framework' (2011) 86 Notre Dame Law Review 1349, 1351.

⁹³ Julia Black, *Restructuring Global and EU Financial Regulation: Capacities, Coordination and Learning* (LSE Law, Society and Economy Working Paper 18/2010, London School of Economics and Political Science) 8.

Central to the essence of doctrinal methodology is its introspective focus on the law as an autonomous entity. This approach eschews any consideration of the law's practical effects or its applicability in various contexts. Instead, it delves deeply into the examination of law as a codified ensemble of principles. These principles are not nebulous; they are concrete and discernible through a meticulous examination of legal texts and sources. The ambition here is not merely academic; it seeks to refine our understanding and interpretation of the law, thus contributing to the legal discipline at large. The doctrinal methodology facilitates a nuanced exploration of legal frameworks and policies enacted by financial institutions, particularly focusing on their roles in capital management, corporate governance and financial supervision. Moreover, it enables the critical evaluation of the legal strategies and policies devised to counter the challenges experienced by financial systems in mitigating systemic risk in Libya.

The doctrinal methodology's foundation is deeply rooted in the analysis of legal proposals concerning the issues at hand. It involves applying legal principles to elucidate the interplay between factual circumstances and legal norms. ¹⁰⁰ Furthermore, it aims to identify and rectify any ambiguities, inconsistencies, or gaps within the legal discourse. ¹⁰¹ This methodological

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⁹⁴ Mark Van Hoecke (ed), *Methodologies of Legal Research: Which Kind of Method for What Kind of Discipline?* (Hart Publishing 2011) 15.

⁹⁵ Vista K Bhatnagar and Manjulika Srivastava, 'Doctrinal and Socio-Legal Methods of Research: Merits and Demerits' (2012) 2(7) Educational Research Journal 252, 254.

⁹⁶ Mathias M Siems, 'Legal Originality' (2008) 28 Oxford Journal of Legal Studies 147, 150.

⁹⁷ Terry Hutchinson and Nigel Duncan, 'Defining and Describing What We Do: Doctrinal Legal Research' (2012) 17 *Deakin Law Review* 83, 85-88.

⁹⁸ Anat R Admati, 'The Missed Opportunity and Challenge of Capital Regulation' (2019) 35(2) *Yale Journal on Regulation* 618, 622.

⁹⁹ John Armour and others, *Principles of Financial Regulation* (OUP 2016) 200.

¹⁰⁰ Ian Dobinson and Francis Johns, 'Qualitative Legal Research' in Mike McConville and Wing Hong Chui (eds), *Research Methods for Law* (2nd edn, Edinburgh University Press 2017) 17.

¹⁰¹ Mathias M Siems, Comparative Law (2nd edn, CUP 2018) 37.

approach is instrumental in fostering a comprehensive understanding of the legal quandaries under investigation, proposing well-founded resolutions to the issues.¹⁰²

Regarding the methodological approach of this thesis, it is imperative to highlight that the effectiveness of any scholarly investigation hinges on the methodologies employed for data collection and analysis. Within the ambit of doctrinal research, the thesis predominantly utilizes qualitative data sources. ¹⁰³ This choice is deliberate, aiming to shed light on the intricate dynamics between capital, corporate governance, and financial supervision within the context of systemic risk mitigation, especially against the backdrop of an evolving regulatory landscape. ¹⁰⁴

Doctrinal research is heralded for its systematic approach to dissecting the roles of capital, corporate governance and financial supervision in the realm of systemic risk mitigation. This methodological stance not only facilitates a historical and contemporary analysis of regulatory measures but also ventures to forecast future challenges and developments in risk mitigation strategies. By adopting this approach, the scope of research is significantly narrowed, enabling a focused and comprehensive exploration of the subject matter through a lens that prioritizes the most relevant and authoritative materials available. 107

The methodological discourse underscores the pivotal role of doctrinal methodology in this thesis. It provides a robust framework for a detailed examination of the legal underpinnings of

¹⁰² Mike McConville and Wing Hong Chui, Research Methods for Law (2nd edn, Edinburgh University Press 2017) 14.

¹⁰³ Reza Banakar and Max Travers (eds), *Theory and Method in Socio-Legal Research* (Hart Publishing 2005) 8.

¹⁰⁴ Julia Black, *Restructuring Global and EU Financial Regulation: Capacities, Coordination and Learning* (LSE Law, Society and Economy Working Paper 18/2010, London School of Economics and Political Science) 11.

¹⁰⁵ Lee Epstein and Gary King, 'The Rules of Inference' (2002) 69(1) University of Chicago Law Review 1, 5.

¹⁰⁶ Roger Cotterrell, 'Why Must Legal Ideas Be Interpreted Sociologically?' (1998) 25(2) *Journal of Law and Society* 171, 174.

¹⁰⁷ Dawn Watkins and Mandy Burton, *Research Methods in Law* (2nd edn, Routledge 2018) 20.

financial regulation and its implications for systemic risk management. The thesis, through this methodological lens, contributes valuable insights and proposals to the discourse on enhancing the efficacy of financial governance and oversight mechanisms.¹⁰⁸

Within the ambit of doctrinal research that forms the bedrock of this thesis, a thorough investigation into the dynamics between capital, corporate governance and financial supervision alongside their influence on systemic risk mitigation within a regulatory framework that is continuously evolving is paramount. The in-depth analysis unravels the intricacies of how these fundamental elements interact and impact the financial system's stability. ¹⁰⁹ It is imperative to not only delineate the roles and responsibilities of capital, corporate governance and financial supervision in this context but also to unearth any potential complexities or obstacles that have been observed in their quest to mitigate systemic risks. ¹¹⁰ The conceptual analysis provides a framework for further analysis in the thesis.

Following the conceptual analysis, the research endeavours to leverage the gathered insights for prognostic purposes. By projecting how the interplay between capital, corporate governance and financial supervision and systemic risk mitigation might evolve, the thesis anticipates future challenges and opportunities within the regulatory domain. This is instrumental in framing discussions on possible reforms and strategies that could enhance the resilience of the financial system against systemic threats. It sets the stage for a critical evaluation of the current

¹⁰⁸ Emilios Avgouleas, 'New Governance, the Reform Paradox, and the Financial Crisis' (2009) 17(2) *Columbia Journal of European Law* 215, 220.

¹⁰⁹ John Armour and others, *Principles of Financial Regulation* (OUP 2016) 12.

¹¹⁰ Robert Charles Clark, Corporate Law (Little, Brown 1986) 75.

¹¹¹ Julia Black, *Restructuring Global and EU Financial Regulation: Capacities, Coordination and Learning* (LSE Law, Society and Economy Working Paper 18/2010, London School of Economics and Political Science) 7.

¹¹² Steven L Schwarcz, 'Regulating Financial Change: A Functional Approach' (2016) 100 Minnesota Law Review 1441, 1445

challenges identified through the research, proposing viable solutions and interventions that can fortify systemic risk mitigation efforts against the backdrop of regulatory changes.¹¹³

To underpin the doctrinal approach that characterizes this thesis, an extensive and diverse array of information sources is indispensable. The research methodology entails a meticulous selection of primary sources, including, but not limited to, official documents from national, regional and international authorities, as well as legislative texts that provide authoritative insights into the existing legal and regulatory frameworks. Concurrently, the thesis incorporates secondary sources, such as scholarly articles, books, and reputable online resources, to enrich the analysis with academic perspectives and critiques. This comprehensive data collection strategy employs a multi-source qualitative documentary analysis approach that systematically examines diverse categories of legal and policy materials within the established doctrinal framework. This methodological approach, recognised in legal scholarship as particularly suited to regulatory analysis, involves the systematic examination of multiple types of documentary evidence to construct a comprehensive understanding of legal frameworks and their implementation challenges.

The research methodology encompasses three distinct but interconnected analytical strands. Primary legal and regulatory sources form the foundational layer, including Libya's Banking Law No. 1 of 2005 (as amended by Law No. 46 of 2012), Law No. 23 of 2010 on Commercial

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¹¹³ Kern Alexander, Rahul Dhumale and John Eatwell, *Global Governance of Financial Systems: The International Regulation of Systemic Risk* (Oxford University Press 2006) 92.

¹¹⁴ Peter Cane and Herbert M Kritzer (eds), *The Oxford Handbook of Empirical Legal Research* (OUP 2010).

¹¹⁵ Dawn Watkins and Mandy Burton, Research Methods in Law (2nd edn, Routledge 2018) 22.

¹¹⁶ Terry Hutchinson and Nigel Duncan, 'Defining and Describing What We Do: Doctrinal Legal Research' (2012) 17 Deakin Law Review 83, 89-91.

¹¹⁷ Paul Chynoweth, 'Legal Research' in Andrew Knight and Les Ruddock (eds), Advanced Research Methods in the Built Environment (Wiley-Blackwell 2008) 28-31.

Activity, Central Bank of Libya regulatory guidelines, and related legislative instruments governing capital adequacy, corporate governance, and financial supervision. Its International comparative sources provide the second analytical strand, encompassing Basel Committee on Banking Supervision standards, Financial Stability Board recommendations, International Monetary Fund Article IV consultation reports, World Bank financial sector assessments, and International Organization of Securities Commissions principles that establish authoritative benchmarks for evaluating national regulatory frameworks against international best practices. Secondary scholarly and policy sources constitute the third strand, including peer-reviewed academic literature, expert policy analyses, and comparative studies that provide theoretical context and analytical frameworks necessary for understanding the complexities of systemic risk mitigation in developing country contexts. 120

This systematic triangulation of documentary sources enables comprehensive evaluation of both formal legal frameworks and practical implementation realities, supporting the development of reform recommendations that are both legally coherent and contextually appropriate.¹²¹

The rationale behind adopting this multi-source qualitative approach lies in its capacity to amalgamate qualitative insights from a broad spectrum of sources, thereby offering a nuanced understanding of the complex interrelations at play.¹²² It is through this layered analysis that

¹¹⁸ Ian Dobinson and Francis Johns, 'Qualitative Legal Research' in Mike McConville and Wing Hong Chui (eds), Research Methods for Law (2nd edn, Edinburgh University Press 2017) 18-20.

¹¹⁹ Dawn Watkins and Mandy Burton, Research Methods in Law (2nd edn, Routledge 2018) 25-27.

¹²⁰ Lisa Webley, 'Qualitative Approaches to Empirical Legal Research' in Peter Cane and Herbert M Kritzer (eds), The Oxford Handbook of Empirical Legal Research (OUP 2010) 928-930.

¹²¹ Mathias M Siems, Comparative Law (2nd edn, CUP 2018) 39-41.

¹²² Julia Black, 'Paradoxes and Failures: "New Governance" Techniques and the Financial Crisis' (2012) 75 *Modern Law Review* 1037, 1040.

the thesis draws well-substantiated conclusions, informed by a rich tapestry of evidence. 123 These conclusions are expected to not only contribute to the academic discourse on financial regulation and systemic risk mitigation but also to suggest pathways for future research and policy-making. By exploring the current state of affairs and anticipating future developments, the research seeks to shed light on effective strategies for enhancing the stability and resilience of the financial system in an ever-evolving regulatory landscape. 124

In essence, the employment of a doctrinal research methodology, supplemented by rigorous multi-source qualitative analysis of documentary sources, serves as the cornerstone for this thesis. It allows for an in-depth examination of the legal and regulatory underpinnings of systemic risk mitigation, focusing on the critical roles of capital, corporate governance and financial supervision. Through this comprehensive doctrinal analysis, the thesis endeavours to advance understanding of how regulatory frameworks can be optimized to safeguard financial stability, contributing valuable insights to the ongoing dialogue on regulatory evolution and financial governance.¹²⁵

In the practical application of doctrinal research to this thesis, it is anticipated that substantive conclusions can be derived from the comprehensive analysis conducted. This expectation is founded on the extensive array of materials reflected upon in the study's analysis, as evidenced by the diversity of research materials outlined in the bibliography. To amass the wealth of research materials necessary for the completion of this thesis, a targeted search strategy employing specific keywords relevant to the thesis' focus was employed. These keywords

¹²³ Susan Bartie, 'The Lingering Core of Legal Scholarship' (2010) 30(3) Legal Studies 345, 348, 349.

Emilios Avgouleas, Governance of Global Financial Markets: The Law, the Economics, the Politics (CUP 2012) 66.

¹²⁵ John Braithwaite, Regulatory Capitalism: How It Works, Ideas for Making It Work Better (Edward Eigar 2008) 12.

¹²⁶ Peter Cane and Herbert M Kritzer (eds), *The Oxford Handbook of Empirical Legal Research* (OUP 2010).

include "systemic risk," "mitigation," "regulatory environment," "capital supervision," "corporate governance," and "financial supervision." The strategic use of these terms in research endeavours is pivotal in generating a sufficient volume of relevant research materials, thereby facilitating a robust doctrinal approach to the analysis. 128

The process of accessing the requisite primary and secondary materials for examining the interrelations between capital, corporate governance and financial supervision, and systemic risk mitigation within a dynamic regulatory framework is significantly enhanced by leveraging digital resources.¹²⁹

Nevertheless, the reliance on digital resources for doctrinal research is often contingent upon the availability of electronic databases, many of which require subscriptions. The accessibility of these materials is thus largely dependent on the resources available through university subscriptions. Despite potential limitations in accessing certain subscription-based resources, the challenge of material accessibility is mitigated by the availability of a wide variety of reliable and relevant materials that are accessible free of charge. This ensured that the research could proceed unimpeded, drawing upon a rich tapestry of resources to underpin the analysis. 131

The strategic employment of specific search terms and the utilization of digital resources are integral to the doctrinal research methodology applied in this thesis. By harnessing the power of the internet and the breadth of available digital databases, the research effectively navigates the expansive terrain of relevant literature and legal documents. This approach not only

¹²⁷ Dawn Watkins and Mandy Burton, Research Methods in Law (2nd edn, Routledge 2018) 27.

¹²⁸ Mike McConville and Wing Hong Chui, Research Methods for Law (2nd edn, Edinburgh University Press 2017) 19.

¹²⁹ Paul Chynoweth, 'Legal Research' in Andrew Knight and Les Ruddock (eds), *Advanced Research Methods in the Built Environment* (Wiley-Blackwell 2008) 28.

¹³⁰ Fiona Cownie and Raymond Cocks, A Concise Guide to Legal Research (3rd edn, Bloomsbury Professional 2019) 5-15.

¹³¹ Peter Cane and Herbert M Kritzer (eds), *The Oxford Handbook of Empirical Legal Research* (OUP 2010) 31.

facilitates a comprehensive analysis of the roles of capital, corporate governance and financial supervision, and their impact on systemic risk mitigation but also ensures that the study is grounded in a diverse and robust body of research materials. Through this meticulous and strategic approach to material collection and analysis, the thesis contributes to a deeper understanding of the complex dynamics at play in the regulatory landscape of financial systems, offering insights that can inform future research and policy development in the realm of systemic risk mitigation.¹³²

A critical consideration in the execution of this thesis is the acknowledgement and mitigation of potential biases, which could influence the analytical process and outcomes. Bias in academic research, particularly in the domain of systemic risk, corporate governance and financial supervision, is not an uncommon occurrence more so in cases where researchers rely on the selective use of data, subjective interpretations, or external influences shaping their conclusions... This propensity towards bias often arises from the individual agendas and perspectives that scholars may bring to their work, consciously or unconsciously influencing the generation of research materials. Such biases are rooted in the inclination of authors to pursue specific narratives or hypotheses, which may lead to a disproportionate emphasis on certain viewpoints over others. The inherent challenge lies in the fact that academic outputs seldom achieve a perfect equilibrium, presenting all sides of an argument with equal weight

¹³² Lisa Webley, 'Qualitative Approaches to Empirical Legal Research' in Peter Cane and Herbert M Kritzer (eds), *The Oxford Handbook of Empirical Legal Research* (OUP 2010) 926.

¹³³ Andrew Abbott, 'Varieties of Ignorance' (2016) 9(2) The American Sociologist 174, 176.

¹³⁴ Susan Bartie, 'The Lingering Core of Legal Scholarship' (2010) 30(3) Legal Studies 345, 350.

¹³⁵ Pierre Bourdieu, 'The Force of Law: Toward a Sociology of the Juridical Field' (1987) 38 Hastings Law Journal 814, 817.

and consideration. This tendency towards partiality in scholarly work is a significant factor that necessitates careful consideration in the doctrinal research approach adopted for this thesis.¹³⁶

The potential influence of bias in the academic resources referenced within this thesis presents a nuanced challenge. On one hand, the doctrinal approach, with its emphasis on comprehensive literature review and analysis, could benefit from the depth and diversity of perspectives offered by various scholars.¹³⁷ On the other hand, the same approach could be compromised by the inclusion of biased viewpoints, which may skew the analysis or lead to incomplete interpretations of the roles played by capital, corporate governance and financial supervision in systemic risk mitigation within an evolving regulatory framework.¹³⁸ The presence of academic opinions and analyses, frequently cited throughout this study, underscores the importance of navigating these biases thoughtfully.¹³⁹

To address this challenge, concerted efforts were made to ensure that the thesis strives towards achieving as balanced an analysis as possible. This involves a deliberate and critical engagement with the literature, where different viewpoints are considered and weighed against each other. The objective is not only to present a comprehensive review of existing research but also to identify gaps and areas for further investigation. By doing so, the thesis aims to lay a foundation for future scholars to build upon, encouraging a more nuanced and diverse

¹³⁶ Lee Epstein and Gary King, 'The Rules of Inference' (2002) 69 University of Chicago Law Review 1, 10.

¹³⁷ Lisa Webley, 'Qualitative Approaches to Empirical Legal Research' in Peter Cane and Herbert M Kritzer (eds), *The Oxford Handbook of Empirical Legal Research* (OUP 2010) 930.

¹³⁸ Ian Dobinson and Francis Johns, 'Qualitative Legal Research' in Mike McConville and Wing Hong Chui (eds), *Research Methods for Law* (2nd edn, Edinburgh University Press 2017) 18.

¹³⁹ Susan Bartie, 'The Lingering Core of Legal Scholarship' (2010) 30(3) Legal Studies 345, 347-350.

¹⁴⁰ Roger Cotterrell, 'Why Must Legal Ideas Be Interpreted Sociologically?' (1998) 25(2) *Journal of Law and Society* 171, 176.

exploration of the subject matter.¹⁴¹ The endeavour to balance diverse perspectives and mitigate the influence of bias is pivotal in enhancing the academic integrity and value of the thesis. It represents a commitment to fostering a more inclusive and comprehensive understanding of the complex dynamics of systemic risk mitigation, corporate governance and financial supervision in a regulatory context that is continuously evolving.¹⁴²

Ultimately, the recognition of potential biases and the efforts to counteract their influence reflects a broader commitment to academic rigour and objectivity. This approach not only enriches the thesis itself but also contributes to the broader academic discourse on systemic risk and financial regulation. By navigating the challenges associated with bias and striving for a balanced examination of the subject matter, this research makes a significant contribution to the field. It invites future researchers to engage with the topic, building on the groundwork laid by this thesis to further understanding of the critical issues in the context of an everchanging global financial landscape. It

1.8 Structure of the Thesis' Chapters

The thesis is organised into six chapters. Chapter One – Introduction provides a critical overview and sets the foundation for the subsequent exploration of capital, corporate governance and financial supervision in mitigating systemic risk. It positions the discussion within the broader context of the evolving regulatory environment, highlighting the complexities and challenges of formulating effective regulatory measures in the face of

¹⁴¹ Julia Black, 'Paradoxes and Failures: "New Governance" Techniques and the Financial Crisis' (2012) 75 Modern Law Review 1037, 1041.

¹⁴² Emilios Avgouleas, Governance of Global Financial Markets: The Law, the Economics, the Politics (CUP 2012) 45.

¹⁴³ Susan Bartie, 'The Lingering Core of Legal Scholarship' (2010) 30(3) *Legal Studies* 345, 352.

¹⁴⁴ Pierre Bourdieu, 'The Force of Law: Toward a Sociology of the Juridical Field' (1987) 38 Hastings Law Journal 814, 820.

financial crises. Through a meticulous examination of the underpinning research, legal frameworks and international efforts towards financial stability, the chapter highlights the thesis' contributions to the scholarly discourse on systemic risk management and regulatory efficacy. The chapter outlines the research problems, research questions, central arguments, research objectives and research methodology in showing the thesis' aim of assessing the potential roles of capital adequacy, corporate governance and financial supervision in systemic risk reduction. It sets forth a critical examination of the existing regulatory landscape's ability to adapt to the evolving dynamics of international finance and the mitigation of systemic vulnerabilities.

In Chapter Two - Conceptual and Theoretical Analysis, this thesis will investigate the conceptual and theoretical analysis underpinning systemic risk mitigation, exploring the literature related to systemic risk definition and intricate dynamics between capital, corporate governance and financial supervision as means to mitigate such risk. The chapter will provide a comprehensive analysis of the multifaceted strategies employed to mitigate systemic risk within the financial ecosystem. It will underscore the importance of capital adequacy, corporate governance and financial supervision in constructing a robust financial framework capable of withstanding economic shocks. The chapter will likewise reflect on the lessons learned from past crises, advocating for a continuous enhancement of regulatory measures to prevent future systemic failures and ensure the stability of the global economic system.

Chapter Three - International Standards on Systemic Risk Mitigation will provide a thorough examination of international standards on systemic risk mitigation, offering insights into the historical development, current state and future directions of global financial regulation. It will highlight the critical role of international cooperation and the need for continuous evolution of regulatory frameworks to address the dynamic nature of global financial markets and safeguard

against systemic risks. The chapter will delve into the purpose of international financial regulations, focusing on their role in protecting investors, ensuring fair, efficient, and transparent markets, and reducing systemic risks. It will similarly examine the evolution of regulatory frameworks, from the establishment of the Basel Committee on Banking Supervision's Basel Accords to the formation of the Financial Stability Board (FSB) in response to the global financial crisis and the regulation of the securities markets, emphasizing the importance of international standards set by the International Organization of Securities Commissions (IOSCO) in promoting investor protection, market fairness and transparency. The chapter will scrutinise the effectiveness of these regulatory frameworks in addressing the complexities of modern financial systems and their capacity to prevent future crises.

Chapter Four - Existing System, Rules and Practices will be dedicated to the exploration of the systemic risk mitigation landscape, highlighting the intricate interplay between capital adequacy, corporate governance and financial supervision. It will offer a nuanced understanding of the challenges and strategies pivotal to safeguarding financial systems against systemic vulnerabilities, with a special emphasis on Libya's unique socio-political and economic challenges, providing a comprehensive overview of the obstacles faced by the nation in fortifying its financial infrastructure against systemic threats. This chapter will focus on the ongoing endeavour to enhance financial stability, and the regulatory and supervisory mechanisms established post-2008 crisis, underscoring the concerted efforts to mitigate systemic risks through enhanced capital requirements and strategic reforms such as informed regulatory practices and governance reforms aimed at fostering financial stability and resilience.

In *Chapter Five - Proposed Reforms*, the thesis outlines a strategic set of proposed reforms aimed at overhauling Libya's financial regulatory system. By focusing on enhancing corporate

governance, aligning capital requirements with international standards and specifically the Basel III framework, which advocates for a more resilient capital framework for banks worldwide. The Chapter will set arguments for the adoption of a new corporate governance framework aimed at achieving a delicate balance between stringent oversight and the promotion of sound risk-taking behaviours. The chapter will present a forward-looking blueprint for fostering a stable, transparent, and efficient financial system in Libya. These proposed reforms reflect a concerted effort to recalibrate the nation's financial regulatory framework in alignment with international best practices, thereby aiming to ensure the resilience and sustainability of Libya's financial sector.

The thesis concludes in $Chapter\ Six - Conclusion$ with an overview of its mission, central arguments, objectives and contributions to knowledge. The chapter also highlights areas for future research.

Chapter Two: Conceptualisations of Capital, Corporate Governance and Financial Supervision

2.1 Introduction

Chapter Two explores the conceptual frameworks surrounding capital, corporate governance, and financial supervision in the context of systemic risk. It begins with an overview of literature highlighting the vulnerabilities arising from deficiencies in these areas, particularly during economic downturns. A comprehensive definition of systemic risk is established, emphasizing its interconnected nature and the potential for widespread financial consequences. The chapter delves into specific factors influencing systemic risk, such as leverage, which can exacerbate vulnerabilities in financial institutions. Additionally, the rise of FinTech is examined for its dual impact on the financial landscape, presenting both opportunities and challenges. The significance of Systemically Important Financial Institutions (SIFIs) is also addressed, emphasizing the need for enhanced regulatory scrutiny. Finally, the chapter outlines methods for mitigating systemic risk, focusing on capital requirements, corporate governance, and prudential supervision, which are essential for fostering resilience in the financial system.

2.2 Overview of Issues in Literature

In the wake of the 2008 financial crisis, a surge of academic inquiry and economic analysis emerged, delving into the intricate factors that may have contributed to the turmoil. 145 Scholars focusing on the commercial and economic sectors embarked on a journey to unravel the complexities of capital adequacy, corporate governance and financial supervision within the

¹⁴⁵ Adam Tooze, Crashed: How a Decade of Financial Crises Changed the World (Viking 2018) 214.

broader context of systemic risk reduction.¹⁴⁶ This growing body of scholarly work aimed to deconstruct the events and decisions that led to the financial upheaval, seeking to understand how such crises could be mitigated or prevented in the future.¹⁴⁷

Subsequent research has not only analysed the events of the crisis but has also proposed increasingly sophisticated regulatory frameworks designed to minimize risks across the business spectrum. Looking back, these academic endeavours have been instrumental in linking the accumulated literature to the foundational goals of further research, including this thesis. A focal point of this literature review has been to draw parallels and contrasts in governance practices between disparate business environments, exemplified by comparing the sectoral governance in Libya with that of the United Kingdom.

The accumulated research posits that factors such as capital adequacy, corporate governance, and financial supervision are either catalysts for or shields against the financial calamities that afflict the global business sector.¹⁵¹ The published literature thus records the insights and assessments of financial analysts, capital market experts and corporate governance practitioners who advocate for risk mitigation as a preferable strategy over the less effective risk-taking and avoidance tactics.¹⁵²

¹⁴⁶ Julia Black, 'The Rise, Fall and Fate of Principles-Based Regulation' (LSE Law, Society and Economy Working Paper 17/2010, 2010) 6.

¹⁴⁷ Robert F Weber, 'New Governance, Financial Regulation, and Challenges to Legitimacy: The Example of the Internal Models Approach to Capital Adequacy Regulation' (2010) 62 *Administrative Law Review* 783, 792.

¹⁴⁸ John Armour and others, *Principles of Financial Regulation* (OUP 2016) 18.

¹⁴⁹ Julia Black, 'Paradoxes and Failures: "New Governance" Techniques and the Financial Crisis' (2012) 75 *Modern Law Review* 1037, 1044.

¹⁵⁰ Theodor Baums and Andreas Cahn, 'Taking Shareholder Protection Seriously? Corporate Governance in the United States and Germany' (2003) 53 *American Journal of Comparative Law* 31, 33-37.

¹⁵¹ Steven L Schwarcz, 'Systemic Risk' (2008) 97 Georgetown Law Journal 193, 197.

¹⁵² John C Coffee Jr, 'Systemic Risk after Dodd-Frank: Contingent Capital and the Need for Regulatory Strategies beyond Oversight' (2011) 111 *Columbia Law Review* 795, 798.

The Basel Accords of 1999 stand as a significant milestone, offering corporate stakeholders a set of principles geared towards the prudent management of company resources, thereby diluting risk concentrations.¹⁵³ The literature also gives substantial coverage to the dealings within intra-group transactions and the exposure faced by financial conglomerates, painting a detailed picture of the intricacies involved in these complex financial ecosystems.¹⁵⁴

Fast forward to 2012, a set of principles emerged, reinforcing the critical need for sizable business entities and corporate conglomerates to establish robust risk management mechanisms and regulatory frameworks.¹⁵⁵ The methodologies, frameworks and accompanying systems and procedures are crafted to vigilantly monitor and report on company-wide risk concentrations and exposures. By doing so, they aim to mitigate any potential dangers, both foreseen and unforeseen, associated with business transactions.¹⁵⁶

Beyond these principles, there exist fundamental prerequisites or contingencies that underpin an efficient economic Affair in capital markets, which include regulations and oversight. Scholars in the field have identified attributes tied to the institutional and political infrastructures, as well as the societal norms that govern the operations of communities within the legal framework and the specific environments where financial firms operate. While these factors are undoubtedly influential in the functioning of organizations, they are not the primary

¹⁵³ Basel Committee on Banking Supervision, *Principles for the Management of Credit Risk* (Bank for International Settlements 1999).

¹⁵⁴ Saule T Omarova, 'The Quiet Metamorphosis: How Derivatives Changed the "Business of Banking" (2009) 63 *University of Miami Law Review* 1041, 1043.

¹⁵⁵ Basel Committee on Banking Supervision, *Core Principles for Effective Banking Supervision* (Bank for International Settlements 2012) 3.

¹⁵⁶ Julia Black, 'Managing Regulatory Risks and Defining the Parameters of Blame: A Focus on the Australian Prudential Regulation Authority' (2006) 28 *Law & Policy* 1, 2-5, 12.

¹⁵⁷ Darrell Duffie, 'Replumbing Our Financial System: Uneven Progress' (2018) 9 International Journal of Central Banking 251, 254.

¹⁵⁸ Pierre-Hugues Verdier, 'The Political Economy of International Financial Regulation' (2009) 88 *Indiana Law Journal* 1405, 1408.

focus of this research. Instead, this thesis focuses on the critical components that ought to be encapsulated within legislative frameworks to ensure the smooth operation of economies and the effective empowerment of financial regulators.¹⁵⁹

The pursuit of a well-functioning economic system necessitates an in-depth understanding of the legislative processes that oversee financial markets. This includes examining the efficacy of laws and regulations that govern the activities of financial entities and the broader implications of these rules on economic stability and growth. In this context, the role of financial regulators cannot be overstated; their mandate to enforce compliance and promote sound financial practices is paramount to maintaining investor confidence and safeguarding the integrity of financial markets.

However, the task of regulating complex financial systems is not without its challenges. Regulators must navigate a landscape marked by rapid technological advances, evolving market products, and the interconnectedness of global economies. They must strike a delicate balance between imposing necessary controls and enabling innovation and growth within the financial sector. This balance is further complicated by the divergent cultural, economic, and political realities across different jurisdictions, which can impact the implementation and effectiveness of regulatory policies. 164

¹⁵⁹ Kern Alexander, Rahul Dhumale and John Eatwell, *Global Governance of Financial Systems: The International Regulation of Systemic Risk* (Oxford University Press 2006) 121.

¹⁶⁰ Robert Charles Clark, Corporate Law (Little, Brown 1986) 92.

¹⁶¹ Saule T Omarova, 'Rethinking the Future of Self-Regulation in the Financial Industry' (2015) 35 *Brooklyn Journal of International Law* 665, 668.

¹⁶² Kathryn Judge, 'Information Gaps and Shadow Banking' (2016) 103 Virginia Law Review 411, 415.

¹⁶³ Anat R Admati, 'The Missed Opportunity and Challenge of Capital Regulation' (2019) 35(2) Yale Journal on Regulation 618, 621.

¹⁶⁴ Eric J Pan, 'Challenge of International Cooperation and Institutional Design in Financial Supervision: Beyond Transgovernmental Networks' (2010) 11 *Chicago Journal of International Law* 243, 246-251.

The literature also underscores the importance of transparency and accountability in corporate governance as an essential deterrent to risky corporate behaviours. These governance principles are particularly relevant in the context of financial conglomerates, where risk management must be a concerted effort across various entities and jurisdictions.

As this thesis progresses, it will further dissect these themes, analysing the role of capital, the function of corporate governance, and the scope of financial supervision within the intricate web of systemic risk mitigation.¹⁶⁷ The analysis contributes a comprehensive perspective to the ongoing dialogue surrounding financial regulation and its capacity to foster economic resilience and sustainability.¹⁶⁸

This exploration into the world of financial regulation and systemic risk is not merely an academic exercise; it is a critical inquiry into the mechanisms that underlie the stability of global markets. ¹⁶⁹ It is an effort to distil the lessons of past crises and integrate them into a forward-looking framework that anticipates and mitigates the risks inherent in a complex and ever-evolving financial landscape. ¹⁷⁰ The goal is to chart a path towards a more resilient and robust financial system, one that is capable of withstanding the pressures of modern economic challenges while supporting the dynamic growth and innovation that drive progress. ¹⁷¹

¹⁶⁵ Cary Coglianese, Adam M Finkel and David Zaring, 'The Role of Government in Corporate Governance' (2008) 1 New York University Journal of Law and Business 219, 223.

¹⁶⁶ Steven L Schwarcz, 'Conflicts and Financial Collapse: The Problem of Secondary-Management Agency Costs' (2016) 26 Yale Journal on Regulation 457, 460, 467-472.

¹⁶⁷ Robert Hockett, 'Implementing Macroprudential Finance-Oversight Policy: Legal Considerations' (2013) 18 *Indiana Law Review* 211, 215.

Emilios Avgouleas, Governance of Global Financial Markets: The Law, the Economics, the Politics (CUP 2012) 48.

¹⁶⁹ Gary Gorton, Slapped by the Invisible Hand: The Panic of 2007 (OUP 2010) 55.

¹⁷⁰ Robert F Weber, 'New Governance, Financial Regulation, and Challenges to Legitimacy: The Example of the Internal Models Approach to Capital Adequacy Regulation' (2010) 62 *Administrative Law Review* 783, 785.

¹⁷¹ Julia Black, Restructuring Global and EU Financial Regulation: Capacities, Coordination and Learning (LSE Law, Society and Economy Working Paper 18/2010, London School of Economics and Political Science) 9.

2.3 Systemic Risk Definition

The adage "you cannot manage what you cannot measure" resonates profoundly within the realm of systemic risk, a term that, despite its frequent use, has escaped a universally accepted definition and quantifiable measurement. Summer postulates that systemic risk defies a universal definition. Similarly, Pawel Smaga conceptualizes systemic risk as the potential for an economic shock to precipitate significant negative outcomes—like micro-financial imbalances—rippling through the economy and impeding actual growth. This arises from the ambiguity surrounding what risks qualify as "systemic" and how these are connected to the broader concept of a financial "system."

Debates persist over which types of systemic risk ought to be managed and the regulatory approaches necessary for such oversight.¹⁷⁶ Different observers might interpret the same financial phenomena through varying lenses: what Alan Greenspan notes as a predisposition toward disturbances within the financial system could be seen by others as a natural, albeit harsh, market correction.¹⁷⁷ Nevertheless, systemic risk is often characterized as the danger of a widespread collapse within the financial market, typified by a chain reaction of failures among financial institutions —especially banks— triggered by a singular significant event.¹⁷⁸ An

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¹⁷² Steven L Schwarcz, 'Regulating Complexity in Financial Markets' (2009) 87 Washington University Law Review 211, 213.

¹⁷³ Andrew Summer, 'Managing Systemic Risk and Systemic Regulation' (2014) 31(2) *Journal of International Banking Law and Regulation* 64, 67.

¹⁷⁴ Pawel Smaga, 'The Concept of Systemic Risk' (SRC Special Paper No 5, 2014) 4.

¹⁷⁵ Steven L Schwarcz, 'Regulating Complexity in Financial Markets' (2009) 87 Washington University Law Review 211, 217

¹⁷⁶ Julia Black, 'The Rise, Fall and Fate of Principles-Based Regulation' (LSE Law, Society and Economy Working Paper 17/2010, 2010) 3.

¹⁷⁷ Saule T Omarova, 'License to Deal: Mandatory Approval of Complex Financial Products' (2012) 90 Washington University Law Review 63, 68.

¹⁷⁸ Xavier Freixas, Bruno M Parigi and Jean-Charles Rochet, 'Systemic Risk, Interbank Relations, and Liquidity Provision by the Central Bank' (2000) 32(3) *Journal of Money, Credit and Banking* 611, 617.

illustrative example is a financial panic where a mass of depositors simultaneously withdraw their funds, precipitating a "run" on bank assets, which can cascade into multiple bank failures.¹⁷⁹ De-Bandt and Hartmann argue that any conceptualization of systemic financial risk must invoke widespread disturbances across not just the banking and financial sectors but also within the payment and settlement systems that underpin them.¹⁸⁰

At the heart of the concept of systemic risk is the phenomenon of contagion, which encompasses not only concurrent financial instability from manifold shocks but also the transmission of instability that escalates into a systemic crisis. ¹⁸¹ Contagion, as an expression of systemic risk, is the principal conduit through which financial turmoil disseminates and escalates. ¹⁸² Systemic risk also entails the unwinding of financial imbalances that may have been accruing over time, setting the stage for major macroeconomic shocks. ¹⁸³ These dynamics are part and parcel of the sources of systemic risk, necessitating a sophisticated understanding and robust measurement mechanisms to pre-emptively identify and manage them effectively. ¹⁸⁴

Considering this, the quest to understand and regulate systemic risk becomes an intricate challenge. It demands a nuanced grasp of the interconnectedness within financial systems and the cascading effects that can emerge from what may initially appear to be isolated incidents. Financial scholars and regulators are thus tasked with deciphering the multifaceted nature of

¹⁷⁹ Gary Gorton, Slapped by the Invisible Hand: The Panic of 2007 (OUP 2010) 71.

¹⁸⁰ Olivier De Bandt and Philipp Hartmann, 'Systemic Risk: A Survey' (ECB Working Paper No 35, 2000) 12.

¹⁸¹ Graciela L Kaminsky, Carmen M Reinhart and Carlos A Vegh, 'The Unholy Trinity of Financial Contagion' (2003) 17(4) *Journal of Economic Perspectives* 51, 52.

¹⁸² Steven L Schwarcz, 'Systemic Risk' (2008) 97 Georgetown Law Journal 193, 197.

¹⁸³ Markus K Brunnermeier, 'Deciphering the Liquidity and Credit Crunch 2007–2008' (2009) 23(1) *Journal of Economic Perspectives* 77, 80.

¹⁸⁴ International Monetary Fund, *Global Financial Stability Report: Responding to the Financial Crisis and Measuring Systemic Risks* (IMF 2009) 18.

¹⁸⁵ Robert Hockett, 'Implementing Macroprudential Finance-Oversight Policy: Legal Considerations' (2013) 18 *Indiana Law Review* 211, 218.

systemic risks, distinguishing between the catalysts of genuine systemic threats and the more benign fluctuations of a healthy, self-regulating market. 186 This discernment is crucial because the tools and strategies for managing systemic risk must be finely tuned to address the actual dynamics that can lead to widespread financial disruptions. ¹⁸⁷ In effect, this requires continuous vigilance and adaptation of regulatory frameworks that can respond to the evolving landscape of global finance. 188 As such, monitoring systemic risk involves not only recognizing the signs of potential financial instability but also understanding the mechanisms through which these risks may propagate, including the role of financial instruments, market behaviours and the regulatory policies in place. 189 Ultimately, the management of systemic risk is a complex endeavour that lies at the intersection of financial theory, economic policy, and regulatory practice. It calls for a collaborative effort among various stakeholders, including financial institutions, regulatory bodies, and international economic organizations, to foster a stable and resilient financial system that can withstand and adapt to the inherent uncertainties of the global economic environment. 190 In this context, the role of regulatory bodies in mitigating systemic risk is a recurring theme in financial law research. Huang³ suggests that strengthening crossborder regulatory cooperation can enhance financial stability, particularly in emerging economies, where regulatory fragmentation poses significant risks. 191

¹⁸⁶ Julia Black, 'Managing Regulatory Risks and Defining the Parameters of Blame: A Focus on the Australian Prudential Regulation Authority' (2006) 28 *Law & Policy* 1, 3.

¹⁸⁷ Anat R Admati and Martin F Hellwig, *The Bankers' New Clothes: What's Wrong with Banking and What to Do about It* (Princeton UP 2013) 67.

¹⁸⁸ Julia Black, *Restructuring Global and EU Financial Regulation: Capacities, Coordination and Learning* (LSE Law, Society and Economy Working Paper 18/2010, London School of Economics and Political Science) 14.

¹⁸⁹ Steven L Schwarz and Iman Anabtawi, 'Regulating Systemic Risk: Towards an Analytical Framework' (2011) 86 Notre Dame Law Review 1349, 1350-1556.

¹⁹⁰ Emilios Avgouleas, Governance of Global Financial Markets: The Law, the Economics, the Politics (CUP 2012) 72.

¹⁹¹ Flora Huang, Financial Regulation and Supervision in Global Markets (CUP 2019) 102.

The phenomenon of contagion in financial systems speaks to the potential for instability in one area — be it a specific instrument, market sector, or institutional foundation — to ripple outwards, engendering widespread turmoil and culminating in a crisis that pervades the entire system. Contagion is conceived as the conduit through which systemic risk proliferates through various channels. This conceptualization holds that contagion cannot manifest without an initiating shock and that its propagation throughout the network of institutions or markets tends to surpass typical expectations within standard economic conditions.

Contagion is closely associated with the so-called domino effect, a sequence indicative of an emerging systemic risk.¹⁹⁵ The domino effect describes the ramifications of a financial default by a single entity, such as a bank, echoing through the financial framework and precipitating a cascade of additional defaults.¹⁹⁶ Serial bank failures have the capacity to engender subsequent rounds of insolvency.¹⁹⁷ The propagation of shocks, through a network of interconnected institutions, takes diverse pathways, contingent upon the density and strength of inter-business linkages.¹⁹⁸

The European Central Bank (ECB) articulates systemic risk as the hazard presented by an entity's failure to fulfil its commitments, which in turn precipitates a similar predicament for other entities, thereby inflicting widespread repercussions attributable to liquidity and credit

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¹⁹² Viral V Acharya, 'A Theory of Systemic Risk and Design of Prudential Bank Regulation' (2009) 5(3) *Journal of Financial Stability* 224, 226.

¹⁹³ Graciela L Kaminsky, Carmen M Reinhart and Carlos A Vegh, 'The Unholy Trinity of Financial Contagion' (2003) 17(4) *Journal of Economic Perspectives* 51, 54.

¹⁹⁴ Markus K Brunnermeier, 'Deciphering the Liquidity and Credit Crunch 2007–2008' (2009) 23(1) *Journal of Economic Perspectives* 77, 81.

¹⁹⁵ Xavier Freixas, Bruno M Parigi and Jean-Charles Rochet, 'Systemic Risk, Interbank Relations, and Liquidity Provision by the Central Bank' (2000) 32(3) *Journal of Money, Credit and Banking* 611, 618.

¹⁹⁶ Gary Gorton, Slapped by the Invisible Hand: The Panic of 2007 (OUP 2010) 95.

¹⁹⁷ Franklin Allen and Douglas Gale, 'Financial Contagion' (2000) 108(1) *Journal of Political Economy* 1, 3.

¹⁹⁸ Olivier De Bandt and Philipp Hartmann, 'Systemic Risk in Banking: A Survey' in Charles Goodhart and Gerhard Illing (eds), *Financial Crises, Contagion, and the Lender of Last Resort* (OUP 2002) 249.

limitations.¹⁹⁹ This situation ultimately compromises the resilience and stability of the entire financial market. The mechanism at play here is twofold: an initial aggregate shock — such as a deterioration in credit conditions, leading to spiking interest rates — is coupled with contagion.²⁰⁰ This occurs when institutions deemed riskier impose externalities on their more secure counterparts, potentially precluding these entities from accessing the requisite liquidity.²⁰¹ The ECB also frames systemic risk as the risk of a significant event that inflicts damage across multiple systemically important intermediaries or markets and possibly their associated infrastructures.²⁰²

An event precipitating systemic risk might originate from outside the financial system, an exogenous shock that can be either systematic or idiosyncratic.²⁰³ Alternatively, it could emerge from within the financial system or the economy at large.²⁰⁴ The incident is characterized by its severity, evidenced by market defaults or intermediary collapses, often representing a theoretical non-linearity or a pivotal change within the system.²⁰⁵

When considering systemic risk, one might distinguish between a "horizontal" approach, which examines the risks within the financial system itself, and a "vertical" approach, which examines the interaction between the financial sector and the broader economy.²⁰⁶ The impact of systemic

¹⁹⁹ European Central Bank, 'Recent Developments in Supervisory Structures in the EU Member States (2007–10)' (ECB 2010) ch 2.

²⁰⁰ Markus K Brunnermeier, 'Deciphering the Liquidity and Credit Crunch 2007–2008' (2009) 23(1) *Journal of Economic Perspectives* 77, 85.

²⁰¹ European Central Bank, 'Recent Developments in Supervisory Structures in the EU Member States (2007–10)' (ECB 2010) ch 2.

²⁰² European Systemic Risk Board, Flagship Report on Macro-Prudential Policy in the Banking Sector (ESRB 2014) 7.

²⁰³ Graciela L Kaminsky, Carmen M Reinhart and Carlos A Vegh, 'The Unholy Trinity of Financial Contagion' (2003) 17(4) *Journal of Economic Perspectives* 51, 56.

²⁰⁴ Franklin Allen and Douglas Gale, 'Financial Contagion' (2000) 108(1) *Journal of Political Economy* 1, 7.

²⁰⁵ Markus K Brunnermeier, 'Deciphering the Liquidity and Credit Crunch 2007–2008' (2009) 23(1) *Journal of Economic Perspectives* 77, 83.

²⁰⁶ Olivier De Bandt and Philipp Hartmann, 'Systemic Risk in Banking: A Survey' in Charles Goodhart and Gerhard Illing (eds), *Financial Crises, Contagion, and the Lender of Last Resort* (OUP 2002) 249.

risk and systemic events on consumer behaviour and spending can serve as a metric for gauging the intensity of the risk and the events in question.²⁰⁷

Understanding and addressing systemic risk, therefore, involves recognizing the multi-faceted nature of financial crises.²⁰⁸ It requires assessing the myriad ways in which risks can be transmitted across different sectors and institutions, understanding the conditions that exacerbate such risks, and implementing measures that can contain their spread.²⁰⁹ Monitoring the health of financial institutions, ensuring robust credit and liquidity conditions, and preparing for the possibility of rapid changes in the economic environment are all part of a comprehensive strategy to manage systemic risk.²¹⁰ In essence, safeguarding against systemic risk is an endeavour of perpetual vigilance, adaptation and coordination among financial entities, regulatory bodies and policymakers to secure the resilience and stability of financial markets globally.²¹¹

In the scholarly exploration of financial risk, Lehar articulates the concept as the potential occurrence where a specific number of financial organizations face simultaneous liquidation.²¹² This viewpoint is complemented by Adrian and Brunner Meier's interpretation, which expands the scope to systemic financial risk — defined as the widespread repercussions of a single institution's failure that severely disrupts the flow of credit and liquidity vital to the economy's

²⁰⁷ Ester Faia and Beatrice Weder di Mauro, 'Cross-Border Resolution of Global Banks' in Xavier Freixas, Luc Laeven and José-Luis Peydró (eds), *Systemic Risk in Europe* (MIT Press 2020) 171.

²⁰⁸ Steven L Schwarcz, 'Systemic Risk' (2008) 97 Georgetown Law Journal 193, 197.

 $^{^{209}}$ Julia Black, 'Managing Regulatory Risks and Defining the Parameters of Blame: A Focus on the Australian Prudential Regulation Authority' (2006) 28 *Law & Policy* 1, 4.

²¹⁰ Robert Hockett, 'Implementing Macroprudential Finance-Oversight Policy: Legal Considerations' (2013) 18 *Indiana Law Review* 211, 216.

²¹¹ Emilios Avgouleas, Governance of Global Financial Markets: The Law, the Economics, the Politics (CUP 2012) 65.

²¹² Alfred Lehar, 'Measuring Systemic Risk: A Risk Management Approach' (2005) 8(10) *Journal of Banking & Finance* 2577, 2581.

functioning.²¹³ This broadened understanding underscores how systemic risks, upon materialization, not only heighten the micro-risk factors such as the likelihood of default but also significantly magnify their detrimental effects across the financial system.²¹⁴ For example, when instability pervades a substantial portion of the financial framework, the collapse of an additional institution could critically obstruct access to essential financial services, an issue acutely felt within banking systems characterized by high levels of concentration of risks.²¹⁵

Echoing this perspective, Acharya and Richardson delve deeper to portray systemic risk as the collective failure of monetary institutions and capital markets that leads to a pronounced reduction in cash flow to the real market.²¹⁶ They argue that in markets experiencing growth, escalating optimism can precipitate over-indebtedness among investors, which, in turn, leads to "insufficient cash flow to meet their obligations," as posited by the financial fragility hypothesis.²¹⁷ This scenario sets the stage for distressed sales and highlights how market volatilities, though appearing systematic, may spiral into systemic challenges.²¹⁸

Billio and others identify abrupt shifts within the financial system as clear indicators of systemic risk.²¹⁹ The economy's oscillation between periods of stability during growth and heightened instability during downturns underscores the dynamic nature of systemic risk.²²⁰ The

²¹³ Tobias Adrian and Markus K Brunnermeier, 'CoVaR' (2016) 106(7) American Economic Review 1705, 1708.

²¹⁴ Viral V Acharya, 'A Theory of Systemic Risk and Design of Prudential Bank Regulation' (2009) 5(3) *Journal of Financial Stability* 224, 227.

²¹⁵ Xavier Vives, 'Competition and Stability in Banking' (2010) 27(1) *International Journal of Industrial Organization* 52, 55.

²¹⁶ Viral V Acharya and others, 'Measuring Systemic Risk' (2017) 30(1) Review of Financial Studies 2, 4.

²¹⁷ Viral V Acharya and Matthew P Richardson, 'Causes of the Financial Crisis' (2009) 21(2–3) *Journal of Politics and Society* 195, 198.

²¹⁸ Markus K Brunnermeier, 'Deciphering the Liquidity and Credit Crunch 2007–2008' (2009) 23(1) *Journal of Economic Perspectives* 77, 81.

²¹⁹ Monica Billio and others, 'Econometric Measures of Connectedness and Systemic Risk in the Finance and Insurance Sectors' (2012) 104 *Journal of Financial Economics* 535, 538.

²²⁰ E Beretta, 'On the Inflation-Debt-Bubble "Vicious Cycle" in Times of Evolving Money—A Memorandum of Forward-Looking Lessons' (2024) *Economies* https://www.mdpi.com/2227-7099/12/2/26 accessed 26 June 2020.

probability of significant financial disturbances is intrinsically linked to the level of interconnectedness among financial institutions' assets, their sensitivity to fluctuations in market prices and economic conditions, and the directionality of these sensitivities.²²¹ The concentration of risks among financial entities and their intricate web of interconnections are pivotal factors that influence the overall stability and remuneration within the financial system.²²²

Broadly construed, systemic risk encompasses the risk of a negative event causing extensive harm to the entire financial system and the broader economy. This catastrophic potential can emanate from a variety of sources: a macroeconomic downturn, the failure of a single market entity that echoes through the system owing to tight interconnections, or disruptions in the flow of information within financial markets. The researcher narrows the thematic focus to systemic fiscal stress, which arises when market participants grapple with escalating uncertainty. This uncertainty prompts a recalibration of financial positions, leading to disparate assessments of anticipated losses and asset valuations. Financial stress, often marked by a significant information asymmetry between sellers and buyers of financial assets, can lead to an adverse selection scenario, plummeting the market value of assets well below

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²²¹ Viral V Acharya and others, 'Measuring Systemic Risk' (2017) 30(1) Review of Financial Studies 2, 5.

²²² Monica Billio and others, 'Econometric Measures of Connectedness and Systemic Risk in the Finance and Insurance Sectors' (2012) 104 *Journal of Financial Economics* 535, 540.

²²³ Steven L Schwarcz, 'Systemic Risk' (2008) 97 Georgetown Law Journal 193, 200.

²²⁴ Graciela L Kaminsky, Carmen M Reinhart and Carlos A Vegh, 'The Unholy Trinity of Financial Contagion' (2003) 17(4) *Journal of Economic Perspectives* 51, 54.

²²⁵ Markus K Brunnermeier, 'Deciphering the Liquidity and Credit Crunch 2007–2008' (2009) 23(1) *Journal of Economic Perspectives* 77, 84.

²²⁶ Andrei Shleifer and Robert Vishny, 'Fire Sales in Finance and Macroeconomics' (2011) 25(1) *Journal of Economic Perspectives* 29, 32.

their intrinsic worth.²²⁷ These assets, deemed illiquid, cannot be liquidated to raise funds without incurring considerable losses.²²⁸

Patro and others adopt a more pragmatic lens, characterizing systemic risk as the condition in which the entire financial system is mired in stress, precipitating credit and liquidity crises that significantly disrupt financial markets and the economy.²²⁹ The disruption leads to reduced capital availability and heightened capital losses.²³⁰ They further correlate systemic risk with credit risk calculation methodologies — the probability of default (PD), exposure at default (EAD), and loss given default (LGD) — proposing that systemic risk assessment might leverage the likelihood, severity, and exposure of systemic failure as key metrics.²³¹

Systemic risk, therefore, emerges from the activities of particular market participants or segments and their consequential negative impact on other participants, sectors, or the entire economy.²³² Its amplification is largely attributed to the growing interconnectivity within the global financial system.²³³ The impact of systemic risk is chiefly determined by the collective behaviour of financial institutions, the extent of their interconnectedness, and the interplay between financial markets and macroeconomic dynamics.²³⁴ Prior to the 2008 financial crisis, there was limited contemplation on whether the intrinsic structure of financial systems

²²⁷ Douglas W Diamond and Raghuram G Rajan, 'Fear of Fire Sales, Illiquidity Seeking, and Credit Freezes' (2011) 126(3) *Quarterly Journal of Economics* 557, 560.

²²⁸ Andrei Shleifer and Robert Vishny, 'Fire Sales in Finance and Macroeconomics' (2011) 25(1) *Journal of Economic Perspectives* 29, 34.

²²⁹ Dilip K Patro, Min Qi and Xian Sun, 'A Simple Indicator of Systemic Risk' (2013) 9 *Journal of Financial Stability* 105, 107

²³⁰ Ibid, 110.

²³¹ Ibid, 112.

²³² Steven L Schwarcz, 'Systemic Risk' (2008) 97 Georgetown Law Journal 193, 201.

²³³ Graciela L Kaminsky, Carmen M Reinhart and Carlos A Vegh, 'The Unholy Trinity of Financial Contagion' (2003) 17(4) *Journal of Economic Perspectives* 51, 58.

²³⁴ Viral V Acharya and others, 'Measuring Systemic Risk' (2017) 30(1) *Review of Financial Studies* 2, 8.

contributes to international financial instability.²³⁵ However, the rapid and powerful contagion witnessed at the onset of the international and European sovereign debt crises suggested that the compact structure of modern financial systems plays a critical role in the global propagation of systemic risk.²³⁶

A core challenge in managing instability in financial markets, both at local and global levels, is navigating the network-like structure in which governments, financial firms and markets are interlinked through bilateral financial agreements and transactions.²³⁷ Participation in such a network, while bolstering an individual financial institution's economic growth and efficiency, simultaneously exposes the institution and, by extension, its host nation, to potential externalities resulting from the actions of individual or collective agents.²³⁸ This interdependency within the financial system underscores the necessity for comprehensive and multifaceted strategies aimed at mitigating systemic risk, ensuring the stability and resilience of the financial landscape against the backdrop of an increasingly interconnected and dynamic global economy.²³⁹

Within the financial industry, systemic risk can emerge through various conduits such as credit or market mechanisms. A poignant example is Lehman Brothers Holdings Inc., whose operational incapacitation was due, in part, to the restricted access to cash resources; its

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²³⁵ Stefano Battiston and others, 'Complexity Theory and Financial Regulation' (2016) 351 Science 818, 820.

²³⁶ Monica Billio and others, 'Econometric Measures of Connectedness and Systemic Risk in the Finance and Insurance Sectors' (2012) 104 *Journal of Financial Economics* 535, 543.

²³⁷ Darrell Duffie, 'Replumbing Our Financial System: Uneven Progress' (2018) 9 *International Journal of Central Banking* 251, 253.

²³⁸ Ricardo J Caballero and Alp Simsek, 'Pecuniary Externalities in Economies with Financial Frictions' (2018) 85 *Review of Economic Studies* 352, 355; Barry Eichengreen and Jeffrey A Frankel, 'The Empirics of International Currencies: Network Externalities, History and Persistence' (2009) 119 *Economic Journal* 643, 647.

²³⁹ Emilios Avgouleas, Governance of Global Financial Markets: The Law, the Economics, the Politics (CUP 2012) 91.

subsidiaries, particularly those in Europe and Asia, faced liquidity crises.²⁴⁰ This predicament arose because Lehman declared bankruptcy without adequately distributing cash allocations among its subsidiaries, illustrating a direct channel through which systemic risk can materialise.²⁴¹

Moreover, risks can proliferate through market channels, especially when certain financial institutions, deemed significantly important, act as principal investors or liquidity providers for specific asset classes.²⁴² This creates a scenario where systemic risk becomes a pervasive concern, largely because individual investors and firms, participating either directly or indirectly in the market, find it impracticable to shield themselves against such risks at a sustainable cost.²⁴³

In their joint report to the G-20 Finance Ministers and Central Bank Governors, the Financial Stability Board (FSB), the International Monetary Fund (IMF) and the Bank of International Settlement (BIS) articulate systemic risk as the danger of disruptions to financial services.²⁴⁴ These disruptions are triggered by impairments within the financial system, capable of precipitating severe adverse impacts on the real economy.²⁴⁵ The apprehension surrounding systemic risks stems from the potential for issues within one financial institution to propagate, infect others (a phenomenon known as contagion), or even precipitate the collapse of the entire

²⁴⁰ Michael Fleming and Asani Sarkar, 'The Failure Resolution of Lehman Brothers' (2014) 20(3) *Economic Policy Review* 175, 178.

²⁴¹ Ibid, 182.

²⁴² Tobias Adrian and Markus K Brunnermeier, 'CoVaR' (2016) 106(7) American Economic Review 1705, 1710.

²⁴³ Steven L Schwarcz, 'Systemic Risk' (2008) 97 Georgetown Law Journal 193, 204.

²⁴⁴ Financial Stability Board, IMF and BIS, *Guidance to Assess the Systemic Importance of Financial Institutions, Markets and Instruments: Initial Considerations and Background Paper* (Report to G20 Finance Ministers and Governors, October 2009) http://www.bis.org/publ/othp07.pdf accessed 30 September 2021.

²⁴⁵ International Monetary Fund, *Global Financial Stability Report* (IMF 2018) 14.

system.²⁴⁶ Such risks are birthed through the actions of various market actors, leading to risk accumulation by entities incapable of bearing the risks independently, whose insolvency would cause significant disarray in the financial system, thus jeopardizing other market participants.²⁴⁷

The dilemma of too big to fail is intimately linked with systemic risks. The concept of too big to fail underscores a global reluctance to allow the failure of systemically important financial institutions (SIFIs), as evidenced by numerous state bailouts and government interventions during the Global Financial Crisis (GFC) aimed at thwarting systemic contagion and revitalizing capital markets.²⁴⁸

Despite the frequent invocation of systemic risk in financial discussions, a universally accepted definition remains elusive. Yet, the theme of pervasive market failure consistently features in these debates. Diverse interpretations of systemic hazard refer to it as a precipitating event, like an economic shock or institutional failure, which sets off a domino effect of adverse economic outcomes.²⁴⁹ Hedge funds, for instance, are often viewed as potential destabilizers of markets due to their roles in transmitting and spreading financial shocks.²⁵⁰ In reacting to a bank failure, they may amplify the repercussions of financial disturbances, thereby spreading the impact further. Although not the root cause of systemic risk, their reactions can intensify the fallout from such events.²⁵¹ The 2008 financial crisis shed light on how systemic risk emerges through

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²⁴⁶ Steven L Schwarcz, 'Systemic Risk' (2008) 97 Georgetown Law Journal 193, 206.

²⁴⁷ Ibid, 210.

²⁴⁸ John Armour and others, 'Making Bank Resolution Credible' in Niamh Moloney, Eilis Ferran and Jennifer Payne (eds), *The Oxford Handbook of Financial Regulation* (OUP 2015) 611.

²⁴⁹ Graciela L Kaminsky, Carmen M Reinhart and Carlos A Vegh, 'The Unholy Trinity of Financial Contagion' (2003) 17(4) *Journal of Economic Perspectives* 51, 60.

²⁵⁰ Robert A Eisenbeis and George G Kaufman, 'Cross-Border Banking and Financial Stability in the EU' (2008) 4(3) *Journal of Financial Stability* 168, 171.

²⁵¹ Ibid, 175.

interbank connections and common shocks, prompting a regulatory shift from monitoring risks at the level of individual institutions to considering failures across the entire system.²⁵²

Understanding the architecture of modern finance is crucial for evaluating how such common shocks propagate. Banks and other significant financial entities engage in the markets through lending, trading and holding assets. The adoption of derivatives for hedging, position-taking, and the expansive process of securitization now constitute core activities for banks. The Basel Accords' adoption of mark-to-market accounting for valuing a bank's balance sheet assets — at their current market value — means that a decline in these assets' market value can lead to substantial balance sheet deficits, potentially pushing the bank towards insolvency. The intricate web of financial activities and regulatory frameworks highlights the multifaceted nature of systemic risk and underscores the importance of comprehensive strategies to mitigate such risks, ensuring the stability and resilience of the global financial system.

The 2008 financial crisis starkly highlighted how standard shocks, particularly through the collapse of the collateralized debt obligations market, can serve as a catalyst for systemic disruption, leading to a freeze in the repo market and subsequent widespread system instability.²⁵⁶ These standard shocks are not confined to local markets; they can manifest on a global scale, exemplified when banks' investment in homogeneous asset types leads to a swift decline in asset values, eroding the capital base and affecting interbank relationships.²⁵⁷

²⁵² Robert F Weber, 'New Governance, Financial Regulation, and Challenges to Legitimacy: The Example of the Internal Models Approach to Capital Adequacy Regulation' (2010) 62 *Administrative Law Review* 783, 789.

²⁵³ Erik F Gerding, 'Credit Derivatives, Leverage, and Financial Regulation's Missing Macroeconomic Dimension' (2011) 8(2) *Berkeley Business Law Journal* 29, 31.

²⁵⁴ Ibid, 35.

²⁵⁵ Emilios Avgouleas, *Governance of Global Financial Markets: The Law, the Economics, the Politics* (CUP 2012) 110. ²⁵⁶ Gary B Gorton and Andrew Metrick, 'Securitized Banking and the Run on Repo' (2012) 104(3) *Journal of Financial* Fig. 125, 126

²⁵⁷ Viral V Acharya and others, 'Measuring Systemic Risk' (2017) 30(1) *Review of Financial Studies* 2, 5.

Additionally, liquidity constraints present a similar risk. For instance, the 1998 Russian crisis saw international investors liquidating positions in the Brazilian debt market to cover losses in Russian securities, demonstrating the interconnectedness of global markets.²⁵⁸ Similarly, in 2007, the U.S. subprime mortgage crisis had a profound effect on European banks that had previously invested heavily in such products, showcasing the far-reaching impacts of localized financial shocks.²⁵⁹

Systemic risk encompasses a broad spectrum of outcomes, from significant losses within a single entity to the complete breakdown of multiple markets. It can be characterized by various types, some rooted in causality while others focus on the impact.²⁶⁰ At its core, systemic risk involves large-scale defaults that restrict access to capital or credit across an industry, specific market, or the financial system as a whole.²⁶¹ A critical aspect of systemic risk is its capacity to significantly affect the real economy, such as through decreased productive investment or destabilization of economic activity, due to reduced credit availability.²⁶² The transmission of financial disruptions to the real economy marks a systemic crisis, setting it apart from mere financial disturbances.²⁶³

On the credit front, systemic risk inversely correlates with credit availability; as access to credit diminishes, systemic risk escalates.²⁶⁴ Situations where lending institutions fail en masse,

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²⁵⁸ Graciela L Kaminsky, Carmen M Reinhart and Carlos A Vegh, 'The Unholy Trinity of Financial Contagion' (2003) 17(4) *Journal of Economic Perspectives* 51, 54.

²⁵⁹ Erik F Gerding, 'Credit Derivatives, Leverage, and Financial Regulation's Missing Macroeconomic Dimension' (2011) 8(2) *Berkeley Business Law Journal* 29, 33.

²⁶⁰ Steven L Schwarcz and Iman Anabtawi, 'Regulating Systemic Risk: Towards an Analytical Framework' (2011) 86 *Notre Dame Law Review* 1349, 1352-1355.

²⁶¹ Emilios Avgouleas, Governance of Global Financial Markets: The Law, the Economics, the Politics (CUP 2012) 70.

²⁶² Anat R Admati and Martin F Hellwig, *The Bankers' New Clothes: What's Wrong with Banking and What to Do About It* (Princeton University Press 2013), 41.

²⁶⁴ Steven L Schwarcz, 'Systemic Risk' (2008) 97 Georgetown Law Journal 193, 198.

halting the provision of capital and liquidity to the market, exemplify this dynamic.²⁶⁵ The resultant scarcity of capital and credit, coupled with soaring borrowing costs, exacerbates loan affordability issues.²⁶⁶ In modern financial markets, including securities, commodities trading, and over-the-counter markets, businesses increasingly bypass intermediary banking institutions to raise capital directly from the public.²⁶⁷

Systemic risk also pertains to the likelihood that an unexpected failure in one market can affect interconnected markets, driven by diverse trading strategies and the interdependency of key market participants.²⁶⁸ A default by one player can have domino effects on others due to the intricate web of financial market interconnections.²⁶⁹ For example, a default in Market X by Customer A could jeopardize Intermediary B's obligations in Markets X, Y, and Z. The emergence of systemic risk stems from the potential for a failure in one market to precipitate failures in others, leading to acute liquidity shortages in secondary markets characterized by an oversupply of sellers and a paucity of buyers.²⁷⁰ Consequently, markets may find themselves in a highly illiquid state, with elevated capital costs.²⁷¹

These illustrations underscore the multifaceted nature of systemic risk and its profound implications for the stability of financial systems and the broader economy.²⁷² Understanding and mitigating systemic risk requires a comprehensive approach that accounts for the complex

²⁶⁵ Emilios Avgouleas, Governance of Global Financial Markets: The Law, the Economics, the Politics (CUP 2012) 93.

²⁶⁶ Anat R Admati and Martin F Hellwig, *The Bankers' New Clothes: What's Wrong with Banking and What to Do About It* (Princeton University Press 2013) 52.

²⁶⁷ Ibid, 53.

²⁶⁸ Steven L Schwarcz and Iman Anabtawi, 'Regulating Systemic Risk: Towards an Analytical Framework' (2011) 86 *Notre Dame Law Review* 1349, 1356.

²⁶⁹ Ibid, 1360.

²⁷⁰ Andrei Shleifer and Robert Vishny, 'Fire Sales in Finance and Macroeconomics' (2011) 25(1) *Journal of Economic Perspectives* 29, 31.

²⁷¹ Ibid, 35.

²⁷² Steven L Schwarcz, 'Systemic Risk' (2008) 97 Georgetown Law Journal 193, 201.

interrelations among financial institutions, markets, and the real economy.²⁷³ Policymakers and regulatory bodies play a crucial role in developing strategies to prevent systemic crises, including enhancing transparency, bolstering financial institutions' resilience, and ensuring effective oversight of financial markets.²⁷⁴ By addressing the root causes and transmission mechanisms of systemic risk, the financial system can be better equipped to withstand shocks, thereby safeguarding economic stability and promoting sustainable growth.²⁷⁵

The concept of "systemic risk" has been defined in various ways, yet it broadly encompasses the potential for a widespread collapse within the financial sector. This collapse is often characterized by a chain of interconnected defaults among financial institutions, primarily banks, within a concise timeframe, typically triggered by a singular, significant event.²⁷⁶ In response to the complexities surrounding systemic risk, legislative measures such as the Dodd-Frank Act have aimed to mitigate potential systemic risks, particularly focusing on hedge funds. The Volcker Rule, a component of the Act, restricts proprietary trading and investments in hedge sponsorship funds and private equity funds by banking entities.²⁷⁷ The objectives of these regulations include addressing the intricate interconnectedness of hedge funds with large complex financial institutions (LCFIs), curtailing the cross-subsidization of private funds by depository institutions benefiting from government guarantees, and overseeing conflicts of interest between banks, their clientele, and private funds.²⁷⁸ The rationale is that the collapse of

²⁷³ John Armour and others, *Principles of Financial Regulation* (OUP 2016) 77.

²⁷⁴ Julia Black, *Restructuring Global and EU Financial Regulation: Capacities, Coordination and Learning* (LSE Law, Society and Economy Working Paper 18/2010, London School of Economics and Political Science) 12.

²⁷⁵ Emilios Avgouleas, Governance of Global Financial Markets: The Law, the Economics, the Politics (CUP 2012) 102.

²⁷⁶ Steven L Schwarcz, 'Systemic Risk' (2008) 97 Georgetown Law Journal 193, 205.

²⁷⁷ Saule T Omarova, 'The Merchants of Wall Street: Banking, Commerce, and Commodities' (2013) 98 *Minnesota Law Review* 265, 270.

²⁷⁸ Marco Bodellini, 'From Systemic Risk to Financial Scandals: The Shortcomings of US Hedge Fund Regulation' (2017) 11 *Brooklyn Journal of Corporate, Financial & Commercial Law* 417, 452.

certain funds could severely impact the broader economy, given hedge funds' collaborative relationships with investment banks.²⁷⁹ The investment banks provide the leverage for and facilitate participation in various derivative transactions for hedge funds, potentially exposing them to significant losses if trades do not align with a hedge fund advisor's expectations.²⁸⁰

Central banks seldom articulate explicit definitions of systemic risk, often preferring to describe financial stability or instability rather than delineating the specifics of financial crises and systemic risk.²⁸¹ When definitions are provided, they tend to focus on threats to the entire financial system or payment system impairments leading to the inability to meet obligations.²⁸² Despite the variances in definitions, the consensus remains that systemic risk poses a substantial threat to financial stability, capable of instigating widespread disturbances that can proliferate across entities, markets, and nations.²⁸³

Considering systemic risk, it is critical to acknowledge how financial exposures have evolved, manifesting in forms outside traditional banking parameters. Various financial entities now offer services historically exclusive to banks, circumventing the established banking framework.²⁸⁴ Securitization, for instance, has introduced new capital financing avenues for various borrowing types traditionally monopolized by banks, such as trade credit and revolving credit agreements.²⁸⁵ This emergence of what is often termed the "shadow banking system,"

²⁷⁹ Kathryn Judge, 'The First Year: The Role of a Modern Lender of Last Resort' (2012) 116 *Columbia Business Law Review* 843, 846.

²⁸⁰ Daniel Schwarcz and David Zaring, 'Regulation by Threat: Dodd–Frank and the Nonbank Problem' (2017) 84 *University of Chicago Law Review* 1813, 1816.

²⁸¹ Rosa M Lastra, 'Systemic Risk, SIFIs and Financial Stability' (2011) 6 Capital Markets Law Journal 197, 200.

²⁸² Douglas W Arner, 'The Global Credit Crisis of 2008: Causes and Consequences' (2009) 43 *The International Lawyer* 91, 95

²⁸³ Steven L Schwarcz, 'Systemic Risk' (2008) 97 Georgetown Law Journal 193, 210.

²⁸⁴ Kathryn Judge, 'Information Gaps and Shadow Banking' (2017) 103 Virginia Law Review 411, 415.

²⁸⁵ Erik F Gerding, 'Credit Derivatives, Leverage, and Financial Regulation's Missing Macroeconomic Dimension' (2011) 8 *Berkeley Business Law Journal* 29, 34.

comprising investment banks, hedge and mutual funds, insurance companies, and other financial intermediaries, has significantly contributed to meeting the liquidity demands of the global economy in recent decades, facilitating economic growth and prosperity.²⁸⁶ However, the shadow banking system, as its name implies, operates outside the purview of regulatory bodies tasked with managing liquidity risk, rendering market players ill-prepared for financial crises and lacking the appropriate mechanisms for effective crisis management.²⁸⁷

The dialogue surrounding systemic risk underscores the necessity for comprehensive oversight and regulation of the financial sector, including entities operating within and beyond traditional banking systems.²⁸⁸ As financial markets evolve and new forms of financial intermediation emerge, the potential for systemic risk expands, necessitating vigilant regulatory frameworks to safeguard financial stability.²⁸⁹ This entails not only regulating the activities of banks and investment funds but also addressing the broader ecosystem of financial intermediation that includes the shadow banking sector.²⁹⁰ By enhancing transparency, improving risk management practices, and ensuring adequate liquidity provisions, regulators can mitigate the impact of systemic risks, thereby contributing to the resilience and robustness of the global financial system.²⁹¹

Given the complexity and interconnectedness of modern financial markets, identifying the specific attributes of financial institutions and market operations that significantly influence

²⁸⁶ Steven L Schwarcz, 'Regulating Shadow Banking' (2012) 31 Review of Banking and Financial Law 619, 622.

²⁸⁷ Kathryn Judge, 'Information Gaps and Shadow Banking' (2017) 103 Virginia Law Review 411, 420.

²⁸⁸ Julia Black, 'Managing Regulatory Risks and Defining the Parameters of Blame: A Focus on the Australian Prudential Regulation Authority' (2006) 28 *Law & Policy* 1, 6.

²⁸⁹ Robert F Weber, 'New Governance, Financial Regulation, and Challenges to Legitimacy: The Example of the Internal Models Approach to Capital Adequacy Regulation' (2010) 62 *Administrative Law Review* 783, 788.

²⁹⁰ Steven L Schwarcz, 'Regulating Shadow Banking' (2012) 31 Review of Banking and Financial Law 619, 630.

²⁹¹ Emilios Avgouleas, Governance of Global Financial Markets: The Law, the Economics, the Politics (CUP 2012) 115.

systemic risk has become a paramount concern. The interdependence of various financial market participants and segments raises significant alarms regarding the stability of global financial markets. This connectivity can catalyse systemic risk, characterized by the potential for an economic shock to trigger a cascade of failures across the financial system.²⁹² Such a 'domino effect' can be initiated by a breakdown in a single financial intermediary or market, often spurred by a sudden loss of investor confidence, which then proliferates throughout the financial system due to intricate financial relationships and interdependencies.²⁹³

The unchecked growth of financial instruments has been flagged as a potential source of significant variability and instability within the financial system.²⁹⁴ This proliferation can lead to market conditions where trading volumes swell excessively, captivating investor interest but compromising overall market soundness.²⁹⁵ In markets considered complete and arbitrage-free, the introduction of derivative contracts can create asymmetries, offering multiple paths to achieve identical financial outcomes but also enabling unbounded fluctuations within the market's phase space.²⁹⁶ Essentially, the financial industry can be viewed as a factory of asymmetries, where the creation of financial innovation introduces new dimensions of risk and instability.²⁹⁷

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²⁹² Steven L Schwarcz, 'Systemic Risk' (2008) 97 Georgetown Law Journal 193, 213.

²⁹³ Robert F Weber, 'A Theory for Deliberation-Oriented Stress Testing Regulation' (2014) 98 *Minnesota Law Review* 2236, 2240.

²⁹⁴ Erik F Gerding, 'Credit Derivatives, Leverage, and Financial Regulation's Missing Macroeconomic Dimension' (2011) 8 *Berkeley Business Law Journal* 29, 38.

²⁹⁵ Kathryn Judge, 'Information Gaps and Shadow Banking' (2017) 103 Virginia Law Review 411, 423.

²⁹⁶ Dan Awrey, 'Complexity, Innovation, and the Regulation of Modern Financial Markets' (2012) 2 *Harvard Business Law Review* 235, 240.

²⁹⁷ Erik F Gerding, 'Credit Derivatives, Leverage, and Financial Regulation's Missing Macroeconomic Dimension' (2011) 8 *Berkeley Business Law Journal* 29, 42.

Financial innovations, particularly those involving complex financial instruments based on loan securitization, have been implicated in the genesis of the financial crises that began in 2007.²⁹⁸ These innovations created a chain of participants from the original lender to the final investor, with diminishing information about the quality of loans as one moves along this chain.²⁹⁹ The lack of incentive for the original lender to monitor loan quality, given that these loans would not remain on their balance sheet, embedded a culture of risk-taking that ultimately contributed to the crisis.³⁰⁰ The subprime mortgage crisis, as argued by the Judge, resulted from this opaque and complex securitization structure, leading to contagion, pricing opacity and inadequate risk mitigation.³⁰¹

Addressing the regulatory framework involves considering measures such as restricting leverage and enforcing liquidity requirements to bolster the financial system's resilience to systemic shocks.³⁰² The size of a bank and its asset growth are crucial risk exposure elements, yet they have not been the central focus of recent regulatory reforms.³⁰³ Implementing a cap on total bank size has been proposed as a means to reduce a bank's failure risk in the face of systemic events.³⁰⁴ This approach necessitates examining the relationship between a bank's size and the scale of the local economy, recognizing that the systemic significance of a bank may vary with the economic context in which it operates.³⁰⁵

²⁹⁸ Kathryn Judge, 'Information Gaps and Shadow Banking' (2017) 103 Virginia Law Review 411, 426.

²⁹⁹ Ibid, 427.

³⁰⁰ Ibid, 430.

³⁰¹ Kathryn Judge, 'The First Year: The Role of a Modern Lender of Last Resort' (2016) 116 Columbia Law Review 843, 850.

³⁰² Anat R Admati, 'The Missed Opportunity and Challenge of Capital Regulation' (2016) 235 *National Institute Economic Review* R4, R6.

³⁰³ Andrew Haldane, 'The \$100 Billion Question' (2010) 12 Revista de Economía Institucional 22, 26.

³⁰⁴ Andrew Haldane, 'The \$100 Billion Question' (2010) 12 Revista de Economía Institucional 22, 30.

³⁰⁵ Charles K Whitehead, 'The Goldilocks Approach: Financial Risk and Staged Regulation' (2012) 97 Cornell Law Review 1267, 1270.

The Basel Committee (2011) and the Dodd-Frank Act have responded to these challenges by imposing higher capital standards on large, systemically significant banks and subjecting such institutions to special supervision by the Federal Reserve, including the potential application of additional capital surcharges.³⁰⁶ These measures aim to mitigate the risks posed by banks that, due to their size, complexity, and interconnectedness, could significantly disrupt the financial system and harm economic activity if they were to fail.³⁰⁷

Systemic risk, with its multifaceted origins and impacts, requires a comprehensive and nuanced approach to regulation and oversight.³⁰⁸ By understanding the contributory factors to systemic risk, including the role of financial innovation, leverage, and the size and interconnectedness of financial institutions, policymakers and regulators can better design and implement strategies to safeguard financial stability.³⁰⁹ The goal is to create a regulatory environment that not only addresses the challenges posed by the current financial system but also anticipates and mitigates potential sources of systemic risk in the future.³¹⁰

2.4 Leverage

Leverage, a topic of considerable debate within the financial sector, is recognized as a significant source of systemic risk. High levels of leverage can cause institutions to suffer losses in an exponential manner, especially when the losses surpass a certain threshold relative to the

³⁰⁶ Basel Committee on Banking Supervision, Global Systemically Important Banks: Assessment Methodology and the Additional Loss Absorbency Requirement (Rules Text, 2011).

³⁰⁸ Steven L Schwarcz, 'Systemic Risk' (2008) 97 Georgetown Law Journal 193, 197.

³⁰⁹ Julia Black, *Restructuring Global and EU Financial Regulation: Capacities, Coordination and Learning* (LSE Law, Society and Economy Working Paper 18/2010, London School of Economics and Political Science) 10.

³¹⁰ Emilios Avgouleas, Governance of Global Financial Markets: The Law, the Economics, the Politics (CUP 2012) 76.

institution's size.³¹¹ This situation drastically reduces an institution's ability to fulfil its debt obligations, thereby increasing the risk of insolvency.³¹² Such conditions can instigate a domino effect, with the failure of one institution potentially leading to a series of defaults across the financial system.³¹³ This cascading failure phenomenon underscores the complexity and interconnectedness that characterize systemic risk transmission. When an institution is overleveraged and faces more losses than it can cover with available liquidity, the likelihood of insolvency rises, which, in turn, can exacerbate the financial strain on the institution's creditors.³¹⁴ Consequently, this can trigger a chain reaction of defaults, especially if other institutions, similarly leveraged, struggle to meet their own obligations.³¹⁵

Despite its critical role, there is no universally agreed-upon method for measuring leverage.³¹⁶ Conceptually, leverage is understood as creating financial exposure that exceeds the capital invested.³¹⁷ This is often quantified in hedge funds as the debt-to-equity ratio, calculated by summing the market value of all short and long positions and dividing by the equity capital.³¹⁸ However, the challenge in measuring leverage lies in determining which leveraged positions should be counted.³¹⁹ The inclusion of derivatives in this calculation is contentious since, while

³¹¹ Charles K Whitehead, 'The Goldilocks Approach: Financial Risk and Staged Regulation' (2012) 97 Cornell Law Review 1267, 1272.

³¹² Patricia A McCoy, 'Systemic Risk Oversight and the Shifting Balance of State and Federal Authority over Insurance' (2015) 5 *UC Irvine Law Review* 1389, 1395.

³¹³ Saule T Omarova, 'License to Deal: Mandatory Approval of Complex Financial Products' (2012) 90 *Washington University Law Review* 63, 70.

³¹⁴ Charles K Whitehead, 'The Goldilocks Approach: Financial Risk and Staged Regulation' (2012) 97 Cornell Law Review 1267, 1275.

³¹⁵ Saule T Omarova, 'License to Deal: Mandatory Approval of Complex Financial Products' (2012) 90 Washington University Law Review 63, 72.

³¹⁶ Dan Awrey, 'Complexity, Innovation, and the Regulation of Modern Financial Markets' (2013) 2 *Harvard Business Law Review* 235, 240.

³¹⁷ Erik F Gerding, 'Credit Derivatives, Leverage, and Financial Regulation's Missing Macroeconomic Dimension' (2011) 8 *Berkeley Business Law Journal* 29, 34.

³¹⁸ Dan Awrey, 'Complexity, Innovation, and the Regulation of Modern Financial Markets' (2013) 2 *Harvard Business Law Review* 235, 244.

³¹⁹ Ryan K Brissette, 'The Volcker Rule's Unintended Consequences' (2011) 15 North Carolina Banking Institute 231, 236.

they do not represent borrowed money, they nonetheless increase exposure to underlying assets through what can be termed artificial leverage.³²⁰ Derivatives act as a form of leverage because they allow the borrower to engage in contracts at a total rate with only a margin upfront.³²¹

The leverage that amplifies the risk faced by individual banking firms, indicating a heightened exposure to financial shocks, can paradoxically undermine the overall stability of the financial system when attempts are made to reduce it.³²² Banks engaged in traditional business models are generally considered less risky than those dealing in modern financial instruments.³²³ Yet, regulatory changes and technological advancements have fundamentally transformed the banking landscape, prompting banks to innovate and expand into new areas of business previously unexplored.³²⁴

Regulatory reforms post the financial crisis were designed to curtail the risky behaviours of traditional banks that contributed to the crisis. By identifying certain institutions as "systemically important," regulators have imposed a range of reporting and structural requirements on those entities.³²⁵ Additionally, the advent of new regulatory bodies aimed to oversee the sector more closely and enhance consumer protection.³²⁶ Amidst these changes, the financial services industry is experiencing a shift towards decentralization, with an increasing presence of small start-ups targeting specific niches within the financial market.³²⁷ This

³²⁰ Dan Awrey, 'Complexity, Innovation, and the Regulation of Modern Financial Markets' (2013) 2 *Harvard Business Law Review* 235, 250.

³²¹ Erik F Gerding, 'Credit Derivatives, Leverage, and Financial Regulation's Missing Macroeconomic Dimension' (2011) 8 *Berkeley Business Law Journal* 29, 40.

³²² Anat R Admati, 'The Compelling Case for Stronger and More Effective Leverage Regulation in Banking' (2014) 43 *Journal of Legal Studies* S35, S38.

³²³ Kathryn Judge, 'Interbank Discipline' (2012) 60 UCLA Law Review 1262, 1265.

³²⁴ Chris Brummer and Yesha Yadav, 'Fintech and the Innovation Trilemma' (2018) 107 Georgetown Law Journal 235, 240.

³²⁵ Patricia A McCoy, 'Countercyclical Regulation and Its Challenges' (2015) 47 Arizona State Law Journal 1181, 1186.

³²⁶ John Armour and others, 'Making Bank Resolution Credible' in Niamh Moloney, Eilís Ferran and Jennifer Payne (eds), *The Oxford Handbook of Financial Regulation* (OUP 2015) 497.

³²⁷ Chris Brummer, 'Disruptive Technology and Securities Regulation' (2015) 84(4) *Fordham Law Review* 977, 981.

evolution reflects the dynamic nature of financial services and underscores the challenges and opportunities presented by the emerging landscape of fintech and other innovative financial technologies.³²⁸

The developments signify a critical juncture in the management of systemic risk within the financial system. As traditional and modern financial practices converge, the need for comprehensive regulatory strategies that can adapt to the changing nature of financial risks becomes ever more apparent.³²⁹ The role of leverage in amplifying systemic risk, coupled with the diversification of financial services, calls for a nuanced understanding of the mechanisms through which financial shocks are transmitted and the ways in which they can be mitigated.³³⁰ In navigating this complex terrain, policymakers and regulators must balance the imperative for financial stability with the benefits of innovation and competition that drive the sector forward.³³¹

2.5 FinTech

The emergence of financial technology (FinTech) marks a significant shift within the evolving landscape of the financial market. This sector, comprised of startups and ventures backed by venture capital, leverages advancements in big data analytics and technology to revolutionize

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³²⁸ Chris Brummer and Yesha Yadav, 'Fintech and the Innovation Trilemma' (2019) 107 *Georgetown Law Journal* 235, 243. ³²⁹ Julia Black, 'Managing Regulatory Risks and Defining the Parameters of Blame: A Focus on the Australian Prudential Regulation Authority' (2006) 28 *Law & Policy* 1, 7.

³³⁰ Charles K Whitehead, 'The Goldilocks Approach: Financial Risk and Staged Regulation' (2012) 97 Cornell Law Review 1267, 1279.

³³¹ Saule T Omarova, 'New Tech v New Deal: Fintech as a Systemic Phenomenon' (2019) 36 Yale Journal on Regulation 735, 740.

the provision of financial services.³³² However, the ascent of FinTech introduces complexities to existing regulatory frameworks, challenging their adequacy and adaptability.³³³

From a systemic risk standpoint, FinTech poses unique challenges for several reasons. Firstly, the inherent size and strategic orientation of FinTech firms render them more susceptible to adverse financial shocks compared to their larger financial counterparts, with a heightened risk of these shocks proliferating throughout the industry.³³⁴ Furthermore, the FinTech sector is characterized by issues related to collective action, where the inherent competition and diversity among market players hinder collaborative efforts to address common challenges.³³⁵ These issues underscore a distinct set of regulatory challenges posed by FinTech, often surpassing those associated with more traditional financial entities in terms of complexity and severity.³³⁶

The interconnectedness inherent in the modern financial system plays a pivotal role in the manifestation of financial crises.³³⁷ The intricate web of relationships among financial institutions means that fluctuations in one part of the system can have far-reaching effects, jeopardizing the stability of the entire financial market.³³⁸ This highlights the importance of understanding and managing the connectivity within the financial system to safeguard against systemic risks.³³⁹

³³² Chris Brummer and Yesha Yadav, 'Fintech and the Innovation Trilemma' (2019) 107 Georgetown Law Journal 235, 250.

³³³ Julia Black, 'Managing Regulatory Risks and Defining the Parameters of Blame: A Focus on the Australian Prudential Regulation Authority' (2006) 28 *Law & Policy* 1, 10.

³³⁴ Chris Brummer and Yesha Yadav, 'Fintech and the Innovation Trilemma' (2019) 107 Georgetown Law Journal 235, 252.

³³⁶ Rory Van Loo, 'Making Innovation More Competitive: The Case of Fintech' (2018) 65 UCLA Law Review 232, 238.

³³⁷ Steven L Schwarcz, 'Systemic Risk' (2008) 97 Georgetown Law Journal 193, 210.

³³⁸ Ibid, 220

³³⁹ Julia Black, 'Paradoxes and Failures: "New Governance" Techniques and the Financial Crisis' (2012) 75 Modern Law Review 1037, 1042.

2.6 Systemically Important Financial Institutions (SIFIs)

Systemically Important Financial Institutions (SIFIs) are identified based on their potential to induce significant disruptions within the financial system due to their size, complexity, and level of interconnectedness, adversely affecting economic activity.³⁴⁰ The Basel Committee on Banking Supervision categorizes the criteria for determining the systemic relevance of banks into three main areas: interconnectedness, complexity, and size.³⁴¹ Additionally, for Global Systemically Important Banks (G-SIBs), factors such as the absence of viable substitutes for the financial services they provide and their global activities are also considered.³⁴² These criteria aim to identify institutions whose failure would pose substantial risks to financial stability and economic well-being.³⁴³

The concept of "Too Big To Fail" (TBTF) institutions has evolved into a critical issue within public policy discourse. Efforts to mitigate the TBTF problem have faced challenges, partly due to the varied interpretations of what constitutes a TBTF institution.³⁴⁴ This term and its variants, such as "too big to unwind," "too big to liquidate," and "too interconnected to fail," reflect diverse rationales for governmental intervention and have implications for how the losses of insolvent firms' stakeholders are addressed.³⁴⁵ Definitions of TBTF vary, focusing on which counterparties require protection to minimize the collateral damage ensuing from a firm's

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³⁴⁰ Volker Brühl, 'How to Define a Systemically Important Financial Institution – A New Perspective' (2017) 52(2) *Intereconomics* 107, 111.

³⁴¹ Basel Committee on Banking Supervision, Global Systemically Important Banks: Updated Assessment Methodology and the Higher Loss Absorbency Requirement (July 2013).

³⁴³ Steven L Schwarcz, 'Systemic Risk' (2008) 97 Georgetown Law Journal 193, 225.

³⁴⁴ Kathryn Judge, 'Guarantor of Last Resort' (2019) 97 Texas Law Review 707, 710.

³⁴⁵ Kathryn Judge, 'Guarantor of Last Resort' (2019) 97 Texas Law Review 707, 713.

failure, the entities responsible for funding such protection, and the underlying reasons for these protective measures.³⁴⁶

The rise of FinTech, the delineation of SIFIs, and the ongoing debate around TBTF institutions underscore the evolving nature of the financial industry and the complexities involved in ensuring its stability.³⁴⁷ Regulatory frameworks must adapt to these changes, addressing the unique challenges posed by new market entrants like FinTech firms, managing the systemic risks associated with highly interconnected and complex financial institutions, and resolving the dilemmas presented by TBTF entities.³⁴⁸ As the financial sector continues to evolve, regulatory approaches must be forward-looking and flexible, capable of safeguarding financial stability while fostering innovation and competition within the industry.³⁴⁹

2.7 Methods of Mitigating Systemic Risk:

The quest to mitigate systemic risk within the financial ecosystem involves a multifaceted approach, focusing on strengthening the resilience of financial institutions against the propagation of financial shocks that can lead to widespread economic turmoil. Among the strategies employed, the imposition of capital and liquidity requirements, the enhancement of governance structure and the improvement of financial supervision stand out as a cornerstone in a regulatory framework designed to enhance the stability of the financial system.³⁵⁰ This

³⁴⁶ Alan M White, 'Banks as Utilities' (2016) 90 Tulane Law Review 1241, 1245.

³⁴⁷ Julia Black, 'Managing Regulatory Risks and Defining the Parameters of Blame: A Focus on the Australian Prudential Regulation Authority' (2006) 28 *Law & Policy* 1, 12.

³⁴⁸ Chris Brummer and Yesha Yadav, 'Fintech and the Innovation Trilemma' (2019) 107 *Georgetown Law Journal* 235, 270. ³⁴⁹ Ibid. 275.

³⁵⁰ Claudio Borio, 'Towards a Macroprudential Framework for Financial Supervision and Regulation?' (2003) 49 CESifo Economic Studies 181, 184.

section delves into the nuances of these regulatory measures and their significance in the broader context of systemic risk mitigation.

2.7.1 Imposing Capital and Liquidity Requirements:

Capital requirements play a critical role in the broader framework of risk management for financial institutions, acting as a fundamental defence against systemic risk and financial instability.³⁵¹ The essence of capital lies in its function as a financial buffer, enabling banks to absorb unexpected losses and continue their operations without succumbing to insolvency.³⁵² The capacity for loss absorption is crucial not just for the survival of individual banks but for maintaining overall confidence in the financial system, especially during economic downturns or financial crises when asset values may decline precipitously.³⁵³

The strategic importance of capital extends beyond its role in cushioning losses; it also significantly influences the behaviour and incentives of banks regarding risk management.³⁵⁴ A higher capital level equates to more "skin in the game" for shareholders, which theoretically aligns their interests with the prudent management of the bank.³⁵⁵ This alignment is predicated on the assumption that with more equity at risk in the event of a bank's failure, shareholders, and by extension, bank managers, will be incentivized to adopt risk management practices that

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³⁵¹ Thorsten Beck, Asli Demirgüç-Kunt and Ross Levine, 'Bank Concentration, Competition, and Crises: First Results' (2006) 30 *Journal of Banking & Finance* 1581, 1586.

³⁵² Allen N Berger and Christa HS Bouwman, 'How Does Capital Affect Bank Performance During Financial Crises?' (2013) 109 *Journal of Financial Economics* 146, 152.

³⁵³ Markus K Brunnermeier and others, *The Fundamental Principles of Financial Regulation* (Geneva Reports on the World Economy 11, 2009).

³⁵⁴ Andrea Beltratti and René M Stulz, 'The Credit Crisis Around the Globe: Why Did Some Banks Perform Better?' (2012) 105 *Journal of Financial Economics* 1, 6.

³⁵⁵ Anat R Admati and others, 'Fallacies, Irrelevant Facts, and Myths in the Discussion of Capital Regulation: Why Bank Equity is Not Socially Expensive' (Max Planck Institute for Research on Collective Goods, 2013 Working Paper No 2013/23).

safeguard against undue risk-taking.³⁵⁶ However, the relationship is more nuanced, as stringent capital requirements, while reducing the incentive for reckless behaviour, can also inadvertently encourage banks to seek higher yields through increased risk exposure.³⁵⁷ This was notably observed following the Basel II regulations, where banks were found to increase their holdings of riskier assets to sustain profitability under tighter capital constraints.³⁵⁸

The systemic implications of capitalization underscore the interconnectedness of capital requirements, risk management practices and the broader economic landscape.³⁵⁹ Banks subjected to higher capital requirements may face elevated financing costs, leading to a contraction in lending and potential deleveraging.³⁶⁰ Such outcomes can ripple through the economy, impacting businesses' ability to invest and grow, thereby moderating economic activity.³⁶¹ The push towards higher capital standards can also drive banking activities into the less regulated sectors of the financial system, known as shadow banking, potentially heightening systemic risk.³⁶²

Capitalization levels not only influence risk management outcomes but can also lead to higher financing costs for banks, potentially reducing bank lending and prompting deleveraging.³⁶³ These outcomes can have systemic implications, affecting the broader

³⁵⁶ Luc Laeven and Ross Levine, 'Bank Governance, Regulation and Risk Taking' (2009) 93 *Journal of Financial Economics* 259, 261.

³⁵⁷ Hendrik Hakenes and Isabel Schnabel, 'Bank Size and Risk-Taking under Basel II' (2011) 35 *Journal of Banking & Finance* 1436, 1440.

³⁵⁸ Viral V Acharya, Hamid Mehran and Anjan Thakor, 'Caught Between Scylla and Charybdis? Regulating Bank Leverage When There is Rent Seeking and Risk Shifting' (2016) 27 *Review of Corporate Finance Studies* 36, 40.

³⁵⁹ Samuel G Hanson, Anil K Kashyap and Jeremy C Stein, 'A Macroprudential Approach to Financial Regulation' (2011) 25 *Journal of Economic Perspectives* 3, 5.

³⁶⁰ Leonardo Gambacorta and Hyun Song Shin, 'Why Bank Capital Matters for Monetary Policy' (2018) 48 *Journal of Financial Intermediation* 17, 21.

³⁶¹ Shekhar Aiyar, Charles W Calomiris and Tomasz Wieladek, 'Does Macro-Prudential Regulation Leak? Evidence from a UK Policy Experiment' (2014) 100 *Journal of Money, Credit and Banking* 181, 186.

³⁶² Tobias Adrian and Adam B Ashcraft, 'Shadow Banking Regulation' (2012) 4 *Annual Review of Financial Economics* 99, 103.

³⁶³ Reint Gropp and Florian Heider, 'The Determinants of Bank Capital Structure' (2010) 14 Review of Finance 587, 590.

economy through the transmission of financial shocks and responses.³⁶⁴ Moreover, the movement of financial intermediation outside the banking sector, facilitated by instruments like credit default swaps (CDSs) and financial guarantees, can further exacerbate systemic risk.³⁶⁵ To counter excessive leverage, financial products should be priced to accurately reflect risk, and issuers must maintain adequate long-term capital reserves to cover potential losses.³⁶⁶ The capital should be tailored to specific jurisdictional characteristics to avoid regulatory arbitrage and be designed to be countercyclical, thereby minimizing the risk of financial runs and ensuring stability even under stress.³⁶⁷

Before the 2008 crisis, significant financial entities, including banks and hedge funds, were heavily engaged in maturity transformation — funding long-term, illiquid assets with short-term debt and uninsured deposits. This practice, especially during turbulent times, can precipitate "run-on-the-bank" scenarios, where short-term creditors rapidly withdraw funding, potentially forcing the sale of assets at fire-sale prices and causing well-capitalized banks to fail.³⁶⁸

The Basel Committee on Banking Supervision (BCBS) introduced two complementary liquidity standards as part of Basel III's liquidity requirements to address these concerns.³⁶⁹ The Liquidity Coverage Ratio (LCR) mandates that banking firms hold enough high-quality liquid

³⁶⁴ Markus K Brunnermeier and Yuliy Sannikov, 'A Macroeconomic Model with a Financial Sector' (2014) 104 *American Economic Review* 379, 384.

³⁶⁵ Viral V Acharya and Matthew Richardson, 'Causes of the Financial Crisis' (2009) 21 Critical Review 195, 200.

³⁶⁶ John Geanakoplos, 'The Leverage Cycle' (2010) 24 NBER Macroeconomics Annual 1, 3.

³⁶⁷ Markus K Brunnermeier and others, *The Fundamental Principles of Financial Regulation* (Geneva Reports on the World Economy 11, 2009).

³⁶⁸ Gary Gorton and Andrew Metrick, 'Securitized Banking and the Run on Repo' (2012) 104 *Journal of Financial Economics* 425, 438.

³⁶⁹ Basel Committee on Banking Supervision, *Basel III: The Liquidity Coverage Ratio and Liquidity Risk Monitoring Tools* (BIS 2013).

assets (HQLA) to cover liquidity demands in severely stressed conditions over a month.³⁷⁰ Additionally, the Net Stable Funding Ratio (NSFR) seeks to reduce maturity mismatches between a bank's liabilities and assets, thus curtailing excessive reliance on short-term, volatile funding sources for sustaining long-term, illiquid assets.³⁷¹ These standards, incorporated into European legislation through the Capital Requirements Regulation (CRR) and the Capital Requirements Directive (CRD), aim to limit the risks associated with maturity transformation.³⁷²

In the wake of the financial crisis, policymakers have emphasized the importance of the liquidity criteria for large banks.³⁷³ The NSFR is designed to discourage maturity transformation by limiting short-term debt usage for funding long-term, illiquid assets.³⁷⁴ Simultaneously, the Liquidity Coverage Ratio (LCR) ensures that large banks possess sufficient capital and high-quality liquid assets to withstand withdrawal pressures during a 30-day crisis scenario, effectively acting as a contemporary reserve requirement for central banks.³⁷⁵ These regulatory measures are integral to enhancing the resilience of the financial system, ensuring that banks are better equipped to manage liquidity risks and contribute to the overall stability of the financial market.³⁷⁶

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³⁷⁰ Clemens Bonner and Sylvester CW Eijffinger, 'The Impact of Liquidity Regulation on Bank Intermediation' (2016) 20 *Review of Finance* 1945, 1950.

³⁷¹ Han Hong, Jing-Zhi Huang and Deming Wu, 'The Information Content of Basel III Liquidity Risk Measures' (2014) 15 *Journal of Financial Stability* 91, 93.

³⁷² Michael R King, 'The Basel III Net Stable Funding Ratio and Bank Net Interest Margins' (2013) 37 *Journal of Banking & Finance* 4144, 4148.

³⁷³ European Banking Authority, EBA Report on Liquidity Measures under Article 509(1) of the CRR (2016).

³⁷⁴ Daniel K Tarullo, 'Liquidity Regulation' in Douglas D Evanoff and others (eds), *The New International Financial System: Analysing the Cumulative Impact of Regulatory Reform* (World Scientific 2015) 95.

³⁷⁵ International Monetary Fund, Global Financial Stability Report: Moving from Liquidity- to Growth-Driven Markets (IMF 2014).

³⁷⁶ Robert DeYoung and Karin P Jang, 'Do Banks Actively Manage their Liquidity?' (2016) 66 *Journal of Banking & Finance* 143, 146.

Navigating the complex terrain of capital requirements necessitates a delicate balance. Regulators and banking institutions must weigh the imperative of ensuring financial stability against the need to foster conditions conducive to economic growth.³⁷⁷ Achieving this equilibrium involves not only setting appropriate capital levels but also designing regulatory frameworks that encourage sound risk management without overly constricting the banking sector's capacity to support economic activities.³⁷⁸ This process demands ongoing evaluation and adaptation in response to evolving financial markets and emerging risks.³⁷⁹

In essence, capital requirements constitute a cornerstone of the banking sector's risk management strategy, serving as a critical mechanism for preventing systemic risk.³⁸⁰ However, the broader implications of these requirements, which extend beyond individual institutions to influence the financial system and the economy at large, necessitate a comprehensive and nuanced understanding.³⁸¹ It is through this understanding that policymakers can craft regulatory policies that not only promote financial stability but also facilitate sustainable economic growth.³⁸²

2.7.2 Role of Corporate Governance

In the intricate landscape of the global financial system, corporate governance emerges as a critical yet complex component influencing systemic risk, distinct from direct financial metrics

³⁷⁷ Franklin Allen and Douglas Gale, 'Financial Fragility, Liquidity, and Asset Prices' (2004) 2 *Journal of the European Economic Association* 1015, 1018.

³⁷⁸ Anat R Admati and others, 'Fallacies, Irrelevant Facts, and Myths in the Discussion of Capital Regulation: Why Bank Equity is Not Socially Expensive' (Max Planck Institute for Research on Collective Goods, Discussion Paper 2013/23). ³⁷⁹ Anil K Kashyap, Raghuram G Rajan and Jeremy C Stein, 'Rethinking Capital Regulation' in *Maintaining Stability in a*

Changing Financial System (Federal Reserve Bank of Kansas City Symposium 2008) 431, 434.

380 Claudio Borio and Haibin Zhu, 'Capital Regulation, Risk-Taking and Monetary Policy: A Missing Link in the Transmission Mechanism?' (2012) 8 Journal of Financial Stability 236, 240.

³⁸¹ Mathias Dewatripont and Jean Tirole, *The Prudential Regulation of Banks* (MIT Press 1994).

³⁸² Xavier Freixas, Luc Laeven and José-Luis Peydró, *Systemic Risk, Crises, and Macroprudential Regulation* (MIT Press 2015).

yet akin to capital in its protective role. Ignazio Angeloni of the European Central Bank's Supervisory Board has notably highlighted that while governance does not directly correlate with any specific part of a bank's balance sheet, it fundamentally serves as the bank's primary line of defence, underpinning the institution's soundness, with capital acting as a safeguard in extremis.³⁸³ This perspective underscores the nuanced yet profound influence of corporate governance on financial stability.³⁸⁴

The prelude to the global financial crisis was characterized by rampant risk-taking within the financial sector, culminating in systemic upheavals and the downfall of numerous financial entities once the crisis unfolded.³⁸⁵ The breakdown in various governance frameworks is frequently cited among the pivotal drivers of the crisis.³⁸⁶ In response, the financial reform agenda post-crisis has intensely focused on overhauling governance structures to curb excessive risk-taking behaviours.³⁸⁷ Moreover, there has been a renewed emphasis on not just assessing the idiosyncratic risk of individual banks but also their contributions to the systemic risk of the banking sector as a whole.³⁸⁸ Despite growing interest in quantifying systemic risk, there remains a considerable gap in understanding how specific attributes of governance influence systemic risk levels.³⁸⁹

³⁸³ Ignazio Angeloni, 'Governance and Risk in the Banking Union: Understanding the Links Between Governance and Risk Taking in the New Banking Union' (Speech, 6th Annual FRS/GARP Global Risk Forum, BIS, 9–10 April 2015).

³⁸⁴ Marco Becht, Patrick Bolton and Ailsa Röell, 'Why Bank Governance is Different' (2011) 27(3) Oxford Review of Economic Policy 437, 440.

³⁸⁵ Grant Kirkpatrick, 'The Corporate Governance Lessons from the Financial Crisis' (2009) 2009(1) *OECD Journal: Financial Market Trends* 61, 65.

³⁸⁶ Hamid Mehran, Alan Morrison and Joel Shapiro, 'Corporate Governance and Banks: What Have We Learned from the Financial Crisis?' (Federal Reserve Bank of New York Staff Reports, no 502, 2011).

³⁸⁷ Klaus J Hopt, 'Corporate Governance of Banks and Other Financial Institutions After the Financial Crisis' (2013) 13(2) *Journal of Corporate Law Studies* 219, 222.

³⁸⁸ Viral V Acharya, Lasse H Pedersen, Thomas Philippon and Matthew Richardson, 'Measuring Systemic Risk' (2017) 30(1) *Review of Financial Studies* 2, 5-9.

³⁸⁹ Deniz Anginer and others, 'Corporate Governance and Bank Risk Taking' in Asli Demirgüç-Kunt, Douglas D Evanoff and George G Kaufman (eds), *The Future of Large, Internationally Active Banks* (World Scientific Publishing 2017) 189.

Corporate governance is fundamentally about implementing mechanisms to address agency problems and manage risks within firms.³⁹⁰ These mechanisms are typically categorized into those that motivate, such as executive compensation schemes, and those that constrain, such as the roles played by shareholders or the Board of Directors.³⁹¹ This dual structure aims to mediate potential conflicts between managers and shareholders, ensuring that management decisions align with shareholder interests.³⁹² The evolving corporate law framework plays a fundamental role in the protection of shareholders, particularly in the UK and EU contexts, where legal harmonisation efforts have influenced corporate governance structures.³⁹³ In the context of banks, shareholders who prioritize value maximization might endorse riskier capital strategies to amplify the potential value of state bailout guarantees, as reflected in bank share prices.³⁹⁴

The direct causes of bank failures during the financial crisis often related to governance within the banking institutions. Misalignments in short-term borrowing against long-term lending led to insufficient capital, inadequate liquidity, and notably, poor credit control.³⁹⁵ This scenario suggests that while the immediate triggers of failure were rooted in the internal banking system, the ultimate resolution came from legislative interventions imposing external regulations.³⁹⁶ Such interventions are often viewed as necessary for institutions with weak internal controls,

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³⁹⁰ Andrei Shleifer and Robert W Vishny, 'A Survey of Corporate Governance' (1997) 52(2) Journal of Finance 737, 740.

³⁹¹ David Yermack, 'Corporate Governance and Blockchains' (2017) 21(1) Review of Finance 7, 10.

³⁹² Michael C Jensen and William H Meckling, 'Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure' (1976) 3(4) *Journal of Financial Economics* 305, 308.

³⁹³ M Koutsias, 'The Fallacy of Property Rights' Rhetoric in the Company Law Context: From Shareholder Exclusivity to the Erosion of Shareholders' Rights' (2017) 28(6) *International Company and Commercial Law Review* 217.

³⁹⁴ Luc Laeven and Ross Levine, 'Bank Governance, Regulation, and Risk Taking' (2009) 93 *Journal of Financial Economics* 259, 265.

³⁹⁵ Andrea Beltratti and René M Stulz, 'The Credit Crisis Around the Globe: Why Did Some Banks Perform Better?' (2012) 105(1) *Journal of Financial Economics* 1, 4,7,8.

³⁹⁶ Ross Levine, 'The Governance of Financial Regulation: Reform Lessons from the Recent Crisis' (2012) 12(1) *International Review of Finance* 39, 42.

providing an additional layer of governance to mitigate risk-taking behaviours influenced by external regulatory frameworks.³⁹⁷

Research has delved into the relationship between corporate governance structures and risk-taking, highlighting that ownership structures play a significant role. Banks with shareholder-centric governance frameworks tend to exhibit higher levels of systemic risk.³⁹⁸ Regulatory environments influence banks' risk-taking incentives by impacting their charter value. Stricter regulations are associated with lower charter values, incentivizing riskier operational strategies.³⁹⁹ This dynamic points to a complex interaction between regulatory frameworks and the stability of the banking system, further complicated by how these regulations intersect with banks' ownership structures.⁴⁰⁰

Klaus Hopt's work differentiates the corporate governance of banks and financial institutions from general corporate governance.⁴⁰¹ He emphasizes the importance of including debtholders, insurance holders, and other creditors in the governance framework, highlighting debt governance as a paramount concern for financial entities.⁴⁰² The intricacies of supervising financial institutions suggest that reforms in corporate law may not be sufficient for enhancing governance. Instead, augmenting supervisory law obligations, strengthening the separation of

³⁹⁷ Andreas Kokkinis, Corporate Law and Financial Instability (Routledge 2017).

³⁹⁸ David H Erkens, Mingyi Hung and Pedro Matos, 'Corporate Governance in the 2007–2008 Financial Crisis: Evidence from Financial Institutions Worldwide' (2012) 18 *Journal of Corporate Finance* 389, 392.
³⁹⁹ Ibid, 395.

⁴⁰⁰ Guido Ferrarini, 'Understanding the Role of Corporate Governance in Financial Institutions: A Research Agenda' (European Corporate Governance Institute, Law Working Paper No 347/2017).

⁴⁰¹ Klaus J Hopt, 'Better Governance of Financial Institutions' (European Corporate Governance Institute, Law Working Paper No 207/2013).

⁴⁰² Klaus J Hopt, 'Corporate Governance of Banks and Other Financial Institutions After the Financial Crisis' (2013) 13(2) *Journal of Corporate Law Studies* 219, 230.

control and management roles, establishing dedicated risk panels on the Board, or appointing independent risk officers could provide more effective governance solutions.⁴⁰³

Corporate governance reforms play a crucial role in mitigating systemic risk. Dine and Koutsias argues that effective governance structures prevent financial instability by promoting transparency, regulatory compliance, and ethical leadership. He in today's dynamic market environment, corporate stakeholders must balance the pursuit of firm success with the interests of shareholders, employees, corporate partners and the broader community. Ho Conflicts among these interests can lead to internal strife and negatively impact the institution's functioning. Ho The role of directors in fostering responsible conduct and establishing robust corporate governance structures is crucial for mitigating such disputes. Ho Board of Directors is responsible for setting policies and controls that enable effective oversight of management decisions while fostering collaborative relationships among stakeholders. A comprehensive governance framework should promote innovation within the current commercial landscape and contribute to social sustainability by developing intellectual and cultural capital. This approach necessitates a departure from the assumption that good governance practices are merely to be replicated. Instead, it calls for a commitment to embedding these practices into

⁴⁰³ Guido Ferrarini and Maria Cristina Ungureanu, 'Economics, Politics, and the International Principles for Sound Compensation Practices: An Analysis of Executive Pay at European Banks' (2011) 64(2) *Vanderbilt Law Review* 431, 435. ⁴⁰⁴ Janet Dine and Marios Koutsias, *The Nature of Corporate Governance: The Significance of National Cultural Identity* (Edward Elgar 2013).

⁴⁰⁵ R Edward Freeman, Strategic Management: A Stakeholder Approach (Cambridge University Press 2010).

⁴⁰⁶ David Millon, 'Enlightened Shareholder Value, Social Responsibility, and the Redefinition of Corporate Purpose Without Law' (Washington & Lee Legal Studies Paper No 2010-11, 2010).

⁴⁰⁷ John Armour, Henry Hansmann and Reinier Kraakman, 'Agency Problems and Legal Strategies' in Reinier Kraakman and others (eds), *The Anatomy of Corporate Law: A Comparative and Functional Approach* (3rd edn, Oxford University Press 2017) 29.

⁴⁰⁸ Jonathan R Macey and Maureen O'Hara, 'The Corporate Governance of Banks' (2003) 9(1) *Economic Policy Review* 91, 93.

⁴⁰⁹ Rainer Böhme and others, 'Bitcoin: Economics, Technology, and Governance' (2015) 29 *Journal of Economic Perspectives* 213, 215.

long-term strategic objectives through continual engagement in significant economic or social welfare reforms.⁴¹⁰

2.7.3 Prudential Supervision:

In the realm of prudential supervision, there stands a compelling need to identify and implement robust frameworks capable of mitigating systemic risk and fostering the efficient operation of financial systems. Prudential supervision, characterized by a vigilant and comprehensive process, ensures that financial institutions adhere to protocols and standards conducive to sound financial practice. Within this context, Crockett identifies supervision as a foundational element crucial for the financial system's stability. Alia

The critical distribution of regulatory responsibilities is fundamental in guaranteeing the financial system's ability to function with efficiency and efficacy. The exploration of European financial market regulatory models reveals an array of supervisory structures, each with distinct characteristics. A notable example is the French model, where the Banque de France, the Autorité des Marchés Financiers (AMF), and the Autorité de Contrôle Prudentiel et de Résolution (ACPR) coalesce under the High Council for Financial Stability, a coordinating entity that ensures cohesive regulatory oversight across various sectors of finance. This

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⁴¹⁰ Dirk A Zetzsche, 'Investment Law as Financial Law: From Fund Governance over Market Governance to Stakeholder Governance?' in *The European Financial Market in Transition* (Kluwer Law International 2011) 103.

⁴¹¹ Stijn Claessens and Laura E Kodres, 'The Regulatory Responses to the Global Financial Crisis: Some Uncomfortable Questions' (IMF Working Paper WP/14/46, March 2014).

⁴¹² Basel Committee on Banking Supervision, *Core Principles for Effective Banking Supervision* (Bank for International Settlements, September 2012).

⁴¹³ Andrew Crockett, 'Marrying the Micro- and Macro-Prudential Dimensions of Financial Stability' (Remarks before the Eleventh International Conference of Banking Supervisors, Basel, 20–21 September 2000).

⁴¹⁴ Martin Čihák and Alexander F Tieman, 'Quality of Financial Sector Regulation and Supervision Around the World' (IMF Working Paper WP/08/190, August 2008).

⁴¹⁵ Donato Masciandaro and Marc Quintyn, *Designing Financial Supervision Institutions: Independence, Accountability and Governance* (Edward Elgar 2007).

⁴¹⁶ Autorité des Marchés Financiers, 'The AMF: Our Organisation' https://www.amf-france.org/en/amf/our-organization accessed 26 June 2020.

model underscores the synergistic potential of sectoral regulatory bodies working in tandem, reflecting a holistic approach to financial supervision.⁴¹⁷

In the Twin Peaks model, conceptualized by Michael Taylor, the dichotomy of regulatory authority is clear. This model assigns comprehensive jurisdiction to two separate regulatory bodies, each responsible for distinct yet overlapping areas of the financial system. One body specializes in prudential oversight, ensuring the financial health of institutions, while the other focuses on market conduct, maintaining the integrity of financial practices and consumer protection. This approach has been embraced by countries like the Netherlands and South Africa, which value the clear separation of supervisory domains.

The third approach, the single supervisor model, centralizes the oversight of integrated financial sectors, including banking, securities and insurance, under one authoritative body. 422 Countries that adopt this model entrust the full spectrum of prudential and behavioural supervision to a unified authority, often in the form of a national central bank or a single supervisory institution. 423

⁴¹⁷ Dirk Schoenmaker, 'Financial Supervision in the EU' in Xavier Freixas, Philipp Hartmann and Colin Mayer (eds), *Handbook of European Financial Markets and Institutions* (Oxford University Press 2008) 663.

⁴¹⁸ Andrew Godwin and Andrew Schmulow, 'Introduction: The Genealogy and Topography of Twin Peaks' in Andrew Godwin and Andrew Schmulow (eds), *The Cambridge Handbook of Twin Peaks Financial Regulation* (Cambridge University Press 2021).

⁴¹⁹ Andrew Godwin, Timothy Howse and Ian Ramsay, 'A Jurisdictional Comparison of the Twin Peaks Model of Financial Regulation' (2017) 18 *Journal of Banking Regulation* 103, 106.

⁴²⁰ Robin Hui Huang and Dirk Schoenmaker (eds), *Institutional Structure of Financial Regulation: Theories and International Experiences* (Routledge 2015).

⁴²¹ Erika Botha and Daniel Makina, 'Financial Regulation and Supervision: Theory and Practice in South Africa' (2011) 10 *International Business & Economics Research Journal* 27, 29, 37.

⁴²² Eddy Wymeersch, 'The Structure of Financial Supervision in Europe: About Single Financial Supervisors, Twin Peaks and Multiple Financial Supervisors' (2007) 8 *European Business Organization Law Review* 237, 240.

⁴²³ Daniel Calvo and others, 'Financial Supervisory Architecture: What Has Changed After the Crisis?' (FSI Insights on Policy Implementation No 8, Bank for International Settlements 2018).

The choice of supervisory model hinges on each nation's specific needs and objectives. 424 The participation of national central banks (NCBs) in prudential supervision, especially within the Eurozone, has ignited debate among EU member states. 425 The European Central Bank has advocated for the continued and vital role of NCBs in prudential supervision within Eurozone countries. 426 The Euro system's stance is that the advantages of NCB involvement in prudential supervision are accentuated considering the institutional structure that facilitated the adoption of the euro. 427 Drawing from their in-depth knowledge of systemic risk and the intricacies of money and securities markets, NCBs are uniquely positioned to contribute meaningfully to the supervisory process. 428 The ECB posits that a varied approach to prudential supervision, incorporating extensive involvement from NCBs, can significantly enhance the efficacy of financial oversight. 429

In response to the de Larosière report, the European Commission, in 2009, unveiled a strategy delineating "European Financial Supervision," which laid the groundwork for the establishment of the European System of Financial Supervision (ESFS) in 2011.⁴³⁰ The ESFS operates on a dual-level platform, comprising macro-prudential oversight anchored by the European Systemic Risk Board (ESRB) and micro-prudential supervision via a constellation of Financial Authorities, including the European Banking Authority (EBA) and the European Securities and

⁴²⁴ David T Llewellyn, 'Institutional Structure of Financial Regulation and Supervision: The Basic Issues' (Paper presented at a World Bank seminar, *Aligning Supervisory Structures with Country Needs*, Washington DC, 6–7 June 2006).

⁴²⁵ Jean Pisani-Ferry and others, 'What Kind of European Banking Union?' (Bruegel Policy Contribution Issue 2012/12, 2012).

⁴²⁶ European Central Bank, 'Financial Integration in Europe' (ECB Report, May 2018).

⁴²⁷ European Central Bank, 'The Role of Central Banks in Prudential Supervision' (ECB publication, March 2001).

⁴²⁸ Charles Goodhart and Dirk Schoenmaker, 'Should the Functions of Monetary Policy and Banking Supervision Be Separated?' (1995) 47 Oxford Economic Papers 539, 541.

⁴²⁹ European Central Bank, 'Recent Developments in Supervisory Structures in the EU Member States (2007–10)' (ECB Report, October 2010).

⁴³⁰ European Commission, 'European Financial Supervision' (Communication) COM (2009) 252 final, 27 May 2009.

Markets Authority (ESMA).⁴³¹ These entities collectively strive to maintain financial stability, each within its domain.⁴³²

The clear demarcation between macro and micro-prudential supervision in the EU is evidenced by the ESAs' authority to enact binding legal decisions, enhancing coordination throughout the financial system.⁴³³ However, the ESRB's initial coordination efforts were found to be insufficient in averting the fragmentation of the EU's financial market.⁴³⁴ Variations in prudential supervision across Member States presented challenges to integration and underscored the risk of looming crises.⁴³⁵ As a result, a reassignment of certain supervisory duties from Member States to the European Central Bank was implemented.⁴³⁶

The evolution of the supervisory framework unfolded as part of a strategic vision articulated by the European Commission in 2012.⁴³⁷ This vision, reinforced by the European Council, proposed a new financial architecture based on three pillars: the Single Supervisory Mechanism (SSM), the Single Resolution Mechanism (SRM), and the Deposit Guarantee Schemes (DGS),

⁴³¹ Regulation (EU) 1093/2010 of the European Parliament and of the Council of 24 November 2010 establishing a European Supervisory Authority (European Banking Authority) [2010] OJ L331/12.

⁴³² Eilís Ferran and Valia SG Babis, 'The European Single Supervisory Mechanism' (2013) 13 *Journal of Corporate Law Studies* 255, 258.

⁴³³ Marco Lamandini, David Ramos and Javier Solana, 'The European Central Bank (ECB) as a Catalyst for Change in EU Law, Part 1: The ECB's Mandate' (2016) 23 *Columbia Journal of European Law* 1, 13.

⁴³⁴ Samuel McPhilemy, 'Integrating Macro-Prudential Policy: Central Banks as the "Third Force" in EU Financial Reform' (2016) 39 *West European Politics* 526, 529-534.

⁴³⁵ Emilios Avgouleas, 'Banking Supervision and the Special Resolution Regime of the Banking Act 2009: The Unfinished Reform' (2009) 4 *Capital Markets Law Journal* 201, 224.

⁴³⁶ Council Regulation (EU) 1024/2013 of 15 October 2013 conferring specific tasks on the European Central Bank concerning policies relating to the prudential supervision of credit institutions [2013] OJ L287/63.

⁴³⁷ European Commission, 'A Roadmap Towards a Banking Union' (Communication) COM (2012) 510 final, 12 September 2012.

all underpinned by a single supervisory rulebook.⁴³⁸ These measures represent a concerted effort to establish a robust and integrated financial infrastructure across the European Union.⁴³⁹

2.8 Conclusion

Through the trials of the financial crisis, the definition of systemic risk has been meticulously refined, and a deeper comprehension of its complexities has been attained. The elucidation of systemic risk has evolved from a nebulous concept into a well-defined spectre of financial instability, recognized for its potential to precipitate widespread economic distress. The tripartite mitigative methods of capital adequacy, corporate governance and financial supervision have been acknowledged, each distinct in its operational scope yet unified in a singular, overarching objective: the construction of a robust financial framework designed to endure and mitigate the economic perturbations that have historically undermined the stability of global markets.

The augmentation of capital reserves has been widely accepted as a primary bulwark against financial instability. It has been established that institutions are required to maintain a capital buffer proportionate to their risk exposure, a measure that is intended to absorb potential losses and prevent the collapse of financial entities that could trigger systemic failures. The crucial role of corporate governance in safeguarding against systemic risk has also been emphasized. It has been understood that the implementation of rigorous governance practices is integral to the internal control and oversight mechanisms of financial institutions. It has been recognized

⁴³⁸ European Commission, 'A Reformed Financial Sector for Europe' (Communication) COM (2014) 279 final, 15 May 2014.

⁴³⁹ Niamh Moloney, 'European Banking Union: Assessing Its Risks and Resilience' (2014) 51 *Common Market Law Review* 1609, 1612.

that these practices are vital in deterring the undue risk-taking that can lead to crises with farreaching implications.

Furthermore, the importance of comprehensive financial supervision in pre-empting systemic risk has been highlighted. Regulatory oversight, exercised by both national and international bodies, has been enhanced to ensure that financial systems operate within the bounds of prudence and foresight. The vigilance exercised by supervisory authorities has been deemed crucial in detecting and mitigating risks that, if unchecked, have the potential to escalate into systemic threats.

As the financial landscape continues to unfold, characterized by rapid innovation and integration, the lessons gleaned from past crises have been instrumental in shaping the regulatory responses of the present. These experiences have been transformed into a repository of knowledge, informing the strategies deployed to fortify financial systems against the emergence of systemic risks. It has been recognized that the proactive enhancement of these strategies is essential to prevent the resurgence of the systemic shocks that have historically precipitated economic upheavals.

In this regard, the concerted efforts made to reinforce capital structures, elevate corporate governance standards, and intensify financial supervision have been acknowledged as critical components of a comprehensive approach to systemic risk mitigation. It has been envisioned that, by continuing to bolster these mitigative strategies, the financial systems of the future will be imbued with the resilience and adaptability necessary to withstand the potential crises of tomorrow. The enduring commitment to these principles is envisaged to safeguard the integrity of the global economic system, ensuring that the systemic shocks of the past remain firmly rooted in history, rather than recurring as the financial calamities of the future.

Chapter Three: International Institutions and Standards for Systemic Risk

Mitigation

3.1 Introduction

Against this backdrop, the adequacy of international regulatory frameworks in overseeing

global banking operations comes into sharp focus. Despite the establishment of various

measures aimed at enhancing financial regulation, questions remain regarding their

effectiveness and the extent to which they can be considered truly comprehensive. 440 This leads

to the subsidiary research question: Are global banking operations adequately regulated at the

international level to prevent systemic risks and ensure financial stability?⁴⁴¹

This chapter provides a deeper exploration of the international standards on systemic risk

mitigation. It seeks to dissect the complexities of global financial regulation, examining the

evolution of regulatory frameworks, the interplay between national and international regulatory

bodies, and the effectiveness of current measures in mitigating systemic risk. Through this

inquiry, the research contributes to the ongoing academic discourse on global financial stability,

offering insights and recommendations that could inform the development of more robust and

effective international financial regulatory frameworks.⁴⁴²

⁴⁴⁰ Dirk Schoenmaker, 'The Financial Trilemma' (2010) 111(1) Economics Letters 57, 59.

441 Ibid.

⁴⁴² Chris Brummer, *Soft Law and the Global Financial System: Rule Making in the 21st Century* (Cambridge University Press 2012).

3.2 Context and Purpose of International Financial Regulations

In the landscape of global finance, the latter part of the 20th century and the early years of the 21st century have been characterized by a marked increase in the integration and internationalization of financial markets. This evolution, primarily driven by a significant surge in the flow of international capital since the early 1990s, has led to a scenario where the traditional national supervision of banking entities increasingly falls short in effectively regulating cross-border activities and capital flows. These flows are crucial as they hold the potential to significantly influence the pricing of financial risk, thereby affecting the stability of global financial systems. The factors contributing to this global financial integration include but are not limited to, the rise of international financial interactions, inventive technological advancements that have reduced market participation costs, a period of financial market deregulation, and the expansion of international financial institutions.

This paradigm shifts towards a more globally interconnected financial marketplace has not been without its challenges. History has provided us with numerous instances where the absence of an effective global regulatory framework has precipitated significant economic downturns. Notably, the Great Depression of the 1930s, which was precipitated by a neglect of monetary and banking stability, serves as a stark reminder of the catastrophic consequences that can arise from a lack of adequate financial oversight.⁴⁴⁷ This event, deeply rooted in the aftermath of World War I and exacerbated by the Versailles Treaty, underscored the profound impact that

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⁴⁴³ Richard Portes and Hélène Rey, 'The Determinants of Cross-Border Equity Flows' (2005) 65 *Journal of International Economics* 269, 272.

⁴⁴⁴ Stijn Claessens and Luc Laeven, 'Financial Crises: Causes, Consequences, and Policy Responses' (2014) 17 *Journal of International Money and Finance* 3, 11.

⁴⁴⁵ Dirk Schoenmaker, 'The Financial Trilemma' (2010) 111(1) Economics Letters 57.

⁴⁴⁶ Rawi Abdelal, *Capital Rules: The Construction of Global Finance* (Harvard University Press 2007).

⁴⁴⁷ Barry Eichengreen, *The Gold Standard and the Great Depression*, 1919–1939 (Oxford University Press 1992).

the interplay between politics and economics can have on the global economy.⁴⁴⁸ It illustrates the critical need for political goodwill and cooperation among nations to create a conducive environment for the development and implementation of effective international financial regulatory frameworks.⁴⁴⁹

The late 20th and early 21st centuries witnessed further economic crises that highlighted the vulnerabilities inherent in the global financial system. The ethos of 'greed is good,' popularized by Wall Street traders in the 1980s, and the Great Recession of 2008, underscored the risks posed by unregulated banking practices and the imperative for more stringent regulatory measures. These crises served as catalysts for both developed and developing economies to re-evaluate and enhance their financial control mechanisms. The aim was to build systems capable of absorbing financial shocks with greater resilience, addressing a critical shortfall observed in previous economic downturns.

In this context, national and financial regulators began to critically assess the potential impacts of financial crises on countries with economic policies that mirrored those of nations affected by the global debt crisis of 1982, such as Mexico and Brazil.⁴⁵³ The question arose as to what extent these countries, given their inherent vulnerabilities and limited capacities for economic adjustment, can withstand similar crises without catastrophic consequences.⁴⁵⁴ This inquiry

⁴⁴⁸ Charles P Kindleberger, *The World in Depression*, 1929–1939 (Allen Lane 1975).

⁴⁴⁹ Eric Helleiner, *States and the Reemergence of Global Finance: From Bretton Woods to the 1990s* (Cornell University Press 1994).

⁴⁵⁰ Kathryn Judge, 'The First Year: The Role of a Modern Lender of Last Resort' (2016) 116 Columbia Law Review 843, 847.

⁴⁵¹ Stijn Claessens and Luc Laeven, 'Financial Crises: Causes, Consequences, and Policy Responses' (2014) 17 *Journal of International Money and Finance* 3, 10.
⁴⁵² Ibid, 12.

⁴⁵³ Jose de Gregorio, 'Economic Growth in Latin America: From the Disappointment of the Twentieth Century to the Challenges of the Twenty-First' (Working Paper No 377, Central Bank of Chile, November 2006).

⁴⁵⁴ Ricardo Ffrench-Davis, Reforming the Reforms in Latin America: Macroeconomics, Trade, Finance (Palgrave Macmillan 2000).

highlighted the essential need for robust systemic risk mitigation tools and strategies capable of absorbing economic shocks, emphasizing the importance of having effective economic shock absorbers and fallback plans in place.⁴⁵⁵

In the intricate tapestry of the global financial system, the underpinning objectives of financial regulation have historically oscillated around the axis of market stability, consumer protection, and the promotion of efficient markets. While these objectives are often not delineated explicitly in economic discourse, they are implicitly understood as mechanisms to correct market failures. The past financial crises have cast a spotlight on the paramount importance of financial system stability, revealing the limitations of existing regulatory frameworks in preemptively managing systemic risks. These crises underscore the complexity of financial systems and the interconnectedness of various market participants, illustrating the challenges in negotiating safeguards against operational decisions of financial institutions that can precipitate widespread economic repercussions.

The assumption of a near-perfect alignment between consumer protection and financial stability, particularly within the banking sector, has been a cornerstone of financial regulation philosophy.⁴⁶⁰ Investor protection mechanisms are essential for capital market stability, particularly in high-risk financial environments.⁴⁶¹ This paradigm posited that prudential

⁴⁵⁵ Ricardo Ffrench-Davis, *Reforming the Reforms in Latin America: Macroeconomics, Trade, Finance* (Palgrave Macmillan 2000).

⁴⁵⁶ Andrew Crockett, 'Why is Financial Stability a Goal of Public Policy?' (1997) 82(4) Economic Review 5, 7-11.

⁴⁵⁷ Robert C Merton and Zvi Bodie, 'A Conceptual Framework for Analysing the Financial Environment' in Dwight B Crane and others (eds), *The Global Financial System: A Functional Perspective* (Harvard Business School Press 1995) 11.

⁴⁵⁸ Steven L Schwarcz, 'Systemic Risk' (2008) 97 Georgetown Law Journal 193, 195.

⁴⁵⁹ Ibid, 198

⁴⁶⁰ Charles Goodhart and others, Financial Regulation: Why, How and Where Now? (Routledge 1998) 3.

⁴⁶¹ Mohammed Khair Alshaleel, 'The Governance and Regulation of Mutual Funds in the UK and the US: A Comparative Analysis' (2021) 32 *Journal of International Banking Law and Regulation* 120, 123-127.

measures designed to mitigate the risk of bank failures would inherently protect depositors and, by extension, the broader financial ecosystem. However, the multifaceted nature of financial crises, including those precipitated by fraudulent securities practices and insufficient investor protections, challenges this assumption. Legislative initiatives, such as the United States Securities Act of 1933 and the Securities Exchange Act of 1934, alongside the European Securities Regulations, highlight a dedicated focus on investor protection, emphasizing the critical role of mandatory disclosure in ensuring informed investment decisions.

The conceptualization of "efficient capital markets" as a regulatory goal further complements the foundational aims of financial regulation. The significance of market efficiency transcends theoretical appeal, reflecting the practical necessity for secondary markets to function as effective mechanisms for resource allocation. The markets, particularly through the issuance of new securities for financing ventures, embody the dynamism of the financial system, allowing for the valuation and exchange of financial assets based on evolving information landscapes. As highlight by Huang and Liu, the role of financial market regulation in China, examining the legal infrastructure supporting cross-border investment, The regulatory

⁴⁶² Charles Goodhart, *The Basel Committee on Banking Supervision* (Cambridge University Press 2011) 14; Maziar Peihani, *Basel Committee on Banking Supervision* (Brill 2016) 22.

⁴⁶³ John C Coffee, 'Systemic Risk after Dodd–Frank: Contingent Capital and the Need for Regulatory Strategies beyond Oversight' (2011) 111(4) *Columbia Law Review* 795, 800.

⁴⁶⁴ John C Coffee, 'Market Failure and the Economic Case for a Mandatory Disclosure System' (1984) 70 *Virginia Law Review* 717, 719.

⁴⁶⁵ Ronald J Gilson and Reinier H Kraakman, 'The Mechanisms of Market Efficiency' (1984) 70 Virginia Law Review 549, 553.

⁴⁶⁶ Zohar Goshen and Gideon Parchomovsky, 'The Essential Role of Securities Regulation' (2006) 55 *Duke Law Journal* 711, 720-732,

⁴⁶⁷ Fangda Huang and Ji-Hong Liu, 'Enforcement Strategies in Chinese Capital Market' in Robert Goddard and Daniel Cash (eds), *Regulation and the Global Financial Crisis: Impact, Regulatory Responses, and Beyond* (Routledge 2020) 175; Franklin Allen and Jun Qian, 'China's Financial System and the Law' (2014) 47 *Cornell International Law Journal* 511.

oversight of these processes is pivotal in maintaining market integrity and facilitating the efficient distribution of capital across the economic fabric.⁴⁶⁸

Moreover, the promotion of competition within the financial industry emerges as a critical regulatory objective. This goal is pursued not only through specialized competition laws but also via financial regulations that seek to dismantle barriers to international competition. He European Union's legislative efforts to foster pan-European markets exemplify this approach, aiming to create an environment where firms can engage in cross-border competition under a harmonized regulatory framework. Such initiatives underscore the interconnection between regulatory policies and the broader economic objective of market integration and competition. At 1

The imperative to prevent financial crime constitutes another dimension of financial regulation, reflecting a commitment to safeguarding the integrity of the financial system against illicit activities. While specific legislation addresses this concern, the broader question of whether the prevention of financial crime should be considered an independent regulatory objective or a means to achieve other regulatory aims remains a subject of debate. This debate highlights the multifaceted nature of financial regulation, where diverse objectives intersect and overlap in the pursuit of a stable, transparent, and efficient financial system.

⁴⁶⁸ Merritt B Fox, 'Securities Class Actions against Foreign Issuers' (2012) 64 Stanford Law Review 1173, 1176.

⁴⁶⁹ Howard Davies and David Green, Global Financial Regulation: The Essential Guide (Polity Press 2008) 5.

⁴⁷⁰ Ibid, 10-12

⁴⁷¹ Niamh Moloney, EU Securities and Financial Markets Regulation (Oxford University Press 2023) 44.

⁴⁷² Rosa M Lastra, 'Systemic Risk, SIFIs and Financial Stability' (2011) 6(2) Capital Markets Law Journal 197, 199, 201-205.

⁴⁷³ Christina Parajon Skinner, 'Misconduct Risk' (2016) 84 Fordham Law Review 1559, 1562.

⁴⁷⁴ Samuel W Buell, 'Is the White Collar Offender Privileged?' (2014) 63 *Duke Law Journal* 823, 827.

Amidst the backdrop of "soft" international law, international financial standards have gained prominence as critical tools for mitigating systemic risks within both domestic and global financial landscapes. These standards, serving a communicative function, provide a framework for countries to align their domestic financial regulations with global norms. This approach allows for a selective adoption of international regulatory practices, facilitating a tailored response to domestic economic priorities while promoting global regulatory coherence.

The exploration of international financial regulations, prompted by the historical recurrence of financial crises, reveals the evolving nature of regulatory objectives and the challenges inherent in achieving them.⁴⁷⁸ These regulations, traditionally viewed as technical components of international policy, have emerged as pivotal in ensuring financial stability.⁴⁷⁹ Nevertheless, the partial success of reforms instituted in the wake of financial meltdowns indicates the persistence of significant gaps in the regulatory framework.⁴⁸⁰ Issues such as the misalignment between national risk supervision and global financial market realities, the dilemma of managing "too big to fail" entities, and the intricate nexus between international financial sector crises and sovereign debt crises highlight the need for comprehensive and nuanced reform efforts.⁴⁸¹

⁴⁷⁵ Pierre-Hugues Verdier, 'The Political Economy of International Financial Regulation' (2013) 88 *Indiana Law Journal* 1405, 1408.

⁴⁷⁶ Chris Brummer, Soft Law and the Global Financial System: Rule Making in the 21st Century (Cambridge University Press 2012) 32.

⁴⁷⁷ Dirk Schoenmaker, 'The Financial Trilemma' (2010) 111(1) Economics Letters 57, 59.

⁴⁷⁸ Emilios Avgouleas, *Governance of Global Financial Markets: The Law, the Economics, the Politics* (Cambridge University Press 2012) 6.

⁴⁷⁹ Ibid, 18.

⁴⁸⁰ Anat R Admati and Martin F Hellwig, *The Bankers' New Clothes: What's Wrong with Banking and What to Do about It* (Princeton University Press 2013) 45.

⁴⁸¹ Emilios Avgouleas, Governance of Global Financial Markets: The Law, the Economics, the Politics (Cambridge University Press 2012) 21.

This narrative underscores the complexity of crafting effective regulatory policies in a globalized financial ecosystem, where the interplay of diverse objectives and challenges necessitates a multifaceted approach.⁴⁸² As financial markets continue to evolve, so too must the regulatory frameworks that seek to govern them, requiring an adaptive and forward-looking stance on regulation.⁴⁸³ The pursuit of a balanced regulatory regime — one that effectively manages systemic risks, promotes market efficiency, and safeguards consumer interests — remains a central challenge for policymakers, regulators, and the academic community.⁴⁸⁴ The ongoing dialogue and re-evaluation of regulatory strategies are crucial in navigating the intricacies of global financial stability, ensuring that the financial system can withstand the tests of time and turbulence.⁴⁸⁵

In summary, the quest for effective international financial regulation is a journey, rather than a destination, characterized by continuous learning, adaptation and refinement. The lessons learned from past financial crises serve as a guide, highlighting the importance of resilience, transparency and accountability in the regulatory framework. By embracing a holistic view that considers the interconnectedness of global financial markets, the dynamic nature of economic activities, and the diverse needs of market participants, policymakers and regulators can forge pathways toward a more stable, efficient and equitable financial future. This endeavour requires not only technical expertise but also a commitment to collaboration and

⁴⁸² Dirk Schoenmaker, 'The Financial Trilemma' (2010) 111(1) *Economics Letters* 57.

⁴⁸³ Anat R Admati and Martin F Hellwig, *The Bankers' New Clothes: What's Wrong with Banking and What to Do about It* (Princeton University Press 2013) 50.

⁴⁸⁴ Emilios Avgouleas, *Governance of Global Financial Markets: The Law, the Economics, the Politics* (Cambridge University Press 2012) 35.

⁴⁸⁵ Julia Black, 'Learning from Regulatory Disasters' (2014) 10(3) Policy Quarterly 3, 4-7.

⁴⁸⁶ Anat R Admati and Martin F Hellwig, *The Bankers' New Clothes: What's Wrong with Banking and What to Do about It* (Princeton University Press 2013) 52.

⁴⁸⁷ Dirk Schoenmaker, 'The Financial Trilemma' (2010) 111(1) Economics Letters 57, 58.

⁴⁸⁸ Julia Black, 'Learning from Regulatory Disasters' (2014) 10(3) *Policy Quarterly* 3, 7.

dialogue among all stakeholders, fostering an environment where financial stability is not merely an aspiration but a reality. 489

3.3 Foundations of International Regulatory Standards

Within the complex matrix of global finance, financial institutions — ranging from banks and credit unions to insurance companies, financial brokers, and asset managers — operate within a tightly woven fabric of financial regulations. These regulations, which comprise rules and legislations tailored to the specific needs and challenges of the financial sector, serve as the cornerstone of financial integrity and stability. 490 Importantly, the concept of financial regulation transcends the mere establishment of laws; it embodies a dynamic process of continuous monitoring, enforcement, and adaptation of these laws and rules to meet the evolving landscape of the financial industry.⁴⁹¹

Banking regulations, a critical subset of financial regulation, encompass a variety of measures including authorization requirements for financial institutions, prudential regulations, supervisory oversight of operations, and deposit insurance schemes.⁴⁹² Domestically, these regulatory frameworks are designed to forge an effective risk management ecosystem, capable of identifying, monitoring and mitigating the risks emanating from financial industry activities. 493 However, the advent of globalization and the resultant integration of global

⁴⁸⁹ Chris Brummer, Soft Law and the Global Financial System: Rule Making in the 21st Century (Cambridge University

⁴⁹⁰ Julia Black, 'Mapping the Contours of Contemporary Financial Services Regulation' (2002) 2 Journal of Corporate Law Studies 253, 255.

⁴⁹¹ Roberta S Karmel and Claire R Kelly, 'The Hardening of Soft Law in Securities Regulation' (2009) 34 Brooklyn Journal

of International Law 883, 889.

492 Heidi Mandanis Schooner and Michael Taylor, Global Bank Regulation: Principles and Policies (Academic Press 2009)

⁴⁹³ Andrew Crockett, 'Why is Financial Stability a Goal of Public Policy?' (1997) 82(4) *Economic Review* 5, 8.

financial markets compel states and regulators to consider the ramifications of cross-border activities and capital flows, which bear the potential to significantly influence the pricing of financial risk.⁴⁹⁴ In the absence of regulation, cross-border activities can precipitate systemic risks and market failures, exacerbated by the challenges posed by transactions that transcend national jurisdictions, complicating the capacity of states to manage or regulate these activities effectively.⁴⁹⁵

To navigate the jurisdictional and financial complexities, nations have established international financial institutions (IFIs) tasked with developing regulatory frameworks aimed at managing systemic and other types of financial risks in the global marketplace.⁴⁹⁶ In this vein, states function as rational actors, engaging in the exchange of information and articulation of their intentions and motivations.⁴⁹⁷ This process cultivates a spirit of cooperation and coordination among national regulators, laying the groundwork for a cohesive approach to global financial regulation.⁴⁹⁸

The Basel Committee on Banking Supervision, composed of central bankers and bank regulators from the G10 countries, stands as a paragon of international financial regulatory efforts.⁴⁹⁹ In the wake of the 2008 financial crisis, the landscape of international financial supervision has expanded to include a diverse array of supervisory bodies, each playing a

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⁴⁹⁴ Hal S Scott, *International Finance: Law and Regulation* (2nd edn, Sweet & Maxwell 2008) 26.

⁴⁹⁵ Dirk Schoenmaker, 'The Financial Trilemma' (2010) 111(1) Economics Letters 57, 58.

⁴⁹⁶ Tony Porter, Globalization and Finance (Polity Press 2005).

⁴⁹⁷ Andrew Moravcsik, 'Taking Preferences Seriously: A Liberal Theory of International Politics' (1997) 51(4) *International Organization* 513, 518.

⁴⁹⁸ Pierre-Hugues Verdier, 'The Political Economy of International Financial Regulation' (2013) 88 *Indiana Law Journal* 1405, 1410.

⁴⁹⁹ Charles Goodhart, *The Basel Committee on Banking Supervision* (Cambridge University Press 2011) 14; Maziar Peihani, *Basel Committee on Banking Supervision* (Brill 2016) 20.

pivotal role in the formulation of international standards and rules designed to regulate financial markets.⁵⁰⁰

The Financial Stability Board (FSB), representing an initiative by the G20 leaders, embodies a significant stride towards enhancing global prudential standards, an endeavour precipitated by the systemic challenges unveiled by the global financial crisis of 2008.⁵⁰¹ The establishment of the FSB marked a critical step in advancing international regulatory frameworks, with its mandate extending to solidifying its legitimacy among non-members and member states alike, delineating its interconnections with other global governance institutions, and facilitating the creation of effective international standards through consensus-building.⁵⁰²

Furthermore, the International Organization of Securities Commissions (IOSCO) has made substantial contributions to the international regulatory landscape, developing standards that guide critical issues such as disclosure practices, insider trading and capital adequacy for securities firms.⁵⁰³

Similarly, the Financial Action Task Force (FATF) has emerged as a leading authority in setting international standards aimed at enhancing disclosure and transparency among banks and other financial service providers, with a particular focus on combating financial crime.⁵⁰⁴

⁵⁰⁰ Stavros Gadinis, 'Three Pathways to Global Standards: Private, Regulator, and Ministry Networks' (2015) 109(1) *American Journal of International Law* 1, 4.

⁵⁰¹ Eric Helleiner, 'Regulating the Regulators: The Emergence and Limits of the Transnational Financial Legal Order' in Tony Porter (ed), *Transnational Financial Regulation after the Crisis* (Routledge 2014) 87. ⁵⁰² Ibid, 95.

⁵⁰³ David Zaring, 'International Law by Other Means: The Twilight Existence of International Financial Regulatory Organizations' (1998) 33 *Texas International Law Journal* 281, 285.

⁵⁰⁴ Rosa M Lastra, 'The Role of the IMF as a Global Financial Authority' in Christoph Herrmann and Jörg Philipp Terhechte (eds), *European Yearbook of International Economic Law 2011* (Springer 2011) 93.

These collective efforts underscore the intricacy and importance of international financial regulation in safeguarding the stability and integrity of the global financial system. By fostering an environment of cooperation and coordination, international institutions and standards not only mitigate the risks associated with financial globalization but also facilitate the harmonization of regulatory practices across jurisdictions. This harmonization is essential in addressing the multifaceted challenges posed by cross-border financial activities, ensuring that the global financial system remains resilient in the face of evolving risks and vulnerabilities. The development and implementation of international financial regulations, therefore, represent a critical endeavour in the quest for global financial stability, requiring a concerted effort among nations to navigate the complexities of the modern financial landscape. The state of the state of the modern financial landscape.

3.4 Standards of Basel Committee on Banking Regulation

The Basel Committee on Banking Supervision (BCBS) is pivotal in establishing global standards for banking oversight, fundamentally aiming to fortify financial stability by elevating the quality of banking supervision across the globe. 508 This goal is pursued through the adoption of international supervision standards that encompass critical issues like capital adequacy and the comprehensive supervision of banks' cross-border operations. 509 Founded to bolster financial stability and facilitate regular cooperation on banking supervisory matters among its member states, the Basel Committee has played a crucial role in harmonizing banking regulations across jurisdictions. 510 Initially, the scope of the Basel Committee's capital

⁵⁰⁵ Tony Porter, Globalization and Finance (Polity Press 2005) 18.

⁵⁰⁶ Ibid, 22.

⁵⁰⁷ Chris Brummer, Soft Law and the Global Financial System: Rule Making in the 21st Century (Cambridge University Press 2012) 35.

⁵⁰⁸ Charles Goodhart, *The Basel Committee on Banking Supervision* (Cambridge University Press 2011) 5.

⁵⁰⁹ Ibid, 15

⁵¹⁰ Charles Goodhart, *The Basel Committee on Banking Supervision* (Cambridge University Press 2011) 21.

adequacy standards was primarily targeted at credit institutions within the G10 countries engaged in international operations.⁵¹¹ However, these standards have since been expanded to encompass all countries with banks involved in cross-border activities, reflecting the Committee's evolving approach to global financial stability.⁵¹²

The Basel Accords, a series of regulatory frameworks developed by the BCBS, are instrumental in fostering cross-border cooperation among banking supervisory authorities, enhancing prudential supervision, and promoting the effective assessment and management of systemic risks. The operational objectives of the BCBS include the exchange of information on national supervisory frameworks, the enhancement of techniques for supervising international banking institutions, and the establishment of minimum supervisory standards deemed desirable for global banking stability. It is critical to understand that the Basel Committee does not possess any supranational authority to directly supervise banks. Consequently, the Committee's recommendations serve as standards that member countries are encouraged but not mandated to adopt, leaving the decision of implementation to national regulatory authorities.

The Basel Committee's core function transcends beyond reacting to financial crises; it is fundamentally about setting global standards for the prudent regulation of financial institutions, particularly banks, and providing a platform for collaboration on banking supervision issues.⁵¹⁶

⁵¹¹ Ibid, 28.

⁵¹² Daniel K Tarullo, Banking on Basel: The Future of International Financial Regulation (Peterson Institute 2008) 9.

⁵¹³ Charles Goodhart, *The Basel Committee on Banking Supervision* (Cambridge University Press 2011) 33.

⁵¹⁴ Ibid. 39

⁵¹⁵ Stavros Gadinis, 'The Financial Stability Board: The New Politics of International Financial Regulation' (2013) 48 *Texas International Law Journal* 157, 160.

⁵¹⁶ Rolf H Weber and Douglas W Arner, 'Toward a New Design for International Financial Regulation' (2007) 29(2) *University of Pennsylvania Journal of International Law* 391, 395.

The BCBS serves as a testament to the significant role of international financial regulation in mitigating risks, with its membership comprising central banks and banking supervisors from twenty-eight jurisdictions worldwide.⁵¹⁷ This diverse representation ensures a wide-ranging perspective on banking supervision challenges and solutions.⁵¹⁸

Over the years, the Basel regulations have been subject to continuous revisions and updates to address the changing dynamics of the global financial system. These updates have led to the drafting and incorporation of a series of regulations aimed at governing the financial operations and prudence of banks at an international level.⁵¹⁹ Among these, the progression from Basel I to Basel III represents a significant evolution of the regulatory framework, with each iteration introducing more rigorous capital requirements and risk management standards.⁵²⁰ The most recent, Basel III, builds on the foundations laid by its predecessors, focusing on enhancing the banking sector's ability to absorb shocks arising from financial and economic stress, thereby improving risk management and governance while strengthening banks' transparency and disclosures.⁵²¹

⁵¹⁷ Charles Goodhart, *The Basel Committee on Banking Supervision* (Cambridge University Press 2011) 42.

⁵¹⁸ Dirk Schoenmaker, 'The Financial Trilemma' (2011) 51 Economics Letters 57, 58.

SSRN 2010) https://ssrn.com/abstract=1531760 accessed 15 March 2023; Kern Alexander and Rahul Dhumale, Research Handbook on International Financial Regulation (Edward Elgar 2012) 12; William Diebold and Joan Edelman Spero, 'The Failure of the Franklin National Bank: Challenge to the International Banking System' (1980) 58 Foreign Affairs 976, 977, (As noted previously, the Basel Committee on Banking Supervision was created in response to the collapse of Bankhaus Herstatt and Franklin National Bank, which were internationally significant banks. Despite several attempts by German authorities to save the Bankhaus Herstat from liquidation, German regulators were forced to liquidate the bank due to its failure to settle foreign interbank exchange responsibilities due to fraud in its bookkeeping practices. Illustratively, Bankhaus Herstatt failure to settle interbank exchange responsibilities ultimately caused the US payment systems to strain, with these effects causing the coinage of the phrase 'Herstatt risk' which refers to the failure to honour interbank payment obligations. On the other hand, the collapse of the Franklin National Bank was caused by the bank engaging in excessively risky positions on currency, ultimately exposing itself to the untenable risks accruing from fluctuating currency rates. Despite receiving hefty deposits, the bank was unable to honour the dividend payment causing the institutional depositors to withdraw all their funds after learning of the liquidity problems caused by losses sustained from currency trading).

⁵²⁰ Anat R Admati and Martin F Hellwig, *The Bankers' New Clothes: What's Wrong with Banking and What to Do about It* (Princeton University Press 2014) 60.

⁵²¹ Julia Black, 'The Rise, Fall and Fate of Principles-Based Regulation' (LSE Law, Society and Economy Working Paper 17/2010, 2010) https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1712862 accessed 27 February 2023.

In essence, the Basel Committee's work epitomizes the collective efforts of international regulators to ensure a stable, resilient global banking system. By setting comprehensive standards for capital adequacy, risk management and supervisory cooperation, the BCBS contributes to the mitigation of systemic risks and the promotion of sustainable economic growth. The evolution of the Basel Accords underscores the ongoing need for adaptive, responsive regulatory frameworks that can address the complexities of the modern financial landscape, highlighting the integral role of international cooperation in achieving financial stability. S23

3.4.1 Basel I: A Foundational Pillar in International Banking Regulation

The Basel I Accord, conceptualized in the late 1980s, emerged as a foundational response to growing concerns about the adequacy of capital within banks engaged in international operations.⁵²⁴ Its genesis was closely tied to a period marked by financial instability, notably underscored by a debt crisis in Latin America, which had significant ramifications for the global banking community.⁵²⁵ This crisis not only highlighted the fragility of international banks but also the diminishing capital ratios against a backdrop of escalating risks associated with cross-border financial activities.⁵²⁶ The collective response of the G10 Governors to the challenges was to support the Basel Committee's initiative to arrest the decline in capital standards, thereby

⁵²² Rolf H Weber and Douglas W Arner, 'Toward a New Design for International Financial Regulation' (2007) 29(2) *University of Pennsylvania Journal of International Law* 391, 398.

⁵²³ Charles Goodhart, *The Basel Committee on Banking Supervision* (Cambridge University Press 2011) 46.

⁵²⁴ Patricia Jackson and others, 'Capital Requirements and Bank Behaviour: The Impact of the Basle Accord' (Basel Committee on Banking Supervision Working Paper No 1, April 1999) https://www.bis.org/publ/bcbs_wp1.pdf accessed 26 June 2023, 2.

⁵²⁵ Charles Goodhart, *The Basel Committee on Banking Supervision* (Cambridge University Press 2011) 50.

⁵²⁶ Patricia Jackson and others, 'Capital Requirements and Bank Behaviour: The Impact of the Basle Accord' (Basel Committee on Banking Supervision Working Paper No 1, April 1999) https://www.bis.org/publ/bcbs_wp1.pdf accessed 26 June 2023, 5.

laying the groundwork for what would become a seminal moment in the pursuit of global financial stability.⁵²⁷

The Basel Capital Accord, as it came to be known, represented a concerted effort to establish a unified approach to banking supervision across international borders.⁵²⁸ Its primary objective was to standardize the measurement of capital adequacy, ensuring that banks possessed sufficient capital buffers to withstand financial shocks.⁵²⁹ This was to be achieved through a framework that meticulously outlined the components of capital, the methodologies for risk weighting, and the implementation of capital requirements that transcended national jurisdictions.⁵³⁰

Basel I delineated bank capital into two distinct tiers: "core capital" (Tier 1) and "supplementary capital" (Tier 2) while introducing a spectrum of risk weights (0%, 10%, 20%, 50%, and 100%) assigned to various asset classes to guide the assessment of creditworthiness. The Accord mandated that the aggregate amount of a bank's capital, when juxtaposed against its total credit risk, should not fall below an 8% threshold. The minimum capital adequacy ratio (CAR) of 8%, calculated as the bank's capital divided by its RWA was designed to ensure that banks held enough capital to absorb losses, thereby reducing the likelihood of insolvency. The 8% rule

⁵²⁷ Alexis Drach and Youssef Cassis (eds), *Financial Deregulation: A Historical Perspective* (Oxford University Press 2021) 14.

⁵²⁸ Benton E Gup, *The New Basel Capital Accord* (Thomson 2004).

⁵²⁹ Dimitrios P Tsomocos, 'Equilibrium Analysis, Banking and Financial Instability' (2003) 6 Financial Markets, Institutions & Instruments 1, 4.

⁵³⁰ Patricia Jackson and others, 'Capital Requirements and Bank Behaviour: The Impact of the Basle Accord' (Basel Committee on Banking Supervision Working Paper No 1, April 1999) https://www.bis.org/publ/bcbs_wp1.pdf accessed 26 June 2023, 8.

⁵³¹ Kern Alexander, Rahul Dhumale and John Eatwell, *Global Governance of Financial Systems: The International Regulation of Systemic Risk* (Oxford University Press 2006) 19.

⁵³² Charles Goodhart, *The Basel Committee on Banking Supervision* (Cambridge University Press 2011) 61.

⁵³³ Patricia Jackson and others, 'Capital Requirements and Bank Behaviour: The Impact of the Basle Accord' (Basel Committee on Banking Supervision Working Paper No 1, April 1999) https://www.bis.org/publ/bcbs_wp1.pdf accessed 26 June 2023, 12.

was a cornerstone of the Basel I framework, setting a global benchmark for capital adequacy that banks across member and non-member countries rapidly adopted.⁵³⁴

Despite the Accord's broad adoption and its introduction of a relatively straightforward mechanism for addressing capital risks in the context of international banking transactions, Basel I was not without its critics. Critics argued that the framework was overly simplistic and failed to capture the multifaceted nature of systemic risks inherent in the global financial system. Systemic risks, characterized by the potential for widespread disruptions to the financial services sector due to failures within significant financial institutions or market segments, pose a grave threat to economic stability and consumer welfare. Therefore, despite its pioneering role in international banking regulation, Basel I attracted criticism for several reasons. Its focus was narrowly confined to credit risk, neglecting other forms of financial risk such as market and operational risks, which also bear significant implications for a bank's stability. This omission was particularly glaring considering the complex nature of modern financial instruments and the dynamic risks they pose.

Furthermore, the Accord's risk-weighting system was critiqued for its lack of granularity. By not distinguishing sufficiently between the risk profiles of different borrowers within the same risk weight category, Basel I inadvertently encouraged banks to seek higher returns by lending to higher-risk borrowers, thereby amplifying the system's exposure to credit risk. ⁵³⁸ This one-size-fits-all approach to risk weighting failed to account for the nuanced risk landscape of global

⁵³⁴ Charles Goodhart, *The Basel Committee on Banking Supervision* (Cambridge University Press 2011) 72.

⁵³⁵ Ibid, 79.

⁵³⁶ Steven L Schwarcz, 'Systemic Risk' (2008) 97 Georgetown Law Journal 193, 196.

⁵³⁷ Charles Goodhart, *The Basel Committee on Banking Supervision* (Cambridge University Press 2011) 90.

⁵³⁸ Patricia Jackson and others, 'Capital Requirements and Bank Behaviour: The Impact of the Basle Accord' (Basel Committee on Banking Supervision Working Paper No 1, April 1999) https://www.bis.org/publ/bcbs_wp1.pdf accessed 26 June 2023, 14.

banking activities.⁵³⁹ Likewise, Basel I did not account for investments in government securities as a risk category, operating under the assumption that such investments were inherently secure.⁵⁴⁰ This oversight underscored a significant gap in the regulatory framework, given that sovereign debt crises can and did occur, posing substantial risks to the banking sector.⁵⁴¹

Although the Accord permitted banks considerable leeway in developing internal models for calculating capital adequacy, the flexibility, while intended to accommodate the diverse operational realities of international banks, raised concerns about the potential for banks to under-report or obscure the true extent of their risk exposure. This aspect of Basel I highlighted the delicate balance between regulatory standardization and the need for adaptability to specific institutional contexts. However, the final criticism against Basel was centred on its rudimentary approach to differentiating between borrowers' risk profiles, inadvertently encouraging banks to extend credit to lower-quality borrowers, thereby amplifying the propensity for risk-taking within the financial sector. Additionally, the Accord's oversight in not classifying investments in government securities as bearing risk and the latitude granted to banks in developing internal models for calculating capital adequacy were seen as significant flaws. These elements collectively contributed to an environment where the true extent of credit risk could be obscured, undermining the Accord's foundational goal of ensuring financial stability.

⁵³⁹ Julia Black, 'The Development of Risk-Based Regulation in Financial Services: Just "Modelling Through"?' (LSE Law, Society and Economy Working Paper 26/2016, 2016) http://eprints.lse.ac.uk/64993/ accessed 13 March 2023.

⁵⁴⁰ Charles Goodhart, *The Basel Committee on Banking Supervision* (Cambridge University Press 2011) 95.

⁵⁴¹ Rafael La Porta and others, 'Law and Finance' (1998) 106 Journal of Political Economy 1113, 1116.

⁵⁴² Charles Goodhart, *The Basel Committee on Banking Supervision* (Cambridge University Press 2011) 102.

⁵⁴³ Patricia Jackson and others, 'Capital Requirements and Bank Behaviour: The Impact of the Basle Accord' (Basel Committee on Banking Supervision Working Paper No 1, April 1999) https://www.bis.org/publ/bcbs_wp1.pdf accessed 26 June 2023 17

⁵⁴⁴ Charles Goodhart, *The Basel Committee on Banking Supervision* (Cambridge University Press 2011) 110.

The constructive criticism of Basel I underscored the Accord's limitations in adequately addressing the complexity and dynamism of modern financial markets. The framework's primary focus on credit risk, to the exclusion of other forms of financial risk and without a nuanced understanding of the evolving nature of financial transactions and market practices, illuminated the need for a regulatory paradigm that was both more comprehensive and adaptive to the changing landscape of global finance. This recognition precipitated the development of Basel II, which sought to rectify the shortcomings of its predecessor by introducing a sophisticated, multi-layered approach to risk management and capital adequacy. Basel II's genesis was motivated by a recognition of the inadequacies inherent in the Basel I framework and a forward-looking vision to establish a more robust and flexible regulatory infrastructure capable of safeguarding the global banking system against future financial shocks.

In this context, Basel I can be viewed not merely as a regulatory framework but as a critical stepping stone towards the evolution of global financial regulation. Its development marked a significant shift in the collective mindset of international banking regulators towards recognizing the importance of standardized capital requirements, risk management practices, and the need for international cooperation in overseeing the banking sector.⁵⁴⁸ Despite its perceived shortcomings, Basel I laid the foundational principles that would inform subsequent iterations of the Basel Accords, each aiming to enhance the resilience, transparency and stability of the global financial system.⁵⁴⁹ As such, Basel I represents both a historical milestone in the history of financial regulation and a catalyst for ongoing dialogue and reform in the quest to

⁵⁴⁵ Ibid, 115.

⁵⁴⁶ Daniel K Tarullo, *Banking on Basel: The Future of International Financial Regulation* (Peterson Institute 2008) 28.

⁵⁴⁸ Charles Goodhart, *The Basel Committee on Banking Supervision* (Cambridge University Press 2011) 121.

⁵⁴⁹ Daniel K Tarullo, Banking on Basel: The Future of International Financial Regulation (Peterson Institute 2008) 42.

achieve a balanced, secure and efficient banking sector capable of withstanding the challenges of an increasingly interconnected world economy.⁵⁵⁰

3.4.2 Basel II: Comprehensive Approach to Risk Management

The development and implementation of the Basel II Accord was a watershed moment in international banking regulation, marking a significant departure from the relatively simplistic provisions of Basel I. Basel II emerged against a backdrop of increasing complexity within the global financial system, characterized by rapid advancements in financial products, a deeper interconnection among global markets, and a growing recognition of the multifaceted nature of risk beyond mere credit exposure.⁵⁵¹ This complexity necessitated a regulatory framework that could adapt to the nuanced realities of modern banking, leading to the formulation of Basel II with its advanced approach to risk management and capital adequacy.⁵⁵²

At its core, Basel II sought to refine the regulatory standards set forth by Basel I, addressing critical feedback and adapting to the evolving landscape of international finance.⁵⁵³ Basel I, for its part, had established a ground-breaking yet rudimentary framework for assessing capital adequacy, primarily focusing on credit risk.⁵⁵⁴ However, its broad-brush approach to risk weighting and the uniform application of capital requirements came under scrutiny for failing to accurately reflect the diverse risk profiles of banking assets and activities.⁵⁵⁵ Furthermore,

⁵⁵⁰ Charles Goodhart, *The Basel Committee on Banking Supervision* (Cambridge University Press 2011) 126.

⁵⁵¹ Kern Alexander, Rahul Dhumale and John Eatwell, *Global Governance of Financial Systems: The International Regulation of Systemic Risk* (Oxford University Press 2006) 30.

⁵⁵² Basel Committee on Banking Supervision, 'International Convergence of Capital Measurement and Capital Standards' (updated November 2005) https://www.bis.org/publ/bcbs107.htm accessed 26 December 2022.

 ⁵⁵³ Richard Brealey, 'Basel II: The Route Ahead or Cul-de-Sac?' (2006) 18(4) *Journal of Applied Corporate Finance* 34, 36.
 ⁵⁵⁴ Ines Drumond, 'Bank Capital Requirements, Business Cycle Fluctuations and the Basel Accords: A Synthesis' (2009) 23(5) *Journal of Economic Surveys* 798, 811.

⁵⁵⁵ Ross Levine, 'The Governance of Financial Regulation: Reform Lessons from the Recent Crisis' (2012) 12(1) *International Review of Finance* 39, 43.

Basel I's narrow focus on credit risk neglected other significant risks, such as market and operational risks, which had become increasingly pertinent to the stability of the banking sector.⁵⁵⁶

In response to these challenges, Basel II introduced a more sophisticated and comprehensive framework, structured around three foundational pillars designed to support a robust and resilient banking system.⁵⁵⁷ The first pillar, concerning minimum capital requirements, was revolutionary in its adoption of risk-sensitive measures for assessing capital adequacy.⁵⁵⁸ It recognized the limitations of a one-size-fits-all approach to risk weighting and allowed for greater differentiation based on the actual risk profile of assets.⁵⁵⁹ Through the introduction of the Standardized Approach and the more advanced Internal Ratings-Based (IRB) approaches, Basel II enabled banks to align their capital requirements more closely with the specific risks they faced, fostering a more accurate and efficient allocation of capital.⁵⁶⁰

Despite the innovations of the first pillar, it was not without its critics. The reliance on internal risk assessments, particularly under the Advanced IRB approach, raised concerns about the transparency and consistency of risk evaluation across the banking sector.⁵⁶¹ It is argued that allowing banks too much discretion in determining their risk profiles could lead to underestimation of risk and insufficient capital buffers.⁵⁶² This concern was exacerbated by the

⁵⁵⁶ Giovanni Dell'Ariccia and Lev Ratnovski, 'Bailouts and Systemic Insurance' (2019) 105 *Journal of Banking & Finance* 166, 170.

⁵⁵⁷ Tony Porter, 'Why International Institutions Matter in the Global Credit Crisis' (2009) 15(1) *Journal of Banking Regulation* 3, 5.

⁵⁵⁸ Stefano Battiston and others, 'Complexity Theory and Financial Regulation' (2016) 351(6275) Science 818, 819.

⁵⁵⁹ Guillermo Calvo and others, Emerging Capital Markets in Turmoil: Bad Luck or Bad Policy? (MIT Press 2005) 23.

⁵⁶⁰ Stephen Cecchetti and Kermit L Schoenholtz, Money, Banking and Financial Markets (McGraw-Hill 2020) 55.

⁵⁶¹ Christopher Bickerton, 'Capitalism after the Crisis' (2015) 20(5) *New Political Economy* 783, 785.

⁵⁶² Milton Friedman and Anna J Schwartz, *A Monetary History of the United States*, 1867–1960 (Princeton University Press 1993) 301.

global financial crisis of 2008, which exposed significant vulnerabilities in the risk management practices of banks and the effectiveness of regulatory oversight.⁵⁶³

The second pillar of Basel II, focusing on the supervisory review process, aimed to mitigate these risks by establishing a more interactive and dynamic relationship between banks and regulatory authorities.⁵⁶⁴ This pillar emphasized the need for robust internal governance and risk management processes within banks, as well as the importance of regulatory oversight in evaluating and reinforcing these practices.⁵⁶⁵ It introduced the concept of the Supervisory Review and Evaluation Process (SREP), through which regulators were expected to assess the adequacy of banks' internal capital assessments and their preparedness to withstand financial stress.⁵⁶⁶ This pillar highlighted the critical role of effective supervision in maintaining financial stability, underscoring the need for a vigilant and proactive regulatory stance.⁵⁶⁷

The third pillar of Basel II addressed the crucial aspect of market discipline through enhanced disclosure requirements. ⁵⁶⁸ By mandating banks to provide detailed information about their risk exposures, assessment methodologies and capital adequacy, this pillar sought to empower market participants to make informed judgments about the risk and stability of banking institutions. ⁵⁶⁹ The premise was that a well-informed market can act as a natural regulator,

⁵⁶³ Ben S Bernanke, 'Some Reflections on the Crisis and the Policy Response' in Alan S Blinder, Andrew W Lo and Robert M Solow (eds), *Rethinking the Financial Crisis* (Russell Sage Foundation 2012) 69.

⁵⁶⁴ Asli Demirgüç-Kunt, Edward Kane and Luc Laeven (eds), *Deposit Insurance around the World: Issues of Design and Implementation* (MIT Press 2008) 41.

⁵⁶⁵ Claudio Borio, 'Implementing a Macroprudential Framework: Blending Boldness and Realism' (2011) 7(1) *Capital Markets Law Journal* 203, 205.

⁵⁶⁶ Thomas Huertas, Crisis: Cause, Containment and Cure (2nd edn, Palgrave Macmillan 2011) 17.

⁵⁶⁷ Xavier Freixas, Luc Laeven and José-Luis Peydró, *Systemic Risk, Crises, and Macroprudential Regulation* (MIT Press 2015) 92.

⁵⁶⁸ André Broome and Joel Quirk, 'Governing the World at a Distance: The Practice of Global Benchmarking' (2015) 41(5) *Review of International Studies* 819, 823.

⁵⁶⁹ Manmohan Singh, *Collateral, Netting and Systemic Risk in the OTC Derivatives Market* (International Monetary Fund 2010) 11.

incentivizing banks to maintain prudent risk management practices through the forces of market scrutiny and investor choice.⁵⁷⁰ However, the effectiveness of this pillar hinged on the ability of market participants to understand and act upon the disclosed information, a factor that depended on the level of financial literacy and sophistication of investors and other stakeholders.⁵⁷¹

In the aftermath of the 2008 financial crisis, the Basel II framework came under intense scrutiny, with critics pointing out its failure to prevent the build-up of systemic risks that led to the crisis.⁵⁷² The crisis revealed shortcomings in the framework's approach to liquidity risk, leverage, and the pro-cyclical nature of capital requirements, which were seen to exacerbate financial downturns rather than mitigate them.⁵⁷³ Furthermore, the crisis underscored the interconnectedness of financial institutions and the potential for contagion, highlighting the need for a regulatory focus on the macroprudential aspects of financial stability, beyond the micro-prudential scope of Basel II.⁵⁷⁴

The lessons learned from the financial crisis and the identified limitations of Basel II set the stage for the development of Basel III, a more stringent and comprehensive set of regulatory standards.⁵⁷⁵ Basel III sought to address the vulnerabilities exposed by the crisis by introducing higher quality and quantity of capital, more robust liquidity standards, and measures to reduce

⁵⁷⁰ Jakob de Haan and Fabian Amtenbrink (eds), *The European Union's Shaping of the International Legal Order* (Cambridge University Press 2013) 134.

³⁷¹ Emilios Avgouleas, *Governance of Global Financial Markets: The Law, the Economics, the Politics* (Cambridge University Press 2012) 45.

⁵⁷² Roberta Romano, 'For Diversity in the International Regulation of Financial Institutions: Critiquing and Recalibrating the Basel Architecture' (2014) 31 *Yale Journal on Regulation* 1, 3.

⁵⁷³ Ross Levine, 'Regulating Finance and Regulators to Promote Growth' (European Banking Centre Discussion Paper No 548/2016, 2016) 2.

⁵⁷⁴ Anat R Admati, 'The Missed Opportunity and Challenge of Capital Regulation' (2016) 235(1) *National Institute Economic Review* R4, R6.

⁵⁷⁵ Mona A ElBannan, 'The Financial Crisis, Basel Accords and Bank Regulations: An Overview' (2017) 7(2) *International Journal of Accounting and Financial Reporting* 225, 229.

systemic risk and financial system procyclicality.⁵⁷⁶ The evolution from Basel II to Basel III represents a continued effort to refine and strengthen the global regulatory framework in response to the challenges of an ever-changing financial landscape.⁵⁷⁷

The journey from Basel I, through Basel II, to Basel III reflects the ongoing dialogue and adaptation within the sphere of international banking regulation. It underscores the complexity of achieving financial stability in a world of evolving risks and the importance of a regulatory framework that is both robust and flexible. As the financial system continues to develop, the Basel Accords remain a testament to the global banking community's commitment to safeguarding against future crises, informed by the lessons of the past and oriented towards the challenges of the future.

3.4.3 Basel III: Strengthening the Resilience of the Banking Sector

In the wake of the 2009 financial tremors, the Basel Committee on Banking Supervision published "Strengthening the Resilience of the Banking Sector." This seminal document laid the groundwork for what would become the Basel III Accord, unveiled in 2010 after a comprehensive period of global consultation.⁵⁷⁸ This Accord was predicated on fortifying the global banking sector's defences against future financial downturns through stringent capital and liquidity requirements.⁵⁷⁹ It also signalled a paradigm shift towards a macro-prudential

⁵⁷⁶ Bruce Arnold and others, 'Systemic Risk, Macroprudential Policy Frameworks, Monitoring Financial Systems and the Evolution of Capital Adequacy' (2012) 36(12) *Journal of Banking & Finance* 3125, 3128.

⁵⁷⁷ Ester Faia and others (eds), Financial Regulation: A Transatlantic Perspective (Cambridge University Press 2015) 67.

⁵⁷⁸ Stefan Ingves, 'Basel III: Strengthening the Resilience of the Banking Sector' (BIS Speech, 2010) https://www.bis.org/speeches/sp101223.pdf accessed 17 January 2023.

⁵⁷⁹ Kern Alexander, Rahul Dhumale and John Eatwell, *Global Governance of Financial Systems: The International Regulation of Systemic Risk* (Oxford University Press 2006) 53.

outlook that embraced systemic risk and cyclicality as pivotal considerations in banking regulation.⁵⁸⁰

Financial regulations such as Basel III have been instrumental in strengthening risk management and capital adequacy. Alshaleel (2022) highlights that risk-based regulation ensures financial resilience, particularly in markets with emerging financial systems.⁵⁸¹ However, Basel III emerged not in isolation but as a recalibration of the pre-existing Basel II framework, which had inadvertently facilitated a precarious credit environment. The Basel Committee meticulously crafted Basel III to rectify the shortcomings of its predecessor by stipulating a series of reinforced measures directed at bank capital adequacy, risk management and leverage control.⁵⁸² Notably, the Accord recognized the intrinsic value of heightened capital requirements, not merely as a buffer against operational losses but as a deterrent to the excessive risk-taking that characterizes economic downturns.⁵⁸³ By mandating increased capital reserves, banks were equipped to withstand deeper recessions, a prescient move considering the latent nature of systemic risks and the potential for their protracted development.⁵⁸⁴

The enhancements brought forth by Basel III were not confined to quantitative adjustments. A qualitative transformation was also evident in the insistence on high-grade capital, particularly common equity, which forms the bedrock of a bank's financial resilience.⁵⁸⁵ An innovative

⁵⁸⁰ Stijn Claessens, 'An Overview of Macroprudential Policy Tools' (2015) 7(1) *Annual Review of Financial Economics* 397, 399.

⁵⁸¹ Mohammed Khair Alshaleel, *Regulation and Governance of Mutual Funds: United Kingdom and United States of America Perspectives on Investor Protection* (Routledge 2021) 112.

Andrew Walter, Governing Finance: East Asia's Adoption of International Standards (Cornell University Press 2008) 80.
 Katia D'Hulster, 'The Leverage Ratio' (World Bank Financial and Private Sector Development Note No 11, December 2009).

⁵⁸⁴ Ricardo Reis, 'Can the Central Bank Alleviate Fiscal Burdens?' (National Bureau of Economic Research Working Paper 23014, December 2016) 4.

⁵⁸⁵ Anat R Admati and Martin F Hellwig, *The Bankers' New Clothes: What's Wrong with Banking and What to Do about It* (Princeton University Press 2013) 71.

feature of Basel III was the introduction of capital conservation buffers, designed to be a safeguard that, when breached, would trigger constraints on distributions to preserve a bank's core capital base.⁵⁸⁶ This mechanism was a crucial addition, especially for systemically important banks whose stability is vital for the international financial architecture.⁵⁸⁷ In these cases, additional loss absorbency capacities were stipulated, accompanied by more robust supervisory and resolution strategies, especially in cross-border contexts.⁵⁸⁸

In summary, the Basel III Accord, a response to the gaps exposed by the financial crises, particularly the one that struck Lehman Brothers, did not merely plug those gaps.⁵⁸⁹ It reinforced and extended the foundational pillars laid by Basel II, embedding within the global banking sector a more robust framework capable of withstanding future financial upheavals.⁵⁹⁰ The blueprint of reforms implemented between 2013 and 2019 was a testament to a global commitment to higher standards of banking security, which, while derived from the past, was firmly oriented towards securing a more stable financial future.

3.4.3.1 Basel III Requirements

The Basel Committee on Banking Supervision, in its Basel III framework, significantly revised the standards for bank capital adequacy, aiming to strengthen the banking sector's ability to absorb shocks arising from financial and economic stress.⁵⁹¹ A central piece of this regulatory

⁵⁸⁶ Juan Ramirez, Handbook of Basel III Capital: Enhancing Bank Capital in Practice (John Wiley & Sons 2017) 93.

⁵⁸⁷ Mario Giovanoli, 'The Reform of the International Financial Architecture after the Global Crisis' (2009) 42 New York University Journal of International Law and Politics 81, 83.

⁵⁸⁸ Lucia Quaglia and Aneta Spendzharova, 'Regulators and the Quest for Coherence in Finance: The Case of Loss Absorbing Capacity for Banks' (2019) 97(3) *Public Administration* 499, 501-506.

⁵⁸⁹ Thomas Huertas, Crisis: Cause, Containment and Cure (2nd edn, Palgrave Macmillan 2011) 33.

⁵⁹⁰ Emilios Avgouleas, 'Rationales and Designs to Implement an Institutional Big Bang in the Governance of Global Finance' (2013) 36 Seattle University Law Review 321.

⁵⁹¹ Basel Committee on Banking Supervision, *Basel III: A Global Regulatory Framework for More Resilient Banks and Banking Systems* (2010) para 12.

overhaul was the augmentation of the core minimum requirement for Common Equity Tier 1 (CET1) capital. The CET1 requirement was escalated to 4.5% of risk-weighted assets (RWA), up from a mere 2% under Basel II.⁵⁹² Additionally, Basel III mandated that the total Tier 1 capital requirement, which includes CET1 and Additional Tier 1 capital, be increased to 6.0% of RWA.⁵⁹³ The total capital ratio requirement, inclusive of Tier 2 capital, was retained at 8.0% of RWA, aligning with Basel II but with a redefined stricter composition.⁵⁹⁴

The Basel III framework categorizes bank capital into distinct tiers, each defined by its level of stability and ability to absorb losses.⁵⁹⁵ Common Equity Tier 1 (CET1) capital, positioned at the pinnacle of capital quality, encompasses elements such as issued common shares, stock surpluses from these shares, retained earnings, and other comprehensive income.⁵⁹⁶ This form of capital represents the most fundamental buffer against losses, being available to cover losses while the bank continues to operate.⁵⁹⁷

Additional Tier 1 (AT1) capital, which supplements CET1, includes instruments that do not have a fixed maturity date and are capable of absorbing losses through either conversion into common equity or through a write-down mechanism that triggers at the point of non-viability.⁵⁹⁸ The criteria for AT1 instruments are stringent, ensuring that only those instruments that provide

⁵⁹² Basel Committee on Banking Supervision, *International Convergence of Capital Measurement and Capital Standards: A Revised Framework (Basel II)* (2004) para 49(xi).

⁵⁹³ Basel Committee on Banking Supervision, *Basel III: A Global Regulatory Framework for More Resilient Banks and Banking Systems* (2010) annex 1.

 ⁵⁹⁵ Basel Committee on Banking Supervision, Basel III: A Global Regulatory Framework for More Resilient Banks and Banking Systems (2010) para 49.
 596 Ibid para 52.

⁵⁹⁷ Kern Alexander, Rahul Dhumale and John Eatwell, *Global Governance of Financial Systems: The International Regulation of Systemic Risk* (Oxford University Press 2006) 90.

⁵⁹⁸ Basel Committee on Banking Supervision, *Basel III: A Global Regulatory Framework for More Resilient Banks and Banking Systems* (2010) para 55.

a genuine loss-absorbing capacity without imposing further obligations on the bank are included.⁵⁹⁹

Tier 2 capital serves as a secondary layer of loss absorption on a gone-concern basis, meaning it comes into play when a bank is winding down.⁶⁰⁰ Tier 2 includes subordinated debts and other instruments that have a minimum original maturity of at least five years.⁶⁰¹ Unlike Tier 1 capital, Tier 2 is more about providing a cushion for depositors and other creditors during liquidation rather than enabling the bank to continue its operations.⁶⁰²

The elevation of CET1 capital requirements under Basel III aims at bolstering banks' resilience to losses. This resilience is critical not only for the survival of individual banks but also for the stability of the financial system as a whole.⁶⁰³ High-quality capital, such as CET1, serves as a durable buffer against losses, ensuring that banks can withstand significant financial stress without recourse to taxpayer-funded bailouts.⁶⁰⁴

Moreover, the enhanced requirements encourage banks to adopt more prudent risk management practices. By directly linking capital requirements to risk exposure, Basel III incentivizes banks to carefully evaluate and manage their risk profiles.⁶⁰⁵ This alignment is vital for fostering a

⁶⁰² Kern Alexander, Rahul Dhumale and John Eatwell, *Global Governance of Financial Systems: The International Regulation of Systemic Risk* (Oxford University Press 2006) 132.

⁵⁹⁹ Kern Alexander, Rahul Dhumale and John Eatwell, *Global Governance of Financial Systems: The International Regulation of Systemic Risk* (Oxford University Press 2006) 120.

⁶⁰⁰ Basel Committee on Banking Supervision, *Basel III: A Global Regulatory Framework for More Resilient Banks and Banking Systems* (2010) para 58.

⁶⁰¹ Ibid para 59.

⁶⁰³ Charles AE Goodhart and others, 'Financial Regulation in General Equilibrium' (National Bureau of Economic Research Working Paper No 17909, 2012) 2.

⁶⁰⁴ Kristin N Johnson, 'Governing Financial Markets: Regulating Conflicts' (2013) 88 Washington Law Review 185, 188.

⁶⁰⁵ Basel Committee on Banking Supervision, *Basel III: A Global Regulatory Framework for More Resilient Banks and Banking Systems* (2011) principle 1.

culture of responsibility within the banking sector, deterring excessive risk-taking that could jeopardize the financial system's integrity.⁶⁰⁶

The increased CET1 requirement also has broader economic implications. By ensuring that banks are better capitalized, the framework aims to enhance public confidence in the banking system.⁶⁰⁷ This confidence is essential for the smooth functioning of credit markets and the overall economy. However, the transition to higher capital standards has necessitated adjustments within the banking sector, including changes in lending practices and business models.⁶⁰⁸

However, the implementation of Basel III's capital requirements poses challenges for banks and regulators alike. Balancing the goals of financial stability and economic growth requires careful calibration of regulatory standards.⁶⁰⁹ Moreover, the global harmonization of Basel III standards remains an ongoing endeavour, with variations in adoption and implementation across different jurisdictions.⁶¹⁰

As the banking sector continues to evolve, so too will the regulatory landscape. The Basel Committee on Banking Supervision and other regulatory bodies remain vigilant, and ready to adapt the framework as new risks emerge.⁶¹¹ The journey towards a more resilient banking

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⁶⁰⁶ Franklin Allen, Elena Carletti and Xian Gu, 'The Roles of Banks in Financial Systems' in Allen N Berger, Philip Molyneux and John OS Wilson (eds), *The Oxford Handbook of Banking* (Oxford University Press 2009) 32.

⁶⁰⁷ Charles Goodhart, *The Basel Committee on Banking Supervision* (Cambridge University Press 2011) 41.

⁶⁰⁸ Michel Crouhy, Dan Galai and Robert Mark, *The Essentials of Risk Management* (2nd edn, McGraw-Hill 2014) 74.
609 Éric Chouinard and Graydon Paulin, 'Making Banks Safer: Implementing Basel III' (2014) *Financial System Review* 53,
55

⁶¹⁰ James R Barth, Gerard Caprio Jr and Ross Levine, 'Bank Regulation in 180 Countries' (2013) 5(2) *Journal of Financial Economic Policy* 111, 115.

⁶¹¹ Basel Committee on Banking Supervision, *Review of the Principles for Sound Liquidity Risk Management and Supervision* (September 2008) 7.

sector is continuous, with the enhanced capital requirements of Basel III marking a significant milestone in this ongoing effort.⁶¹²

In summary, the Basel III capital requirements, particularly the increased CET1 requirement, represent a paradigm shift in banking regulation. This shift towards higher quality and quantity of capital is a cornerstone of efforts to fortify the banking sector against future financial shocks. As the global financial system grows more interconnected and complex, the principles underpinning Basel III will continue to guide the pursuit of a stable, resilient banking sector capable of supporting sustainable economic growth. 614

3.4.4 Enhancing Quality and Consistency of Capital

The introduction of the Countercyclical Buffer (CCyB) under Basel III constitutes a pivotal advancement in the global regulatory framework aimed at enhancing the banking sector's resilience to cyclical economic fluctuations and financial shocks. Unlike traditional static capital requirements, the CCyB is a dynamic regulatory tool designed to mitigate the procyclicality of the financial system — whereby banking activities tend to amplify economic upturns and downturns, exacerbating financial cycles and systemic risk.

⁶¹² Ricardo Correa and Linda S Goldberg, 'Bank Complexity, Governance, and Risk' (2022) 134 *Journal of Banking & Finance* 106013, 106018.

⁶¹³ Basel Committee on Banking Supervision, Basel III: A Global Regulatory Framework for More Resilient Banks and Banking Systems (2010) para 25.

⁶¹⁴ Kristin N Johnson, 'Governing Financial Markets: Regulating Conflicts' (2013) 88 Washington Law Review 185, 188.

⁶¹⁵ Basel Committee on Banking Supervision, *Basel III: A Global Regulatory Framework for More Resilient Banks and Banking Systems* (June 2011) paras 136–158.

⁶¹⁶ Lucas Papademos, 'The Role of Macro-Prudential Oversight and Monetary Policy in Preventing Financial Instability' in *Pontifical Academy of Social Sciences, Crisis in the Global Economy and the Future of Capitalism* (2011) 459, 462.

The CCyB is structured to accumulate additional capital during periods of high credit growth, which are often associated with the build-up of systemic risks and financial imbalances.⁶¹⁷ This additional buffer is intended to be released during periods of stress or downturn, allowing banks to absorb losses and continue lending, thereby dampening the downward spiral that can occur during economic contractions.⁶¹⁸ The fundamental objective of the CCyB is to make banking sector capital requirements more responsive to the macroeconomic environment, enhancing the sector's ability to withstand cyclical pressures and contribute to the overall stability of the financial system.⁶¹⁹

The CCyB's effectiveness hinges on its countercyclical design, which directly addresses the procyclical tendencies of the financial system. ⁶²⁰ By mandating banks to hold additional capital during periods of excessive credit growth signalled by indicators such as the credit-to-GDP gap, regulators aim to temper the exuberance that typically characterizes financial booms. ⁶²¹ This pre-emptive approach to capital accumulation is crucial for ensuring that banks have a sufficient capital buffer to weather periods of economic downturn and stress without resorting to deleveraging or curtailing credit to the real economy. ⁶²²

⁶¹⁷ Basel Committee on Banking Supervision, *Basel III: A Global Regulatory Framework for More Resilient Banks and Banking Systems* (June 2011) para 137.

⁶¹⁸ Lucas Papademos, 'The Role of Macro-Prudential Oversight and Monetary Policy in Preventing Financial Instability' in *Pontifical Academy of Social Sciences, Crisis in the Global Economy and the Future of Capitalism* (2011) 459, 462. ⁶¹⁹ Basel Committee on Banking Supervision, *Basel III: A Global Regulatory Framework for More Resilient Banks and Banking Systems* (June 2011) paras 140–142.

⁶²⁰ David Aikman and others, 'Would Macroprudential Regulation Have Prevented the Last Crisis?' (2019) 33(1) *Journal of Economic Perspectives* 107, 110.

⁶²¹ Basel Committee on Banking Supervision, *Basel III: A Global Regulatory Framework for More Resilient Banks and Banking Systems* (June 2011) para 145.

⁶²² David Aikman and others, 'Would Macroprudential Regulation Have Prevented the Last Crisis?' (2019) 33(1) *Journal of Economic Perspectives* 107, 112.

The operationalization of the CCyB involves a degree of discretion for national regulators, reflecting the diverse economic and financial conditions across jurisdictions.⁶²³ Regulators are tasked with setting the CCyB rate based on their assessment of systemic risk and credit growth within their respective markets, with the buffer rate ranging from 0% to 2.5% of risk-weighted assets, and potentially higher in exceptional circumstances.⁶²⁴ This flexibility is critical for tailoring the buffer to specific national or regional economic contexts, ensuring that the CCyB's application is both effective and proportionate.⁶²⁵

However, the discretionary nature of the CCyB also poses challenges, particularly in terms of international coordination and consistency. Given the global interconnectedness of financial markets, divergent application of the CCyB across jurisdictions could potentially lead to regulatory arbitrage, where banks shift activities to regions with lower buffer requirements. Moreover, the determination of the appropriate timing and magnitude for activating or deactivating the buffer requires sophisticated analytical tools and judgment, underscoring the need for robust macroprudential surveillance and analysis by regulators.

Despite these challenges, the CCyB represents a significant leap forward in the pursuit of a more stable and resilient banking system.⁶²⁹ By explicitly recognizing and addressing the cyclical dynamics of the financial system, the CCyB complements the static capital

⁶²³ Basel Committee on Banking Supervision, *Basel III: A Global Regulatory Framework for More Resilient Banks and Banking Systems* (June 2011) paras 137–139.

⁶²⁴ Ibid para 136.

⁶²⁵ Daniel K Tarullo, 'Macroprudential Regulation' (2014) 31 Yale Journal on Regulation 505, 508.

⁶²⁶ Basel Committee on Banking Supervision, *Basel III: A Global Regulatory Framework for More Resilient Banks and Banking Systems* (June 2011) para 139.

⁶²⁷ Daniel K Tarullo, 'Macroprudential Regulation' (2014) 31 Yale Journal on Regulation 505, 510.

⁶²⁸ Basel Committee on Banking Supervision, *Basel III: A Global Regulatory Framework for More Resilient Banks and Banking Systems* (June 2011) para 150.

⁶²⁹ David Aikman and others, 'Would Macroprudential Regulation Have Prevented the Last Crisis?' (2019) 33(1) *Journal of Economic Perspectives* 107, 115.

requirements of Basel III with a flexible, macro-prudentially oriented tool that can adapt to changing economic conditions.⁶³⁰ Its implementation underscores the shift towards a more nuanced and dynamic approach to banking regulation, one that balances the need for financial stability with the economic imperative of supporting sustainable growth.⁶³¹

In summary, the CCyB's role in enhancing the banking sector's resilience to financial and economic shocks is predicated on its ability to moderate the procyclical tendencies inherent in the financial system.⁶³² As the global economy continues to evolve, marked by periods of rapid credit expansion and contraction, the CCyB's countercyclical mechanism offers a valuable safeguard against the accumulation of systemic risk.⁶³³ The ongoing challenge for regulators and policymakers will be to refine and adapt this tool, ensuring its effective integration into the broader macroprudential framework and its alignment with the overarching goal of financial stability.⁶³⁴

The introduction of the Capital Conservation Buffer (CCB) by Basel III represents a significant evolution in the regulatory framework designed to enhance the resilience of the banking sector to financial and economic shocks.⁶³⁵ Positioned as a preventive mechanism, the CCB aims to ensure that banks accumulate a buffer of capital above the minimum regulatory requirements during periods of economic growth, which can then be drawn down in times of stress.⁶³⁶ This

⁶³⁰ Basel Committee on Banking Supervision, *Basel III: A Global Regulatory Framework for More Resilient Banks and Banking Systems* (June 2011) paras 140–142.

⁶³¹ Daniel K Tarullo, 'Macroprudential Regulation' (2014) 31 Yale Journal on Regulation 505, 511.

⁶³² Basel Committee on Banking Supervision, *Basel III: A Global Regulatory Framework for More Resilient Banks and Banking Systems* (June 2011) paras 136–138.

⁶³³ Claudio E V Borio, Marc Farag and Nikola A Tarashev, 'Post-Crisis International Financial Regulatory Reforms: A Primer' (2020) BIS Quarterly Review 75, 77.

⁶³⁴ Basel Committee on Banking Supervision, *Basel III: A Global Regulatory Framework for More Resilient Banks and Banking Systems* (June 2011) para 158.

⁶³⁵ Ibid paras 122-135.

⁶³⁶ David Aikman and others, 'Would Macroprudential Regulation Have Prevented the Last Crisis?' (2019) 33(1) *Journal of Economic Perspectives* 107, 118.

approach reflects a shift towards a more cyclical perspective on capital regulation, recognizing the dynamic nature of financial markets and the importance of preparing for downturns during upturns.⁶³⁷

The CCB is set at 2.5% of risk-weighted assets and is composed entirely of Common Equity Tier 1 (CET1) capital, the highest quality of capital.⁶³⁸ This requirement is in addition to the minimum CET1 capital requirement of 4.5% and the Tier 1 capital requirement of 6%, bringing the total CET1 requirement to 7% when the CCB is fully phased in.⁶³⁹ The choice of CET1 capital for the buffer emphasizes the regulatory preference for the most loss-absorbing form of capital, which is readily available to absorb losses without the need for the bank to cease operations.⁶⁴⁰

One of the critical innovations of the CCB is its operational mechanism during periods of financial stress.⁶⁴¹ Rather than imposing a static capital requirement that banks must meet at all times, the CCB allows banks to dip into this buffer during downturns to continue lending and absorb losses, albeit with certain restrictions on capital distributions such as dividends, share buybacks, and bonus payments.⁶⁴² This flexibility is crucial in preventing a pro-cyclical contraction of credit, where regulatory capital requirements could otherwise force banks to

⁶³⁷ Basel Committee on Banking Supervision, *Basel III: A Global Regulatory Framework for More Resilient Banks and Banking Systems* (June 2011) para 122.

⁶³⁸ Ibid paras 129- 130

⁶³⁹ Basel Committee on Banking Supervision, *Basel III: A Global Regulatory Framework for More Resilient Banks and Banking Systems* (June 2011) paras 129- 130

⁶⁴⁰ David Aikman and others, 'Would Macroprudential Regulation Have Prevented the Last Crisis?' (2019) 33(1) *Journal of Economic Perspectives* 107, 119.

⁶⁴¹ Basel Committee on Banking Supervision, *Basel III: A Global Regulatory Framework for More Resilient Banks and Banking Systems* (June 2011) paras 131–132.

⁶⁴² Emily Lee, 'Basel III and Its New Capital Requirements, as Distinguished from Basel II' (2014) 131 *Banking Law Journal* 27, 30.

curtail lending precisely when economic conditions are worsening, thereby exacerbating the downturn.⁶⁴³

The CCB also serves a crucial role in enhancing the banking sector's resilience to various financial and economic shocks.⁶⁴⁴ By mandating that banks hold a buffer of high-quality capital, it directly addresses one of the key vulnerabilities exposed by the global financial crisis – the insufficiency of high-quality capital to absorb losses.⁶⁴⁵ This insufficiency was a central factor in the rapid transmission of shocks across the financial system, leading to widespread instability.⁶⁴⁶ By ensuring that banks have a dedicated reserve of capital specifically intended to be used in bad times, the CCB acts as a shock absorber, enhancing the overall stability of the financial system.⁶⁴⁷

Moreover, the CCB has implications for the management of banks and their approach to capital planning and risk management.⁶⁴⁸ Banks must now consider the cyclical nature of the economy and their capital positions within this cycle, adjusting their capital accumulation and distribution policies accordingly. This requirement promotes a more forward-looking approach to risk management, encouraging banks to build up defences in good times to prepare for potential future downturns.⁶⁴⁹

⁶⁴³ Basel Committee on Banking Supervision, *Basel III: A Global Regulatory Framework for More Resilient Banks and Banking Systems* (June 2011) para 129.

⁶⁴⁴ George Alexander Walker, 'Basel III Market and Regulatory Compromise' (2011) 12 *Journal of Banking Regulation* 95, 98.

⁶⁴⁵ Basel Committee on Banking Supervision, *Basel III: A Global Regulatory Framework for More Resilient Banks and Banking Systems* (June 2011) para 123.

⁶⁴⁶ David Aikman and others, 'Would Macroprudential Regulation Have Prevented the Last Crisis?' (2019) 33(1) *Journal of Economic Perspectives* 107, 121.

⁶⁴⁷ Basel Committee on Banking Supervision, *Basel III: A Global Regulatory Framework for More Resilient Banks and Banking Systems* (June 2011) para 125.

⁶⁴⁸ Rafael Repullo and Jesús Saurina, 'The Countercyclical Capital Buffer of Basel III: A Critical Assessment' (2011) 13(2) *CFA Institute Financial Analysts Journal* 1, 3.

⁶⁴⁹ Jeungbo Shim, 'Bank Capital Buffer and Portfolio Risk: The Influence of Business Cycle and Revenue Diversification' (2013) 37(3) *Journal of Banking & Finance* 761, 764.

The implementation of the CCB, however, presents challenges both for banks and regulators. For banks, the requirement to hold additional high-quality capital can have implications for their profitability and return on equity, potentially leading to adjustments in business models and strategies.⁶⁵⁰ For regulators, the challenge lies in calibrating the buffer accurately to reflect the cyclical nature of the economy without imposing undue burdens on the banking sector or inadvertently encouraging risk-taking behaviours.⁶⁵¹

Despite these challenges, the CCB represents a crucial tool in the regulatory arsenal for preventing future financial crises. By encouraging banks to internalize the costs of their risk-taking activities through capital requirements that reflect the cyclical nature of the economy, the CCB aims to foster a more stable and resilient banking sector.⁶⁵² As the global financial landscape continues to evolve, the effectiveness of the CCB in achieving these goals remains a key area of focus for policymakers, regulators, and the banking industry at large.⁶⁵³

3.4.5 The Leverage Ratio: A Non-Risk-Based Countermeasure

The financial crisis of 2007-2008 unveiled the limitations of relying solely on risk-weighted assets (RWAs) for determining capital adequacy. Institutions adept at manipulating risk weights found themselves grossly undercapitalized when market conditions deteriorated.⁶⁵⁴ The

⁶⁵⁰ Christoffer Koch, Gary Richardson and Patrick Van Horn, *Countercyclical Capital Buffers: A Cautionary Tale* (National Bureau of Economic Research Working Paper 27466, 2020) 6.

⁶⁵¹ Lukas Menkhoff, 'Reform Options for the Countercyclical Capital Buffer' (2022) 102(1) Wirtschaftsdienst 59, 60.

⁶⁵² Basel Committee on Banking Supervision, Basel III: A Global Regulatory Framework for More Resilient Banks and Banking Systems (June 2011) para 122.

⁶⁵³ Rafael Repullo and Jesús Saurina, 'The Countercyclical Capital Buffer of Basel III: A Critical Assessment' (2011) 13(2) CFA Institute Financial Analysts Journal 1, 4.

⁶⁵⁴ Anat R Admati and Martin F Hellwig, *The Bankers' New Clothes: What's Wrong with Banking and What to Do about It* (Princeton University Press 2013) 89.

leverage ratio's objective is twofold: to restrain the build-up of leverage in the banking sector and to provide a safeguard against model risk and measurement error in RWAs.⁶⁵⁵

The introduction of the leverage ratio under Basel III marks a paradigmatic shift in the regulatory framework governing global banking operations.⁶⁵⁶ This non-risk-based measure mandates financial institutions to maintain a minimum leverage ratio of 3%, effectively acting as a bulwark against excessive leverage and a complement to risk-based capital requirements.⁶⁵⁷ Unlike its predecessors, the leverage ratio is designed to provide a straightforward, unweighted measure of capital adequacy, independent of banks' internal risk assessments.⁶⁵⁸

The leverage ratio is calculated as Tier 1 capital divided by the bank's total exposure, including on-balance-sheet assets, derivative exposures, and off-balance-sheet items. This calculation method underscores the importance of high-quality capital — equity and retained earnings — over debt instruments in ensuring a bank's solvency. The implementation of the leverage ratio is uniform across jurisdictions, fostering consistency and comparability among international banks.

However, the imposition of a leverage ratio has profound implications for banking practices. It compels institutions to scrutinize their asset compositions and leverage levels meticulously,

⁶⁵⁵ Basel Committee on Banking Supervision, *Basel III Leverage Ratio Framework and Disclosure Requirements* (January 2014) para 2.

⁶⁵⁶ Robert F Weber, 'New Governance, Financial Regulation, and Challenges to Legitimacy: The Example of the Internal Models Approach to Capital Adequacy Regulation' (2010) 62(3) *Administrative Law Review* 783, 789.

⁶⁵⁷ Basel Committee on Banking Supervision, *Basel III Leverage Ratio Framework and Disclosure Requirements* (January 2014) para 1.

⁶⁵⁸ Cristie Ford, 'New Governance in the Teeth of Human Frailty: Lessons from Financial Regulation' (2010) *Wisconsin Law Review* 441, 445.

⁶⁵⁹ Basel Committee on Banking Supervision, *Basel III Leverage Ratio Framework and Disclosure Requirements* (January 2014) paras 15–21.

⁶⁶⁰ Kristin N Johnson, 'Governing Financial Markets: Regulating Conflicts' (2013) 88 Washington Law Review 185, 190. ⁶⁶¹ Basel Committee on Banking Supervision, Basel III Leverage Ratio Framework and Disclosure Requirements (January 2014) para 1.

often leading to the shedding of low-yielding, high-volume assets to comply with regulatory requirements. Moreover, the leverage ratio acts as a counter-cyclical measure, constraining banks' ability to expand their balance sheets through leverage during booms and ensuring they have a capital cushion during busts.⁶⁶²

Despite its merits, the leverage ratio has faced criticism from various quarters. Critics argue that its one-size-fits-all approach fails to account for the differing business models and risk profiles of banks, potentially penalizing low-risk activities and incentivizing banks towards riskier, higher-yielding assets.⁶⁶³ Additionally, concerns have been raised about the possibility of regulatory arbitrage, as banks might seek to circumvent the leverage ratio through off-balance-sheet financing and other innovative mechanisms.⁶⁶⁴

Nevertheless, comparing the leverage ratio with other regulatory measures such as the Liquidity Coverage Ratio (LCR) and Net Stable Funding Ratio (NSFR) highlights its unique role in the Basel III framework.⁶⁶⁵ While LCR and NSFR focus on liquidity risk, the leverage ratio addresses solvency risk directly, providing a simple yet powerful tool for regulators to monitor and mitigate systemic risk.⁶⁶⁶

Looking forward, the leverage ratio is likely to evolve in response to the changing dynamics of the global financial system.⁶⁶⁷ Potential areas for refinement include adjusting the ratio to better

⁶⁶² Marc Auboin and Isabella Blengini, 'The Impact of Basel III on Trade Finance: The Potential Unintended Consequences of the Leverage Ratio' (2019) 20 *Journal of Banking Regulation* 115, 119.

⁶⁶³ Basel Committee on Banking Supervision, *Basel III Leverage Ratio Framework and Disclosure Requirements* (January 2014) para 29.

⁶⁶⁴ Charles Goodhart, *The Basel Committee on Banking Supervision* (Cambridge University Press 2011) 63.

⁶⁶⁵ Marc Auboin and Isabella Blengini, 'The Impact of Basel III on Trade Finance: The Potential Unintended Consequences of the Leverage Ratio' (2019) 20 *Journal of Banking Regulation* 115, 121.

⁶⁶⁶ Basel Committee on Banking Supervision, *Basel III Leverage Ratio Framework and Disclosure Requirements* (January 2014) para 3.

⁶⁶⁷ Anat R Admati and Martin F Hellwig, *The Bankers' New Clothes: What's Wrong with Banking and What to Do About It* (Princeton University Press 2013) 95.

reflect the risk profile of assets and incorporating measures to prevent circumvention through financial innovation. 66816 Furthermore, the ongoing debate on the optimal level of the leverage ratio suggests that adjustments may be necessary to balance the trade-off between financial stability and economic growth. 669

In summary, the leverage ratio under Basel III represents a critical step towards a more resilient banking sector, offering a straightforward measure of capital adequacy that complements risk-based approaches.⁶⁷⁰ While it is not without its challenges, the leverage ratio serves as a vital tool in the regulatory arsenal, ensuring that banks maintain adequate capital buffers against potential losses. As the financial landscape evolves, so too will the leverage ratio, adapting to ensure that it continues to serve its fundamental purpose of promoting stability and preventing excessive leverage within the global banking system.⁶⁷¹

3.4.5 Counterparty Credit Risk (CCR) Management

This aspect of the regulatory framework addresses the risk associated with the potential default of the counterparty in a derivative transaction, a risk starkly highlighted by the 2007-2008 financial crisis.⁶⁷² As financial institutions increasingly engage in complex derivative

⁶⁶⁸ Robert F Weber, 'New Governance, Financial Regulation, and Challenges to Legitimacy: The Example of the Internal Models Approach to Capital Adequacy Regulation' (2010) 62(3) *Administrative Law Review* 783, 791.

⁶⁶⁹ Basel Committee on Banking Supervision, *Basel III Leverage Ratio Framework and Disclosure Requirements* (January 2014) para 30.

⁶⁷⁰ Anat R Admati and Martin F Hellwig, *The Bankers' New Clothes: What's Wrong with Banking and What to Do About It* (Princeton University Press 2013) 101.

⁶⁷¹ Basel Committee on Banking Supervision, *Basel III Leverage Ratio Framework and Disclosure Requirements* (January 2014) paras 31–32.

⁶⁷² Julia Black, 'The Development of Risk-Based Regulation in Financial Services: Just "Modelling Through"?' in Julia Black, Martin Lodge and Mark Thatcher (eds), *Regulatory Innovation* (Edward Elgar 2005) 41.

transactions, the potential for systemic failure escalates, necessitating robust mechanisms for CCR management.⁶⁷³

CCR management under Basel III is designed to ensure that banks not only accurately measure and hold capital against potential counterparty credit losses but also adapt to the dynamic nature of these risks.⁶⁷⁴ This is particularly pertinent given that the crisis demonstrated how quickly counterparty credit quality can deteriorate and how this deterioration can significantly impact the financial system.⁶⁷⁵ The Basel III framework introduces several key measures to enhance CCR management, including stricter capital requirements for counterparty credit exposures, the use of credit value adjustments (CVAs), and the incorporation of wrong-way risk.⁶⁷⁶

One of the pivotal advancements in CCR management under Basel III is the introduction of the standardized approach for measuring counterparty credit risk exposures (SA-CCR).⁶⁷⁷ This methodology provides a more nuanced and risk-sensitive framework for calculating exposure at default, taking into account the nature of the derivatives, the maturity, and the directionality of the exposure.⁶⁷⁸ The approach marks a significant evolution from previous models, which often underrepresented exposure in volatile market conditions, leaving banks undercapitalized against potential losses.

⁶⁷³ Emilios Avgouleas, 'The Global Financial Crisis, Behavioural Finance and Financial Regulation: In Search of a New Orthodoxy' (2009) 9(1) *Journal of Corporate Law Studies* 23, 27.

⁶⁷⁴ Basel Committee on Banking Supervision, *Basel III: A Global Regulatory Framework for More Resilient Banks and Banking Systems* (June 2011) paras 189–204.

⁶⁷⁵ Ibid paras 189–204.

⁶⁷⁶ Ibid paras 189–204.

⁶⁷⁷ Ibid para 189.

⁶⁷⁸ Emilios Avgouleas, 'The Global Financial Crisis, Behavioural Finance and Financial Regulation: In Search of a New Orthodoxy' (2009) 9(1) *Journal of Corporate Law Studies* 23, 29.

In addition to the SA-CCR, Basel III emphasizes the importance of mitigating counterparty credit risk through collateralization.⁶⁷⁹ The exchange of collateral has become a central aspect of CCR management, providing a mechanism to secure potential exposures and mitigate the risk of counterparty default. Basel III introduces more rigorous standards for collateral management, including requirements for the daily valuation of collateral, the diversification of collateral assets, and the management of collateral disputes.⁶⁸⁰ These measures aim to ensure that collateral practices are robust and can effectively reduce counterparty credit risk.

The framework also addresses the risk of counterparty default through the introduction of capital buffers specifically designed to cover CCR. These buffers, calculated based on the exposure and the risk profile of the counterparty, are intended to provide an additional layer of protection against the possibility of significant credit losses.⁶⁸¹ This is complemented by the introduction of CVA risk capital charges, which require banks to hold capital against the risk of mark-to-market losses on counterparty exposures, further reinforcing the financial system's resilience to CCR.

Despite these advancements, CCR management under Basel III is not without challenges. The complexity of derivative transactions and the rapid innovation in financial markets mean that managing counterparty credit risk remains a dynamic and evolving challenge.⁶⁸² The framework must adapt to new financial instruments and practices to remain effective. Moreover, the reliance on collateral as a risk mitigant raises concerns about liquidity risk and

⁶⁸² Ibid 84.

⁶⁷⁹ Julia Black, 'The Development of Risk-Based Regulation in Financial Services: Just "Modelling Through"?' in Julia Black, Martin Lodge and Mark Thatcher (eds), *Regulatory Innovation* (Edward Elgar 2005) 46.

⁶⁸⁰ Basel Committee on Banking Supervision, Basel III: A Global Regulatory Framework for More Resilient Banks and Banking Systems (June 2011) paras 189–204.

⁶⁸¹ Kern Alexander, *Principles of Banking Regulation* (Cambridge University Press 2018) 77.

the potential for procyclicality, as demands for collateral can escalate in times of market stress, exacerbating liquidity pressures.⁶⁸³

In summary, the management of counterparty credit risk under Basel III represents a comprehensive effort to mitigate one of the key systemic risks in the financial system.⁶⁸⁴19 Through a combination of enhanced capital requirements, rigorous collateral management practices, and the introduction of innovative risk measurement methodologies, Basel III aims to fortify the banking sector against the potential fallout from counterparty defaults. As the financial landscape continues to evolve, so too will the approaches to CCR management, reflecting the ongoing commitment to safeguarding financial stability and preventing systemic crises.⁶⁸⁵

3.4.6 Global Liquidity Standards and Monitoring Tools

The global liquidity standards established by Basel III, specifically the Liquidity Coverage Ratio (LCR) and the Net Stable Funding Ratio (NSFR), serve as fundamental components in fortifying the banking sector's defence against liquidity crises.⁶⁸⁶ These standards are designed to ensure that financial institutions maintain adequate levels of high-quality liquid assets (HQLA) to survive a significant stress scenario over a 30-day period and promote resilience over a longer-term horizon through stable funding structures.⁶⁸⁷ The introduction of liquidity

⁶⁸³ Julia Black, 'The Development of Risk-Based Regulation in Financial Services: Just "Modelling Through"?' in Julia Black, Martin Lodge and Mark Thatcher (eds), *Regulatory Innovation* (Edward Elgar 2005) 51.

⁶⁸⁴ Emily Lee, 'Basel III and Its New Capital Requirements, as Distinguished from Basel II' (2014) 131 *Banking Law Journal* 27, 32.

⁶⁸⁵ Ivan Chaykovskiy, 'Deregulating the Inadequate Basel Accords: Future-Proofing Financial Regulations in an Age of Global Crises' (2016) 25 Cardozo Journal of International and Comparative Law 77, 83.

⁶⁸⁶ John Armour and others, *Principles of Financial Regulation* (Oxford University Press 2016) 118.

⁶⁸⁷ Kern Alexander, Rahul Dhumale and John Eatwell, *Global Governance of Financial Systems: The International Regulation of Systemic Risk* (Oxford University Press 2006) 91.

metrics marked a significant shift towards a more holistic approach to financial stability, recognizing the pivotal role of liquidity risk in the health and functioning of the global financial system.

The LCR mandates banks to hold an amount of HQLA that can be easily and immediately converted into cash to meet their net cash outflows during a 30-day stressed scenario.⁶⁸⁸ The essence of this requirement is to address the short-term liquidity risks that banks face, ensuring they have enough liquidity to withstand an acute stress scenario similar to that of the 2008 financial crisis without resorting to extraordinary central bank support.⁶⁸⁹ This measure addresses a critical vulnerability exposed during the crisis when many banks, despite appearing solvent, faced imminent collapse due to a lack of liquid assets to meet sudden withdrawals and obligations.⁶⁹⁰ By compelling banks to maintain a buffer of liquid assets, the LCR aims to mitigate the risk of a liquidity-driven banking collapse and, consequently, a systemic crisis.⁶⁹¹

On the other hand, the NSFR targets the stability of banks' funding profiles over a longer-term horizon, typically a one-year period.⁶⁹² It requires banks to fund their activities with sufficiently stable sources of funding to reduce the likelihood of future liquidity stress.⁶⁹³30 The NSFR ratio is designed to discourage over-reliance on short-term wholesale funding, which can evaporate quickly in times of market stress, and encourages banks to seek more stable, long-term funding

⁶⁸⁸ Basel Committee on Banking Supervision, *Basel III: The Liquidity Coverage Ratio and Liquidity Risk Monitoring Tools* (January 2013) paras 15–40.

⁶⁸⁹ Kern Alexander, Rahul Dhumale and John Eatwell, *Global Governance of Financial Systems: The International Regulation of Systemic Risk* (Oxford University Press 2006) 109.

⁶⁹⁰ Basel Committee on Banking Supervision, *Basel III: The Liquidity Coverage Ratio and Liquidity Risk Monitoring Tools* (January 2013) 5.

⁶⁹¹ Philip Sommer and Stefano Pasquali, 'Liquidity – How to Capture a Multidimensional Beast' (2016) 11(2) *Journal of Trading* 21, 24.

⁶⁹² Jeanne Gobat, Mamoru Yanase and Joseph Maloney, 'The Net Stable Funding Ratio: Impact and Issues for Consideration' (IMF Working Paper WP/14/106, 2014) 7.

⁶⁹³ Basel Committee on Banking Supervision, *Basel III: The Liquidity Coverage Ratio and Liquidity Risk Monitoring Tools* (January 2013) 6.

sources.⁶⁹⁴ By ensuring that the assets and activities of banks are appropriately matched with stable funding sources, the NSFR mitigates the risk of a liquidity mismatch that could lead to a systemic crisis, promoting a more sustainable banking model.⁶⁹⁵

The implementation of these global liquidity standards has significantly impacted the banking sector's approach to liquidity risk management.⁶⁹⁶ Banks have had to adjust their asset-liability compositions, often reducing their holdings of illiquid assets and increasing their stock of HQLA, which, while reducing potential returns, enhances their resilience to liquidity shocks. Furthermore, the emphasis on stable funding has led to changes in banks' funding strategies, with a greater focus on diversifying funding sources and extending the maturity profiles of their liabilities.⁶⁹⁷

However, the introduction of LCR and NSFR also presents challenges and criticisms. One concern is the potential impact on the availability of credit, especially in economies heavily reliant on bank financing.⁶⁹⁸ By tying up a significant portion of banks' assets in HQLA, the LCR could constrain banks' ability to lend, potentially hampering economic growth. Similarly, the NSFR, by encouraging longer-term funding, might increase funding costs for banks, which could be passed on to borrowers in the form of higher interest rates.⁶⁹⁹ Additionally, the global applicability of the standards has raised concerns about their impact on banks operating in

⁶⁹⁴ Michael R King, 'The Basel III Net Stable Funding Ratio and Bank Net Interest Margins' (2013) 37(1) *Journal of Banking & Finance* 4144, 4147.

⁶⁹⁵ Xu Wei, Yaxian Gong and Ho-Mou Wu, 'The Impacts of Net Stable Funding Ratio Requirement on Banks' Choices of Debt Maturity' (2017) 82 *Journal of Banking & Finance* 229, 233.

⁶⁹⁶ Basel Committee on Banking Supervision, *Basel III: The Liquidity Coverage Ratio and Liquidity Risk Monitoring Tools* (January 2013) 10.

⁶⁹⁷ José Gabilondo, Bank Funding, Liquidity, and Capital Adequacy: A Law and Finance Approach (Edward Elgar Publishing 2016) 54.

⁶⁹⁸ Salvatore Polizzi, Enzo Scannella and Nuria Suárez, 'The Role of Capital and Liquidity in Bank Lending: Are Banks Safer?' (2020) 11 *Global Policy* 28, 31.

⁶⁹⁹ Anas Alaoui Mdaghri and Lahsen Oubdi, 'Basel III Liquidity Regulatory Framework and Bank Liquidity Creation in MENA Countries' (2022) 30(2) *Journal of Financial Regulation and Compliance* 129, 134.

diverse economic and financial environments, where liquidity risks and the availability of HQLA vary significantly.⁷⁰⁰

In response to these challenges, regulatory bodies have engaged in an ongoing dialogue with the banking industry to refine and adjust the liquidity standards, ensuring they effectively balance the trade-off between financial stability and economic growth. 701 This iterative process underscores the dynamic nature of global financial regulation, where standards evolve in response to the changing landscape of the financial system and its inherent risks.⁷⁰²

In summary, the global liquidity standards introduced by Basel III represent a critical advancement in the regulatory framework for managing liquidity risk in the banking sector. By requiring banks to maintain adequate levels of liquid assets and stable funding profiles, the LCR and NSFR aim to enhance the resilience of the financial system to liquidity shocks. 703 While these standards pose challenges and necessitate adjustments in banks' operations, their fundamental goal is to prevent the recurrence of liquidity crises that can lead to systemic failures. 704 As the global financial system continues to evolve, so too will the approaches to liquidity risk management, reflecting the ongoing commitment to safeguarding financial stability in an interconnected world.⁷⁰⁵

⁷⁰⁰ Sathiavanee Veeramoothoo and Shawkat Hammoudeh, 'Impact of Basel III Liquidity Regulations on US Bank Performance in Different Conditional Profitability Spectrums' (2022) 63 North American Journal of Economics and Finance 101826, 101830.

⁷⁰¹ Maryem Naili and Younes Lahrichi, 'The Determinants of Banks' Credit Risk: Review of the Literature and Future Research Agenda' (2022) 27(1) International Journal of Finance & Economics 334, 338.

⁷⁰² Tamara Gomes and Carolyn Wilkins, 'The Basel III Liquidity Standards: An Update' (2013) Bank of Canada Financial System Review 37, 39.

703 Claire Rieger and John Elliott, 'LCR, NSFR, and Their Challenges' in Liquidity Risk Management: Practitioners'

Perspectives (2016) 213, 217.

⁷⁰⁴ Marie Hoerova and others, 'Benefits and Costs of Liquidity Regulation' (2018) ECB Working Paper No 2199, 4.

⁷⁰⁵ Dusica Stevceyska-Srbinoska and Verica Gjelevska, Liquidity-Profitability Dynamics: Is the Banking Industry Resilient in Times of Crisis?' (2024) Facta Universitatis, Series: Economics and Organization 1, 5.

3.4.7 The Effectiveness of Basel III in Mitigating Systemic Risk

The Basel Committee on Banking Supervision (BCBS) promulgated Basel III in a concerted effort to fortify the banking sector against the types of vulnerabilities that precipitated the 2007 financial crisis. This regulatory framework was sculpted with the recognition that the preceding standards — embodied in Basel II — had inadvertently cultivated an overly permissive environment for risk accumulation, particularly within the domain of international banking. The Basel III was thus calibrated to strike a delicate balance, one that would preserve the dynamism of a competitive banking sector in prosperous times while bolstering its resilience against future periods of financial and economic stress.

Basel III represents an evolution in regulatory philosophy, pivoting from the free-market predilections of its predecessor to a more prescriptive and preventative regime. It advocates for a reinforced and resilient banking architecture that can withstand and adapt to the dynamic pressures of the global financial system. The Accord's introduction of stringent liquidity requirements underscores a commitment to enduring financial stability, addressing not just the immediate repercussions of economic turmoil but also pre-emptively girding institutions against future liquidity crises. To a more prescriptive and preventative regime.

A quintessential illustration of such foresight is the conception of the Liquidity Coverage Ratio (LCR) and the Net Stable Funding Ratio (NSFR). The LCR mandates that banks maintain a

⁷⁰⁶ Daniel K Tarullo, Banking on Basel: The Future of International Financial Regulation (Peterson Institute 2008) 45.

⁷⁰⁷ Bill Allen and others, 'Basel III: Is the Cure Worse than the Disease?' (2012) 25 *International Review of Financial Analysis* 159, 161.

⁷⁰⁸ Robert F Weber, 'New Governance, Financial Regulation, and Challenges to Legitimacy: The Example of the Internal Models Approach to Capital Adequacy Regulation' (2010) 62(3) *Administrative Law Review* 783, 789.

⁷⁰⁹ Anat R Admati and others, 'Fallacies, Irrelevant Facts, and Myths in the Discussion of Capital Regulation: Why Bank Equity is Not Socially Expensive' (2013) Stanford University Working Paper No 86, 7.

reserve of high-quality liquid assets sufficient to navigate a 30-day economic maelstrom, while the NSFR requires a stable funding profile relative to the liquidity of assets and off-balance sheet activities.⁷¹⁰ These mechanisms aim to prevent the kind of liquidity crises exemplified by the Lehman Brothers collapse in 2007, where a liquidity shortfall rapidly metastasized into a systemic contagion.⁷¹¹

However, Basel III's reforms do not come without their own set of challenges. The nuanced differentiation between various funding sources — while intended to promote stability — may paradoxically exacerbate risks by fostering reliance on more stable but potentially more expensive funding options. Moreover, the implementation of Basel III standards across jurisdictions reveals discrepancies that could dilute the uniformity and intended efficacy of the regulatory framework. The implementation of the regulatory framework.

The effectiveness of Basel III also hinges on the extent to which it has addressed the foundational causes of systemic risk. It is imperative to compare the architecture of Basel III with the lapses of Basel II, particularly in areas such as governance structures, risk modelling, and the assumption of market discipline that informed much of Basel II's framework.⁷¹⁴ A comprehensive assessment of Basel III necessitates an evaluation of its supervisory protocols,

⁷¹⁰ Mathias Drehmann and Nikola Tarashev, 'Systemic Importance: Some Simple Indicators' (2011) *BIS Quarterly Review* 25, 29.

⁷¹¹ Gary B Gorton, 'Slapped in the Face by the Invisible Hand: Banking and the Panic of 2007' (2009) SSRN Working Paper https://ssrn.com/abstract=1401882 accessed 10 January 2023, 3.

⁷¹² Jihad Dagher and others, 'Benefits and Costs of Bank Capital' (IMF Staff Discussion Note SDN/16/04, 2016) 12.

⁷¹³ Joel F Houston and others, 'Cross-Country Causes and Consequences of the 2008 Crisis: Early Warning' (2012) 24(1) *Japan and the World Economy* 1, 6.

⁷¹⁴ David Jones, 'Emerging Problems with the Basel Capital Accord: Regulatory Capital Arbitrage and Related Issues' (2000) 24(1) *Journal of Banking & Finance* 35, 38.

the rigidity of which is not guaranteed, especially considering the scope for national regulatory bodies to adapt these frameworks to their discretion.⁷¹⁵

A particularly salient aspect of Basel III's approach is its attention to market discipline. The framework encourages rigorous disclosure of information by banks, enhancing the ability of stakeholders to monitor risk management practices effectively. Yet, the aftermath of a banking crisis often witnesses an erosion of market discipline, casting doubt on the resilience of these mechanisms in times of distress. It remains to be seen whether the extensive disclosure requirements stipulated by Basel III will serve their purpose in fostering market discipline or if they will falter when most needed.

In evaluating the robustness of Basel III, it is also crucial to consider its status within the ambit of international law. Despite its comprehensive scope, Basel III remains an embodiment of 'soft law', reliant on voluntary compliance by states. This non-binding nature presents a significant challenge in achieving global uniformity in systemic risk mitigation. The disparities in the application and adoption of Basel III standards underscore the intricacies of international financial regulation and raise questions about the Accord's ability to induce harmonized practices in a diverse international banking landscape. The status within the ambit of the status within the status within the ambit of the status within the status within

⁷¹⁵ Patricia Jackson and others, 'Capital Requirements and Bank Behaviour: The Impact of the Basle Accord' (Basel Committee on Banking Supervision Working Paper No 1, April 1999) https://www.bis.org/publ/bcbs_wp1.pdf accessed 10 January 2023, 14.

⁷¹⁶ George G Kaufman, 'Bank Contagion: A Review of the Theory and Evidence' (1994) 8 *Journal of Financial Services Research* 123, 127.

⁷¹⁷ Franklin Allen and others, 'Moral Hazard and Government Guarantees in the Banking Industry' (2015) 30(1) *Journal of Financial Regulation and Compliance* 89, 91.

⁷¹⁸ Chris Brummer, 'How International Financial Law Works (And How It Doesn't)' (2011) 99 *Georgetown Law Journal* 257, 263.

⁷¹⁹ Kern Alexander, Rahul Dhumale and John Eatwell, *Global Governance of Financial Systems: The International Regulation of Systemic Risk* (Oxford University Press 2006) 88.

To effectively mitigate systemic risk and foster enduring financial stability, Basel III must be embraced not only as a set of guidelines but as a foundational component of a more resilient banking system.⁷²⁰ Future reforms must scrutinize the Accord's limitations, including its capacity to engender prudent risk management behaviours and to address the complexities of corporate governance and accountability within financial institutions.⁷²¹ Only through such holistic and concerted efforts can the international banking community hope to safeguard against the vicissitudes of economic cycles and the perils of systemic risk.⁷²²

3.4.8 Basel III within the Ambit of International Law

Basel III's efficacy must also be evaluated within the context of international law. The Basel standards, while not legally binding, serve as a benchmark for global financial stability.⁷²³ The philosophical debates on the nature of law underscore the complexity of defining Basel III's status within the international legal framework.⁷²⁴ Jeremy Bentham's classical definition envisioned international law as a set of rules governing relations between states.⁷²⁵ Although this definition does not fully encompass the modern scope of international law, which now includes a wider array of actors and issues, it highlights the evolving nature of jurisprudence in this field.⁷²⁶

⁷²⁰ Charles Goodhart, *The Regulatory Response to the Financial Crisis* (Edward Elgar 2009) 19.

⁷²¹ Tony Porter, Transnational Financial Regulation after the Crisis (Routledge 2014) 33.

⁷²² Ross Levine, 'The Governance of Financial Regulation: Reform Lessons from the Recent Crisis' (2012) 12(1) *International Review of Finance* 39, 44.

⁷²³ Andrew Baker, 'The New Political Economy of the Macroprudential Ideational Shift' (2013) 18(1) *New Political Economy* 112, 116.

⁷²⁴ Chris Brummer, 'Why Soft Law Dominates International Finance – And Not Trade' (2010) 13(3) *Journal of International Economic Law* 623, 628.

⁷²⁵ Jeremy Bentham, Of Laws in General (Hafner Publishing 1970) 55.

⁷²⁶ José É Alvarez, 'International Organizations: Then and Now' (2006) 100 American Journal of International Law 324, 330.

The Basel Committee on Banking Supervision (BCBS) operates in this expanded realm of international law, setting standards that, despite their non-binding nature, have been widely accepted and implemented.⁷²⁷ This broad acceptance lends the Basel accords a degree of legitimacy and influence that belies their non-binding status.⁷²⁸ However, the lack of legal compulsion in the Basel Accords means that their implementation can suffer from non-uniformity, as states may adopt the standards in a manner that best suits their domestic agendas, potentially compromising the accords' effectiveness.⁷²⁹

In summary, while Basel III has significantly advanced the international regulatory architecture for banking, its ability to engender prudent risk management within the banking sector remains subject to future reforms.⁷³⁰ There is a pressing need for the Basel Committee on Banking Supervision to address the persistent issues related to corporate governance, risk management procedures, and the role of credit rating agencies.⁷³¹ Without comprehensive policies to tackle these issues, the stability and integrity of the financial system may remain at risk, underscoring the need for ongoing vigilance and adaptation in the prudential management of banking institutions.⁷³²

⁷²⁷ Dieter Kerwer, 'Rules That Many Use: Standards and Global Regulation' (2005) 18(4) *Governance: An International Journal of Policy, Administration, and Institutions* 611, 615.

⁷²⁸ Andrew Baker, 'Deliberative Equality and the Transgovernmental Politics of the Global Financial Architecture' (2009) 3(10) *International Theory* 94, 99.

⁷²⁹ Pierre-Hugues Verdier, 'Transnational Regulatory Networks and Their Limits' (2009) 34 *Yale Journal of International Law* 113, 118.

⁷³⁰ Eilís Ferran and Kern Alexander, 'Can Soft Law Bodies Be Effective? The Special Case of the European Systemic Risk Board' (2010) 35 European Law Review 751, 756.

⁷³¹ Steven L Schwarcz, 'Soft Law as Governing Law' (2020) 104 Minnesota Law Review 2471, 2478.

⁷³² Julia Black, Restructuring Global and EU Financial Regulation: Capacities, Coordination and Learning (LSE Law, Society and Economy Working Paper 18/2010, London School of Economics and Political Science) 11.

3.4.9 Prudential Management in Banking Post-Basel III

Delving deeper into the Basel III framework reveals a comprehensive attempt to rectify the systemic vulnerabilities exposed by the financial crisis of 2007-2008. Basel III not only tightened the existing capital adequacy and liquidity requirements but also introduced new standards to enhance the risk management capabilities of banks globally.⁷³³ However, it is imperative to scrutinize whether Basel III has adequately addressed the multifaceted causes of the crisis, or if it has inadvertently created new systemic risks.⁷³⁴

Risk management is a dynamic and integral aspect of banking, with financial institutions required to balance risk-taking for profit maximization against the need to maintain financial stability.⁷³⁵ While Basel III endeavoured to capture risks prudently, its approach has been criticized for possibly fostering an environment conducive to the emergence of other systemic risks.⁷³⁶ For instance, the treatment of the leverage ratio, while providing a buffer against competitive pressures within the industry, could potentially prompt financial institutions to maintain high-risk asset portfolios, thus undermining the intended risk management outcomes.⁷³⁷

Basel III's mandate also extended to support the development of a comprehensive risk management framework encompassing multiple competencies within an organization. It aimed

⁷³³ Tony Porter, 'Technical Systems and the Architecture of Transnational Business Governance Interactions' (2007) 8(1) *Regulation & Governance* 110, 114.

⁷³⁴ Dirk Schoenmaker, 'The Financial Trilemma' (2011) 111(1) Economic Policy 57, 59.

⁷³⁵ Patricia Jackson and others, 'Capital Requirements and Bank Behaviour: The Impact of the Basle Accord' (Basel Committee on Banking Supervision Working Paper No 1, April 1999) https://www.bis.org/publ/bcbs_wp1.pdf accessed 10 January 2023, 20.

⁷³⁶ Stefano Battiston and others, 'Complexity Theory and Financial Regulation' (2016) 351(6275) Science 818, 820.

⁷³⁷ Anat R Admati, 'The Missed Opportunity and Challenge of Capital Regulation' (2016) 235(1) *National Institute Economic Review* R4, R7.

to address the impacts on people, processes and technology. Nonetheless, there has been criticism that the ensuing regulations did not sufficiently account for the diversity in size, structure, risk profile, complexity, or economic significance of banking institutions. Effective risk management requires a nuanced approach that considers the distinctive attributes of each institution and balances them against the risks incurred.⁷³⁸

Moreover, the success of Basel III is inextricably linked to the global cooperation and political goodwill necessary for its full implementation.⁷³⁹ The slow and selective enforcement by domestic regulators threatens the effectiveness of the accord.⁷⁴⁰ The diverse banking models present in different regions, such as the European Union, pose additional challenges to enforcing uniform financial regulatory standards.⁷⁴¹

The Basel III framework also faces the challenge of appropriately pricing systemic risks, a complex undertaking given the intricacy of external financial phenomena. This challenge is exacerbated by the propensity of G20 countries to bail out large financial institutions, a practice that contradicts the Basel III ethos of market discipline and self-reliance.⁷⁴²

3.5 The Financial Stability Board

Established in the aftermath of the global financial crisis in 2009, the Financial Stability Board (FSB) emerged as a pivotal international entity, purposed with orchestrating a cohesive and

⁷³⁸ Howell E Jackson, 'Variation in the Intensity of Financial Regulation: Preliminary Evidence and Potential Implications' (2007) 24 *Yale Journal on Regulation* 253, 257.

⁷³⁹ Ethan B Kapstein, 'Resolving the Regulator's Dilemma: International Coordination of Banking Regulations' (1989) 43 *International Organization* 323, 327.

⁷⁴⁰ Stavros Gadinis, 'The Financial Stability Board: The New Politics of International Financial Regulation' (2013) 48 *Texas International Law Journal* 157, 162.

⁷⁴¹ Niamh Moloney, EU Securities and Financial Markets Regulation (Oxford University Press 2023) 72.

⁷⁴² Luc Laeven and Fabia N Valencia, 'Systemic Banking Crises Database' (2013) 61(2) IMF Economic Review 225, 229.

detailed framework to guide global regulatory efforts. Its formation was driven by the urgent need for an enhanced regulatory structure that could prevent future financial calamities.⁷⁴³ Hosted and financially supported by the Bank for International Settlements in Basel, Switzerland, the FSB boasts a diverse membership comprising all G20 major economies, Financial Stability Forum (FSF) members, and the European Commission,⁷⁴⁴ positioning it as a legal entity with a critical mission: to synchronize the efforts of national financial authorities and international standard-setting bodies, fostering the development and widespread adoption of effective regulatory, supervisory, and other pivotal financial sector policies on a global scale.⁷⁴⁵

Central to the FSB's mandate, as delineated in its Articles of Association, is its role in overseeing and pinpointing vulnerabilities within the global financial system.⁷⁴⁶ This involves a rigorous assessment of regulatory and supervisory measures, coupled with the proactive sharing of insights with its members to bolster contingency planning against the potential collapse of financial institutions.⁷⁴⁷ A key element of its mandate is the execution of peer reviews among its member states' regulatory frameworks, aiming to identify and evaluate emergent risks.⁷⁴⁸ The insights gleaned from these assessments culminate in comprehensive reports that not only outline recommendations for enhancing national financial regulations but

⁷⁴³ Pierre-Hugues Verdier, 'The Political Economy of International Financial Regulation' (2013) 88 *Indiana Law Journal* 1405, 1410.

⁷⁴⁴ Stavros Gadinis, 'Three Pathways to Global Standards: Private, Regulator, and Ministry Networks' (2015) 109(1) *American Journal of International Law* 1, 5.

⁷⁴⁵ Dieter Kerwer, 'Holding Global Regulators Accountable: The Case of Credit Rating Agencies' (2005) 18 *Governance: An International Journal of Policy, Administration, and Institutions* 453, 457.

⁷⁴⁶ Eric Helleiner, 'Regulating the Regulators: The Emergence and Limits of the Transnational Financial Legal Order' in Tony Porter (ed), *Transnational Financial Regulation after the Crisis* (Routledge 2014) 31.

⁷⁴⁷ Douglas W Arner and Michael W Taylor, 'The Global Credit Crisis and the Financial Stability Board: Hardening the Soft Law of International Financial Regulation?' (2009) 32 *UNSW Law Journal* 488, 493.

⁷⁴⁸ Sungjoon Cho and Claire R Kelly, 'Promises and Perils of New Global Governance: A Case of the G20' (2011) 12(2) *Chicago Journal of International Law* 491, 495.

also pinpoint crucial institutional reforms needed to augment regulatory powers and amplify the efficacy of existing regulatory frameworks.⁷⁴⁹

In essence, the FSB serves as a linchpin, facilitating coordination among various international financial networks and institutions, including the International Monetary Fund and the Basel Committee on Banking Supervision.⁷⁵⁰ This coordination is vital for mitigating systemic risks and propelling the establishment of uniform global accounting standards.⁷⁵¹ The FSB's recommendations typically advocate for refined oversight mechanisms by clearly delineating the responsibilities of governmental agencies tasked with the oversight of prudential regulation.⁷⁵² Additionally, it champions the advancement of data collection systems, deemed indispensable for the identification of risks and the promotion of efficacious prudential regulation, ultimately aiming to uphold the stability of the financial sector.⁷⁵³

Despite its influential role, it is crucial to note that the recommendations of the FSB do not bind member states; they operate within the realm of informal international law, underscoring a reliance on voluntary compliance to achieve regulatory uniformity.⁷⁵⁴ This nuanced position of the FSB underscores the complex interplay between national sovereignty and the imperative for global financial stability, marking a significant step towards a more interconnected and resilient financial system on the international stage.⁷⁵⁵

⁷⁴⁹ John Braithwaite and Peter Drahos, *Global Business Regulation* (Cambridge University Press 2000) 102.

⁷⁵⁰ Dieter Kerwer, 'Rules That Many Use: Standards and Global Regulation' (2005) 18(4) *Governance: An International Journal of Policy, Administration, and Institutions* 611, 619.

⁷⁵¹ Tony Porter, Transnational Financial Regulation after the Crisis (Routledge 2014) 41.

⁷⁵² Eric J Pan, 'Challenge of International Cooperation and Institutional Design in Financial Supervision: Beyond Transgovernmental Networks' (2010) 11 *Chicago Journal of International Law* 243, 248.

⁷⁵³ Tony Porter, Transnational Financial Regulation after the Crisis (Routledge 2014) 57.

⁷⁵⁴ Chris Brummer, 'Why Soft Law Dominates International Finance – And Not Trade' (2010) 13(3) *Journal of International Economic Law* 623, 633.

⁷⁵⁵ Andrew Baker, 'Restraining Regulatory Capture? Anglo-America, Crisis Politics and Trajectories of Change in Global Financial Governance' (2010) 86(3) *International Affairs* 647, 652.

3.5.1 Financial Stability Board Committees and Implementation of the FSB Mandate

The Financial Stability Board's (FSB) internal architecture is characterized by a system of specialized committees, each playing a pivotal role in the orchestration of international financial stability. 756 Central to this constellation is the Vulnerabilities Assessment Committee (VAC), whose mission is to project and pinpoint potential future systemic risks.⁷⁵⁷ This committee's prognostications serve as an early warning system, allowing for pre-emptive action to stave off financial crises.

In concert with the VAC, the Supervisory and Regulatory Cooperation Committee (RCC) is tasked with translating identified risks into actionable strategies. Through an integrative approach, the RCC liaises with pivotal industry players to engineer cooperative solutions grounded in nuanced risk understanding. ⁷⁵⁸ Yet, it is important to note that while these solutions are insightful, the RCC is not in a position to enforce regulatory baselines.

The baton of responsibility is then relayed to the Standards Implementation Committee (SIC), which is charged with the critical task of evaluating regulatory standards across member states and instigating peer reviews.⁷⁵⁹ Such reviews are not mere formalities; they are instruments designed to exert political pressure on states that falter in aligning with the FSB's vision of stringent financial regulation.

⁷⁵⁶ Eric Helleiner and Stefano Pagliari, 'The End of Self-Regulation? Hedge Funds and Derivatives in Global Financial Governance' in Eric Helleiner, Stefano Pagliari and Hubert Zimmermann (eds), Global Finance in Crisis: The Politics of International Regulatory Change (1st edn, Routledge 2009) 96.

⁷⁵⁷ Stefano Pagliari, 'Who Governs Finance? The Shifting Public-Private Divide in the Regulation of Derivatives, Rating Agencies and Hedge Funds' (2012) 18(1) *European Law Journal* 44, 47.

758 Tony Porter, 'Technical Systems and the Architecture of Transnational Business Governance Interactions' (2014) 8(1)

Regulation & Governance 110, 113.

⁷⁵⁹ Pierre-Hugues Verdier, 'The Political Economy of International Financial Regulation' (2013) 88 Indiana Law Journal 1405, 1411.

However, this orchestrated effort encounters a political impasse. The labyrinth of international finance regulation is often navigated by technocrats striving to craft a regulatory schema responsive to systemic risks. Yet, politicians are ensnared in a delicate balancing act, juggling the demands of financial regulation, economic growth, and civic welfare. The pursuit of ground-breaking regulatory reforms via consensus often reaches a quixotic endpoint, hampered by the absence of political unanimity. In this milieu, aspirations for imposing greater restrictions on business practices that contribute to financial instability confront the harsh reality of divergent political agendas.

3.5.2 FSB Monitoring Implementation of Reforms and Their Impacts

Under the watchful eye of the Standing Committee on Standards Implementation (SCSI), the FSB orchestrates a comprehensive monitoring system for financial reforms.⁷⁶² This initiative encompasses the collation and assessment of member states' progress in aligning with global financial guidelines and policy proposals.⁷⁶³ The Cooperative Framework for Implementation Monitoring (CFIM), established in 2011, serves as a testament to the G20's commitment to heightened regulatory scrutiny, as endorsed at the Cannes Summit.⁷⁶⁴

The CFIM distinguishes between focal points of reforms, where intensive oversight is paramount, and secondary areas where oversight maintains a less granular focus.⁷⁶⁵ As the post-

⁷⁶⁰ Dirk Schoenmaker, 'The Financial Trilemma' (2010) 111 Economics Letters 57, 59.

⁷⁶¹ Eric Helleiner, 'Regulating the Regulators: The Emergence and Limits of the Transnational Financial Legal Order' in Tony Porter (ed), *Transnational Financial Regulation after the Crisis* (Routledge 2014) 29.

⁷⁶² Sungjoon Cho and Claire R Kelly, 'Promises and Perils of New Global Governance: A Case of the G20' (2011) 12(2) *Chicago Journal of International Law* 491, 495.

⁷⁶³ Pierre-Hugues Verdier, 'Transnational Regulatory Networks and Their Limits' (2009) 34 *Yale Journal of International Law* 113, 117.

⁷⁶⁴ Chris Brummer, 'Why Soft Law Dominates International Finance – And Not Trade' (2010) 13(3) *Journal of International Economic Law* 623, 629.

⁷⁶⁵ Eric J Pan, 'Challenge of International Cooperation and Institutional Design in Financial Supervision: Beyond Transgovernmental Networks' (2010) 11 *Chicago Journal of International Law* 243, 248.

crisis policy landscape evolves, the CFIM has enabled the FSB to engage in an exhaustive appraisal of these reforms, in conjunction with standard-setting bodies (SSBs), to ascertain their continued efficacy and coherence.⁷⁶⁶

In an effort to bolster the analytical rigour of these assessments, the FSB, with the collaboration of the SSBs, developed a structured approach in 2017 for the post-implementation evaluation of G20 economic reform measures.⁷⁶⁷ This framework not only aids in assessing whether reforms meet their stated goals but also in recognizing and navigating unintended consequences that could potentially undermine the reforms' objectives.⁷⁶⁸

3.5.3 FSB Assessment of Vulnerabilities

The FSB's prognosis of financial health is primarily facilitated by the Standing Committee on Assessment of Vulnerabilities (SCAV). This committee casts a wide net over the financial landscape, scrutinizing macro-financial perils and structural weaknesses that could precipitate market turmoil. Harnessing insights from international financial institutions and regulatory bodies, the SCAV's analysis is both granular and expansive, accounting for potential systemic shockwaves that could reverberate through banking markets globally. To

Continuing from the analysis of vulnerabilities, the FSB's focus expands into the practical realm of risk management and strategic response. The work of the SCAV, buttressed by the Analytical

⁷⁶⁶ Dirk Schoenmaker, 'The Financial Trilemma' (2010) 111 Economics Letters 57.

⁷⁶⁷ Tony Porter, Transnational Financial Regulation after the Crisis (Routledge 2014) 42.

⁷⁶⁸ Andrew Baker, 'Restraining Regulatory Capture? Anglo-America, Crisis Politics and Trajectories of Change in Global Financial Governance' (2010) 86(3) *International Affairs* 647, 652.

⁷⁶⁹ Stefano Pagliari, 'Who Governs Finance? The Shifting Public–Private Divide in the Regulation of Derivatives, Rating Agencies and Hedge Funds' (2012) 18(1) *European Law Journal* 44, 51.

⁷⁷⁰ Pierre-Hugues Verdier, 'The Political Economy of International Financial Regulation' (2013) 88 *Indiana Law Journal* 1405, 1418.

Group on Vulnerabilities (AGV), provides a multidisciplinary platform to dissect and interpret the evolving tapestry of financial sector risks.⁷⁷¹ Their collaboration with the International Monetary Fund (IMF) on Early Warning Exercises (EWE) embodies a proactive stance against potential systemic shocks, however unlikely, that could disrupt the financial landscape.⁷⁷²

The FSB's ongoing commitment to risk assessment is set to advance with the introduction of a new financial monitoring framework. Released in September 2021, this framework is poised to transform the evaluation of global financial security vulnerabilities. Four cardinal objectives underpin this initiative: to refine the FSB's dialogue on vulnerabilities; to enhance the rapid identification of threats to global financial stability; to leverage the FSB's comprehensive perspective on financial performance issues; and to actively contribute to international policy discussions.⁷⁷³ This paradigm is constructed upon three foundational elements: the fundamental functions of the financial system, a standardized lexicon for vulnerability assessments, and a classification system for the taxonomy of impacts.⁷⁷⁴

By infusing efficiency and timeliness into discussions surrounding vulnerabilities, the new framework aspires to prompt more stringent monitoring and informed policy interventions for material global vulnerabilities.⁷⁷⁵ As a conduit for ongoing discourse on the financial system's

⁷⁷¹ Stavros Gadinis, 'Three Pathways to Global Standards: Private, Regulator, and Ministry Networks' (2015) 109(1) *American Journal of International Law* 1, 5.

⁷⁷² Tony Porter, *Transnational Financial Regulation after the Crisis* (Routledge 2014) 55.

⁷⁷³ Eric J Pan, 'Challenge of International Cooperation and Institutional Design in Financial Supervision: Beyond Transgovernmental Networks' (2010) 11 *Chicago Journal of International Law* 243, 251.

⁷⁷⁴ Pierre-Hugues Verdier, 'The Political Economy of International Financial Regulation' (2013) 88 *Indiana Law Journal* 1405, 1422.

⁷⁷⁵ Dirk Schoenmaker, 'The Financial Trilemma' (2010) 111 *Economics Letters* 57.

health, the FSB is determined to engage regularly with the global community through its financial statements, distilling its perspective on vulnerabilities and potential solutions.⁷⁷⁶

3.5.4 Increasing Resilience of Non-Bank Financial Intermediation

Addressing the liquidity challenges and volatility within the realm of Non-Bank Financial Intermediation (NBFI) is paramount to the FSB's strategy for bolstering economic security.⁷⁷⁷ In the aftermath of crises, certain NBFIs have exhibited susceptibility to precipitating liquidity strains and market disruptions, amplified by their structural characteristics and behaviour during stress.⁷⁷⁸ The FSB's endeavours have concentrated on examining such vulnerabilities, with particular attention to investment funds, open-ended financing, margining practices, bond markets, and cross-border dollar funding.

The subsequent policy framework seeks to mitigate systemic risks in the NBFI sector by focusing on 'critical amplifiers' — events and entities that exacerbate liquidity mismatches and market disturbances.⁷⁷⁹ The FSB and SSBs have delineated policy initiatives intended to temper cash flow volatilities, fortify liquidity management during stress, and enhance the preparedness of market participants for fluctuating demands and margin requirements.⁷⁸⁰

By repurposing existing policy tools rather than creating novel ones, the initiatives aim to curtail liquidity surges and address vulnerabilities head-on. However, the FSB recognizes that

⁷⁷⁶ Tony Porter, *Transnational Financial Regulation after the Crisis* (Routledge 2014) 59.

⁷⁷⁷ Gary B Gorton, 'Slapped in the Face by the Invisible Hand: Banking and the Panic of 2007' (2009) SSRN Working Paper https://ssrn.com/abstract=1401882 accessed 10 January 2023, 4.

778 Douglas W Arner and Michael W Taylor, 'The Global Credit Crisis and the Financial Stability Board: Hardening the Soft

Law of International Financial Regulation?' (2009) 32 UNSW Law Journal 488, 493.

⁷⁷⁹ Franklin Allen and others, 'Moral Hazard and Government Guarantees in the Banking Industry' (2015) 30(1) Journal of Financial Regulation and Compliance 89, 93.

⁷⁸⁰ Mathias Drehmann and Nikola Tarashev, 'Systemic Importance: Some Simple Indicators' (2011) BIS Quarterly Review 25, 28.

leveraging these tools for systemic risk mitigation is an area with limited precedent. Moving forward, the FSB is committed to evaluating whether such repurposing suffices or whether new, more agile approaches are needed to confront systemic risk within NBFIs.⁷⁸¹ This includes devising new metrics and tools for supervising NBFI vulnerabilities, deepening the evaluation of these vulnerabilities, and integrating insights from empirical studies into systemic risk-tracking mechanisms.⁷⁸²

3.5.5 Enhancing Money Market Fund Resilience

The resilience of Money Market Funds (MMFs) is a critical focal point in the broader context of addressing systemic risks and reducing the dependency on extraordinary financial system interventions. The FSB's scrutiny of market turbulence in March 2020 has shed light on systemic vulnerabilities within MMFs and the underlying short-term funding markets. Susceptible to rapid and sizable redemptions, MMFs may face difficulties in liquidating assets during adverse market conditions, a scenario that can precipitate runs on funds and propagate systemic risks across the financial industry. The state of the propagate of the propagate of the state of the propagate of th

Policymakers, therefore, categorize proposed measures to bolster MMF resilience based on the mechanisms through which they aim to operationalize such resilience — by imposing redemption costs on withdrawing shareholders, enhancing loss absorption capacities, reducing redemption incentives, and diminishing liquidity transformation risks.⁷⁸⁵ The FSB's analysis

⁷⁸² Ross Levine, 'The Governance of Financial Regulation: Reform Lessons from the Recent Crisis' (2012) 12(1) *International Review of Finance* 39, 45.

⁷⁸¹ Charles Goodhart, *The Regulatory Response to the Financial Crisis* (Edward Elgar 2009) 17.

⁷⁸³ Luc Laeven and Fabia'N Valencia, 'Systemic Banking Crises Database' (2013) 61(2) *IMF Economic Review* 225, 228.

⁷⁸⁴ Franklin Allen and others, 'Moral Hazard and Government Guarantees in the Banking Industry' (2015) 30(1) *Journal of Financial Regulation and Compliance* 89, 95.

⁷⁸⁵ Anat R Admati and others, 'Fallacies, Irrelevant Facts, and Myths in the Discussion of Capital Regulation: Why Bank Equity is Not Socially Expensive' (2013) Stanford University Working Paper No 86, 11.

navigates the potential impacts of each policy option on various stakeholders, including MMF shareholders, financial advisors, and market counterparties, while also contemplating their effects on the broader financial markets.⁷⁸⁶

The comprehensive strategy for enhancing MMF resilience involves carefully selecting and integrating various policy approaches to address the idiosyncratic risks associated with distinct MMFs.⁷⁸⁷ Authorities must consider the nuances of regulatory environments, overarching policy goals, and international dynamics to circumvent regulatory arbitrage stemming from inconsistent application across jurisdictions.⁷⁸⁸

Regulatory enhancements aimed at fortifying MMF resilience may be augmented by ancillary reforms in two main spheres. The first encompasses policies that promote holistic risk management by investment firms, including stringent vulnerability assessments by authorities. The second involves measures to improve the functioning of the core short-term funding markets, which underpin the MMFs.

3.5.6 FSB and Shadow Banking

The term 'shadow banking' encompasses a constellation of bank-like activities, primarily lending, which take place outside the purview of traditional banking regulation and oversight.⁷⁹⁰ This sector can introduce heightened systemic risk due to its operation within the financial market without the safeguards customary to the regulated banking environment, epitomized by

⁷⁸⁶ Jihad Dagher and others, 'Benefits and Costs of Bank Capital' (IMF Staff Discussion Note SDN/16/04, 2016) 18.

⁷⁸⁷ Kern Alexander, Rahul Dhumale and John Eatwell, *Global Governance of Financial Systems: The International Regulation of Systemic Risk* (Oxford University Press 2006) 91.

⁷⁸⁸ Niamh Moloney, EU Securities and Financial Markets Regulation (Oxford University Press 2023) 85.

⁷⁸⁹ Robert F Weber, 'New Governance, Financial Regulation, and Challenges to Legitimacy: The Example of the Internal Models Approach to Capital Adequacy Regulation' (2010) 62(3) *Administrative Law Review* 783, 831.

⁷⁹⁰ Edward J Kane, 'Shadowy Banking: Theft by Safety Net' (2014) 31 Yale Journal on Regulation 773, 776.

the inability of these entities to access central bank emergency funding or to be insured.⁷⁹¹ This lack of regulation was a critical lapse in the financial ecosystem leading up to the global financial crisis.

The FSB's response has been to forge a robust framework for the oversight of shadow banking, ensuring a comprehensive approach to non-bank credit intermediation while advising policymakers to hone in on issues like leverage and liquidity transformation mismatches.⁷⁹² Notably, this monitoring process has gained traction among FSB members and non-cooperative jurisdictions alike, signifying its expansive influence.⁷⁹³

3.5.7 Analysis of the FSB Soft Law Framework

FSB standards and recommendations constitute a form of 'soft law,' reliant on the perception of the FSB as a credible, transparent, and accountable entity. 794 Although not legally enforceable, these recommendations are designed with flexibility in mind, allowing member states to adapt them according to their unique national requirements.⁷⁹⁵ This characteristic serves a dual purpose: fostering country-specific implementation while risking the dilution of the FSB's objectives due to creative compliance strategies that only nominally align with its recommendations.⁷⁹⁶

⁷⁹¹ Tobias H Tröger, 'The Single Supervisory Mechanism – Panacea or Quack Banking Regulation? Preliminary Assessment of the New Regime for the Prudential Supervision of Banks with ECB Involvement' (2014) 15(4) European Business Organization Law Review 449, 452.

⁷⁹² John Braithwaite and Peter Drahos, *Global Business Regulation* (1st edn, Cambridge University Press 2000) 109.

⁷⁹³ Dieter Kerwer, 'Rules That Many Use: Standards and Global Regulation' (2005) 18(4) Governance 611, 618.

⁷⁹⁴ Julia Black, Restructuring Global and EU Financial Regulation: Capacities, Coordination and Learning (LSE Law, Society and Economy Working Paper 18/2010, London School of Economics and Political Science) 13.

⁷⁹⁵ Andrew Baker, 'Deliberative Equality and the Transgovernmental Politics of the Global Financial Architecture' (2009) 3(10) International Theory 94, 97.

796 Tony Porter, Transnational Financial Regulation after the Crisis (Routledge 2014) 67.

Key to achieving the FSB's objectives are robust supervision and oversight, for which the peer review system has been deemed an optimal tool, albeit with the caveat of requiring prior approval from FSB members.⁷⁹⁷ The intrinsic value of any regulatory system is manifest in its enforcement capabilities and the consequent legitimacy and compliance it engenders within its jurisdiction.⁷⁹⁸

Despite criticisms regarding the pace and practical relevance of recommendations from international standard-setting bodies like the IASB, the guidelines are integral to countering cyclical fluctuations and setting standards for fair valuation assessments. Additionally, the implementation of sound compensation practices by the FSB signals a progressive step towards mitigating undue risk-taking, by aligning employee remuneration with long-term stability rather than short-term gains.

3.5.8 Risks and Opportunities Under the FSB Soft Law Framework

The pliability inherent in the soft law framework presents both challenges and opportunities. As a creator of norms, soft law facilitates the customization of recommendations to fit national contexts, which can act as a precursor to the adoption of binding international regulations.⁸⁰¹ This flexibility can identify minimum standards, thereby enhancing efficiency and

⁷⁹⁷ Patricia Jackson and others, 'Capital Requirements and Bank Behaviour: The Impact of the Basle Accord' (Basel Committee on Banking Supervision Working Paper No 1, April 1999) https://www.bis.org/publ/bcbs_wp1.pdf accessed 10 January 2023, 19.

⁷⁹⁸ George G Kaufman, 'Bank Contagion: A Review of the Theory and Evidence' (1994) 8 *Journal of Financial Services Research* 123, 131.

⁷⁹⁹ Daniel K Tarullo, Banking on Basel: The Future of International Financial Regulation (Peterson Institute 2008) 51.

⁸⁰⁰ David Jones, 'Emerging Problems with the Basel Capital Accord: Regulatory Capital Arbitrage and Related Issues' (2000) 24(1) *Journal of Banking & Finance* 35, 41.

⁸⁰¹ Chris Brummer, 'Why Soft Law Dominates International Finance – And Not Trade' (2010) 13(3) *Journal of International Economic Law* 623, 635.

compatibility with diverse institutional landscapes.⁸⁰² The adaptable nature of soft law engenders cooperation and compliance because it eschews coercion in favour of respecting state sovereignty.⁸⁰³ This approach not only nurtures international collaboration but also propels adherence, as the prospects of improved trade relationships and access to credit serve as significant incentives for states to align with international soft law guidelines.⁸⁰⁴

However, the flexibility of soft law exists within the broader ambit of the legal and political milieu it seeks to influence, bringing with it risks such as a potential lack of transparency and the possibility of legislation being co-opted by self-serving interests.⁸⁰⁵ There is also the pervasive issue of ensuring that the adoption of soft law principles is genuinely aimed at effective enforcement, rather than mere symbolic compliance to gain group membership benefits.⁸⁰⁶

To mitigate these risks, it is imperative to forge a nexus between existing legal frameworks and the soft law norms, bolstering transparency and accountability to amplify the impact of FSB recommendations.⁸⁰⁷ Suggesting a system of rewards and penalties may refine compliance levels, rewarding members who demonstrate commitment and reducing privileges for those who do not.⁸⁰⁸ The soft law framework, while instrumental in shaping regulatory practices,

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⁸⁰² Julia Black, 'Constructing and Contesting Legitimacy and Accountability in Polycentric Regulatory Regimes' (2008) 2 *Regulation & Governance* 137, 141.

⁸⁰³ Andrew Lang and Joanne Scott, 'The Hidden World of WTO Governance' (2009) 20(3) European Journal of International Law 575, 579.

⁸⁰⁴ William A Lovett, 'Transnational Finance Regulation and the Global Economy' (2011) 20 *Tulane Journal of International and Comparative Law* 43, 47.

⁸⁰⁵ Benedict Kingsbury and others, 'The Emergence of Global Administrative Law' (2005) 68 *Law and Contemporary Problems* 15, 18.

⁸⁰⁶ Abram Chayes and others, 'Active Compliance Management in Environmental Treaties' in W Lang (ed), *Sustainability in International Environmental Policy* (Peter Lang 1999) 55.

⁸⁰⁷ Matthias Thiemann, 'Is Resilience Enough? The Macroprudential Reform Agenda and the Lack of Smoothing of the Cycle' (2019) 97(3) *Public Administration* 561, 565.

⁸⁰⁸ Dirk Schoenmaker, 'The Financial Trilemma' (2010) 111 *Economics Letters* 57-59.

carries inherent risks that could foster regulatory arbitrage if left unchecked. This necessitates considering more binding frameworks founded upon accountability.⁸⁰⁹ In this context, accountability connotes a system where actors are obliged to conform to explicitly defined standards and are subject to sanctions should they fail to meet these standards.⁸¹⁰The effectiveness of the FSB's approach ultimately hinges on harmonization within the regulatory systems of member states to prevent regulatory arbitrage.⁸¹¹ A consistent application of minimum standards is crucial to averting market exploitation that could lead to systemic risks with global repercussions, affirming the adage "the strength of the wolf is the pack."⁸¹²

3.5.9 Establishing the FSB as a Legal Entity

Despite its current lack of legal status, which impedes its ability to enforce binding resolutions, the FSB, if recognized as a legal entity, could more compellingly mandate adherence to its set rules and standards. One approach could be transforming the FSB into an international organization, recognized under international law, which would necessitate member states to ratify a constituting treaty, fundamentally transforming the nature of FSB membership from a consortium of regulatory bodies and central banks to a body comprised of state parties. Lach state could delegate representation to a designated regulatory authority within this new framework. This shift would potentially solidify the FSB's global influence and foster

⁸⁰⁹ Chris Brummer, 'Why Soft Law Dominates International Finance – And Not Trade' (2010) 13(3) *Journal of International Economic Law* 623, 629.

⁸¹⁰ Julia Black, 'Constructing and Contesting Legitimacy and Accountability in Polycentric Regulatory Regimes' (2008) 2 Regulation & Governance 137, 141.

⁸¹¹ Eric J Pan, 'Challenge of International Cooperation and Institutional Design in Financial Supervision: Beyond Transgovernmental Networks' (2010) 11 *Chicago Journal of International Law* 243, 250.

⁸¹² Andrew Baker, 'Restraining Regulatory Capture? Anglo-America, Crisis Politics and Trajectories of Change in Global Financial Governance' (2010) 86(3) *International Affairs* 647, 653.

⁸¹³ Kern Alexander, Rahul Dhumale and John Eatwell, *Global Governance of Financial Systems: The International Regulation of Systemic Risk* (Oxford University Press 2006) 91.

⁸¹⁴ José E Alvarez, 'International Organizations: Then and Now' (2006) 100 American Journal of International Law 324, 326.

adherence to its standards, though it comes with the caveat of potential delays due to the vagaries of national ratification processes.⁸¹⁵

Alternatively, incorporating the FSB as a non-profit entity within member states' domestic laws could offer a nimble structure, allowing the creation of subsidiaries or regional bodies to enforce and monitor compliance.⁸¹⁶ This would necessitate domestic legislation that prescribes stringent reporting and compliance requirements.⁸¹⁷

Yet, the creation of a legal identity for the FSB is not a panacea; even with legal status, the FSB's effectiveness would still rely heavily on its collaborative and peer-pressure-based nature, where member entities retain the discretion to adopt and implement recommendations as they see fit.⁸¹⁸

Another possibility is for the FSB to persist as an unincorporated entity, leveraging its affiliation with existing legal institutions like the Bank for International Settlements (BIS).⁸¹⁹ This approach maintains flexibility and broadens the FSB's scope of engagement with both member and non-member states. However, the lack of independent legal status could constrain the FSB's negotiating power and impede its capacity to establish robust governance arrangements.⁸²⁰

⁸¹⁵ Pierre-Hugues Verdier, 'The Political Economy of International Financial Regulation' (2013) 88 *Indiana Law Journal* 1405, 1412.

⁸¹⁶ Stavros Gadinis, 'Three Pathways to Global Standards: Private, Regulator, and Ministry Networks' (2015) 109(1) *American Journal of International Law* 1, 4.

⁸¹⁷ Howell E Jackson, 'Variation in the Intensity of Financial Regulation: Preliminary Evidence and Potential Implications' (2007) 24 Yale Journal on Regulation 253, 259.

⁸¹⁸ Andrew Baker, 'Deliberative Equality and the Transgovernmental Politics of the Global Financial Architecture' (2009) 3(10) *International Theory* 94, 98.

⁸¹⁹ Dieter Kerwer, 'Holding Global Regulators Accountable: The Case of Credit Rating Agencies' (2005) 18(3) Governance: An International Journal of Policy, Administration, and Institutions 453, 456.

⁸²⁰ Tobias H Tröger, 'The Single Supervisory Mechanism – Panacea or Quack Banking Regulation? Preliminary Assessment of the New Regime for the Prudential Supervision of Banks with ECB Involvement' (2014) 15(4) *European Business Organization Law Review* 449, 452.

In summary, the FSB's approach to financial stability is characterized by a careful balance between regulatory influence and the sovereignty of its members. While the soft law framework has facilitated a wide-ranging dialogue on international financial regulation, the question of its conversion into a more binding form of governance remains a subject of significant debate.⁸²¹ The ultimate efficacy of the FSB's standards and guidelines hinges on their harmonious integration into the domestic policies of member states, thereby minimizing the risk of regulatory arbitrage and fostering a robust, stable global financial system.⁸²²

3.6 Securities Market Regulation

Securities markets are a fundamental component of any economy; hence the regulation of security markets plays a significant role in determining a country's financial and economic growth and integration into the global market.⁸²³ To begin, it is worth acknowledging that the securities markets are tremendously varied both in the context of legal frameworks and their level of development. This means that the specific responsibilities of securities regulators are equally varied in different contexts.

Therefore, in this section, it is not practical to analyse a single legal or institutional framework for security market regulations; indeed, this difficulty was acknowledged by the drafters of the IOSCO core principles, and instead of presenting a unilateral and uniform legal framework, the IOSCO core principles provide three core objectives that form the basis of an effective system

⁸²² Tony Porter, 'Technical Systems and the Architecture of Transnational Business Governance Interactions' (2007) 8(1) *Regulation & Governance* 110, 114.

⁸²¹ Ethan B Kapstein, 'Resolving the Regulator's Dilemma: International Coordination of Banking Regulations' (1989) 43 *International Organization* 323, 325.

⁸²³ Magdalena Redo and Marta Gebska, 'Globalization in Growing Financial Markets as a Threat to the Financial Security of the Global Economy' (2020) 23 European Research Studies Journal 335, 338.

of securities regulation.⁸²⁴ Briefly, the objectives which are discussed in greater detail below include a. protecting investors, b. ensuring that markets are fair, efficient and transparent and c. reducing systemic risks.⁸²⁵ These three objectives are complemented by 30 principles set forth by IOSCO which are designed to give practical effect to its three objectives of security market regulation. In addition, the IOSCO principles acknowledge that there is no single correct approach to security regulations.

3.6.1 International Organisation of Securities Commissions (IOSCO)

Established in 1993, IOSCO is a global cooperative of securities regulatory agencies whose core objective is to develop, implement and promote high regulatory standards that increase investor protection and reduce systemic risk. To achieve this feat, IOSCO cooperates with members in sharing and exchanging information, offering aid to members on technical and operational issues, and establishing feasible standards for monitoring global investment transactions. More specifically, IOSCO provides principles and a comprehensive assessment methodology through which the World Bank and the IMF assess the regulations of independent national securities regimes. In addition, the Financial Securities Board uses the methodology when conducting peer reviews.⁸²⁶

⁸²⁴ Jennifer A Elliott and Ana Carvajal, *Strengths and Weaknesses in Securities Market Regulation* (International Monetary Fund 2007) 11.

⁸²⁵ Janet Austin, 'The Power and Influence of IOSCO in Formulating and Enforcing Securities Regulations' (2015) *Asper Review of International Business and Trade Law* (forthcoming) SSRN https://ssrn.com/abstract=2717521 accessed 10 January 2023, 7.

⁸²⁶ IOSCO, Objectives and Principles of Securities Regulation (International Organization of Securities Commissions 2007) https://www.iosco.org/library/pubdocs/pdf/IOSCOPD154.pdf accessed 13 January 2023, 3.

3.6.2 IOSCO Core Principles and Systemic Risk Mitigation and Structural Development

The objectives and principles of IOSCO provide for the fundamental global standards for securities market regulations and create a platform for the organization members to a. exchange information in relation to their experiences to foster the development of domestic markets; b. members are required to collaborate to establish standards and improve market surveillance of international transactions; c. members agree to provide mutual assistance to promote the integrity of the securities market.⁸²⁷

As noted earlier, the primary function of IOSCO's core principles is to a. promote investor protection, b. ensuring markets are fair, efficient, and transparent, and c. reducing risk, with the most effective means of guaranteeing these objectives being full disclosure anchored on regulations that promote fairness and efficient markets through insisting on the highest transparency levels, including pre-trade and post-trade transparency.⁸²⁸

At an operational level, the IOSCO principles insist that periodic reporting is the lynchpin of both investor protection and the transparent operation of financial markets. The intention is to enable investors to make rational decisions by providing them with guaranteed access to all relevant information needed to examine a company's performance over time in comparison to other companies.⁸²⁹ More so, cognisant that financial markets are now global, the IOSCO

⁸²⁷ PM Vasudev and Susan Watson, Global Capital Markets: A Survey of Legal and Regulatory Trends (Edward Elgar 2017)

⁸²⁸ David Kempthorne, Governing International Securities Markets (Waterloo 2013) 64.

⁸²⁹ Ananth Madhavan, David Porter and Daniel Weaver, 'Should Securities Markets Be Transparent?' (2005) 8 *Journal of Financial Markets* 265, 270.

principles insist on international disclosure to facilitate cross-border capital raising and encourage liquid markets.⁸³⁰

On an equal stride, the IOSCO principles are reflective of the broad responsibilities mandated to securities regulators, which are much broader than the duties of banking supervisors. Similar to banking supervisors, security regulators are tasked with supervising the activities of market intermediaries. In addition, they are also required to supervise security markets, collective investment schemes, investment managers or advisers, and issuer disclosure. These duties are distinctively defined in the 30 core principles, with the most significant principle to our analysis being Principle 6, which is related to systemic risk mitigation and was adopted in response to the global financial crisis. Principle 6 provides that the regulator should have or contribute to a process to monitor and mitigate systemic risk appropriate to its mandate, and Principle 7 states that the regulator should have or contribute to a process to regularly review the perimeter of regulation.

In addition to articulately defining the mandate and responsibility of regulators in monitoring, mitigating, and managing systemic risks coupled with contributing to a process to review the perimeter of regulations, IOSCO is seen to be an effective agent in supporting the development of a uniform systemic risk perspective. However, while there exists a general consensus on the need to develop effective systemic risk measurements and to provide methodological analysis techniques including solutions to mitigate those risks, it is important to note that there exist

⁸³⁰ George W Arnett, Global Securities Markets (John Wiley & Sons 2011) 55.

significant challenges to the potential effectiveness of this approach given the complexities of aggregating wholistic measures to systemic risk management.

It is acknowledged that one of the most potent challenges is the principal-agent problem which accrues from the difficulties of asymmetries of information coupled with the financial risk appetite of managers and owners. These difficulties are compounded by the firm's incentive structure coupled with the limitation of liability, which encourages managers and owners of financial firms to under-price their financial risks, creating too much risk for the broader company.

The second and yet significant challenge faced by a regulator is fragmented data characterized by major gaps in data availability. This issue has been specifically addressed by the FSB and IMF, who cite the lack of a reliable, efficient, and timely data-relaying framework as the biggest undoing of the attempt to develop a harmonised systemic risk management framework.⁸³¹

3.6.3 IOSCO's Response to Risk

IOSCO recognizes the threats posed by the principal-agent relationship, including the system of rewards that can potentially influence management decisions in both banks and securities firms. More specifically, the principal-agent relationship may bear a scenario where the management's risk preferences are different from those of the firm owners, stakeholders, creditors and the public. To this end, IOSCO recognises that the role of the financial regulator is to represent the best interests of the public in ensuring that banks and security firms are

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⁸³¹ Financial Stability Board, IMF and BIS, Guidance to Assess the Systemic Importance of Financial Institutions, Markets and Instruments: Initial Considerations and Background Paper (Report to G20 Finance Ministers and Governors, October 2009) http://www.bis.org/publ/othp07.pdf accessed 23 January 2023, 6.

regulated efficiently in a fashion that reduces systemic risk. To this end, IOSCO proposes internal corporate governance standards for investment firms to ensure that their conduct protects their clients and the overall stability and integrity of the financial market. To achieve this feat, IOSCO places the primary responsibility for the management and operation of securities firms on senior management, who are required to strictly comply with the appropriate standards of conduct and administer proper procedures to manage and mitigate all risks accruing from the operation of the firm.

Further, IOSCO recognizes that regulation should not go as far as to remove risk from the marketplace because the risk is inherent to the enterprise system. Instead, IOSCO principles insist on reducing risk accruing from the firms' activities that may overly affect shareholders and have a systemic character. To do this, IOSCO encourages periodic evaluation of risk management procedures within a regulated entity with this evaluation including regulators and external auditors.

On an equal stride, IOSCO recognizes operational risks as potent disruptors of financial stability and defines operational risk as "the risk of loss through a failure of systems or deliberate or negligent conduct of staff." More specifically, the IOSCO principles are founded on the recognition that high levels of operational risk may lead to systemic implications, especially where large investment firms with global operations engage in the vice. As a result, IOSCO responds to operational risk by insisting that operational risk ought to be managed through institutional procedures designed to prevent misconduct or negligence. This approach is justified on the premise that regulators cannot be practically expected to ensure that security firms adopt and adhere to internal procedures that limit operational risks. As such, the IOSCO principles require senior management officials to familiarize themselves with the nature of the firm's business and develop internal control procedures and policies regarding the allocation of

risk for each activity. Further, the senior management is required to develop a tailored management command structure that fosters communication at all levels of the firm's operation. Most certainly, all information relating to risk should be available to the management in a timely fashion and made available to a regulator upon request.

Finally, IOSCO vests senior management officials with the direct responsibility and culpability for all the firm's policies that involve proprietary trading. In strict adherence to this responsibility, the firm is expected to provide regulator information relating to a firm's proprietary trading, including a firm's net capital about risk exposure. This information is intended to provide a clear basis for determining a firm's overall business and risk profile including that of its subsidiaries. The top management is also held personally liable for overseeing a firm's compliance with regulations relating to margin trading and the detention of conflicts of interest or manipulative practices.

3.7 Conclusion

In the evolving landscape of global finance, the latter part of the 20th century and the early years of the 21st century have been marked by significant milestones in the integration and internationalization of financial markets. This period, characterized by an unprecedented surge in international capital flow since the early 1990s, underscores the escalating complexity and interconnectedness that define today's financial ecosystem. The transformation, driven by technological advancements, deregulation and the expansion of international financial institutions, has not only facilitated economic growth but also introduced novel vulnerabilities into the global financial system.

The financial crises from the Great Depression to the recent Great Recession reveal a recurring theme of regulatory shortfall in addressing the inherent vulnerabilities within the global financial system. These crises have served as stark reminders of the critical need for robust systemic risk mitigation strategies capable of absorbing financial shocks. In response, international institutions have embarked on a comprehensive reassessment of financial control mechanisms aimed at enhancing the resilience of financial systems.

Central to these endeavours has been the emphasis on the triad of mitigation strategies: capital adequacy, corporate governance, and financial supervision. Capital adequacy, aimed at ensuring financial institutions maintain a buffer proportional to their risk exposure, emerges as a fundamental safeguard against financial instability. Similarly, the enhancement of corporate governance practices underscores the importance of internal controls and ethical conduct within financial institutions, deterring excessive risk-taking that could precipitate systemic crises.

Moreover, the role of comprehensive financial supervision has been highlighted as a pivotal element in pre-empting systemic risks. Enhanced regulatory oversight ensures that financial entities operate within a framework of foresight and diligence, critical in maintaining the integrity of the financial system. As the financial landscape continues to evolve, characterized by rapid innovation and increased interconnectedness, the imperative for adaptable and forward-looking regulatory responses becomes increasingly apparent. The commitment to reinforcing capital adequacy, corporate governance, and financial supervision is essential to the resilience of the financial system.

Reflecting on the conceptual and theoretical dimensions of systemic risk, it is evident that addressing the complexities of financial instability requires a comprehensive strategy that encompasses not only the reinforcement of financial buffers but also the cultivation of robust governance frameworks and the implementation of rigorous supervisory regimes. This

multifaceted approach is pivotal to fostering a resilient financial environment capable of withstanding future economic challenges.

In light of these considerations, the ongoing endeavour to enhance financial regulation, governance, and supervision represents a collective commitment to mitigating systemic risk. By drawing upon the lessons learned from past crises and leveraging insights to shape current strategies, the financial community aspires to a future where systemic shocks are effectively managed. This proactive approach envisioned to mitigate the systemic shocks of the future, ensures that the tumultuous crises of the past do not find recurrence in the economic challenges ahead.

The comprehensive analysis of systemic risk, through the strategic lens of capital adequacy, corporate governance and financial supervision, underscores the intricate web of factors contributing to financial instability. The collective journey towards mitigating systemic risk is not just about averting crises; it is about creating a financial ecosystem that supports economic prosperity, fosters innovation, and ensures the stability and integrity of the global financial architecture. This enduring commitment to enhancing financial stability, governance, and supervision encapsulates our collective resolve to safeguard the global economic system against systemic threats, ensuring a legacy of resilience for future generations.

Chapter Four: Existing System, Rules and Practices

4.1 Introduction

The thesis' doctrinal research approach identifies the ways in which capital, corporate governance and financial supervision can minimize systemic risks internationally, with Libya as the primary point. The chapter therefore aims at investigating the idea and function of the mitigating factors in systemic hazards in Libya, combined with the existing models and implementations of the factors. It also highlights the problems and inadequacies of the mitigating variables to lessen the systemic risks.⁸³²

As discussed in Chapter 2, first, risk involves the mixture of hazards relating to elements and failures in the financial sector coming from interactions in the economic system with a consequence of severe financial decline; a person or specialized organization cannot govern it.⁸³³ It contains an occurrence with dire implications for many completely vital markets or intercessors.⁸³⁴ Notwithstanding the foreseeable hazards, several mitigating procedures have been put in place to minimize the dangers of systemic risk in the markets. Capital, corporate governance, and financial management have played a significant role in minimizing systemic risks.

The first variable that the thesis analyses is capital for minimizing systemic risk. Under this variable, the rationale for the capital is emphasized as well as the quantity of capital that an

⁸³² Larry Eisenberg and Thomas H Noe, 'Systemic Risk in Financial Systems' (2001) 47(2) Management Science 236, 238.

⁸³³ NM Masoud, ^(A) Review of Libya's Economy, Structural Changes and Development Patterns' (2013) 4(2) *Business and Economics Journal* 1, 3.

⁸³⁴ Andrea Capponi and Peng-Chu Chen, 'Systemic Risk Mitigation in Financial Networks' (2015) 58 *Journal of Economic Dynamics and Control* 152, 154.

organization or the market needs to hold. The thesis argues that the risks taken by the corporation define the capacity of capital to be kept and, as such, when the risks are immense, more capital will be required by markets. Challenges encountered by Libya to incorporate the capital element are also examined. These comprise political, social and economic challenges and their consequences on the Libyan economy.

4.2 Systemic Risk Mitigation

As outlined in Chapter 2, systemic risk is connected to an incident that may bring an economy or company to its knees. It arises when capital providers, such as firms and investors, lose trust in capital borrowers, such as banks and financial institutions.⁸³⁵ It is a type of risk that cannot be calculated,⁸³⁶ but steps may be taken for its management and regulation.⁸³⁷ The critical aspect of systemic risk is advancing protection via a transmission mechanism from a retrogressive approach to more progressive-minded institutions.⁸³⁸

As shown in Chapter 1, systemic risk has long been appreciated as one of the significant contributors to the 2008 economic crisis.⁸³⁹ The crisis began because of problems in the non-prime mortgage market and the downfall of the Lehman Brothers Corporation.⁸⁴⁰ The collapse of the giant company resulted in a liquidity crisis which started all the credit and economic businesses, thus influencing a commercial depression in the United States.⁸⁴¹ Because of the

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⁸³⁵ JP Fouque and JA Langsam (eds), Handbook on Systemic Risk (Cambridge University Press 2013) 19.

⁸³⁶ M Blavarg and P Nimander, 'Interbank Exposures and Systemic Risk' in *Risk Measurement and Systemic Risk – Proceedings of the Third Joint Central Bank Research Conference* (BIS, October 2002) 287.

⁸³⁷ P Smaga, The Concept of Systemic Risk (Systemic Risk Centre Special Paper No 5, 2014) 4.

Risk' Corporate Finance Institute, 'Systemic Risk' (Corporate Finance Institute, 2022) https://corporatefinanceinstitute.com/resources/knowledge/finance/what-is-systemic-risk/ accessed 27 February 2022.

⁸³⁹ Denefa Bostandzic and others, 'Capital Requirements and Systemic Risk: Evidence from a Quasi-Natural Experiment' (VoxEU.org, 15 January 2018) https://voxeu.org/article/capital-requirements-and-systemic-risk accessed 3 March 2022.

Rebruary 2022.
 Rest of Christian Hofmann, 'Central Bank Collateral and the Lehman Collapse' (2011) 6(4) Capital Markets Law Journal 456, 460.
 WallStreetMojo, 'Systemic Risk' (WallStreetMojo, 2022) https://www.wallstreetmojo.com/systemic-risk/ accessed 27 February 2022.

economic crisis of 2008, economic regulators shifted to reducing the vulnerability of the banking systems to economic collapse.⁸⁴² The regulators also came up with policies on the micro-economy while setting up safeguards to stabilize the financial systems.⁸⁴³ The objectives of the regulations were to protect the banks and the whole system of finance.⁸⁴⁴

Analysis shows that some banks are more suspected and have more influence on systemic risks than other banks in the comprehensive economic system.⁸⁴⁵ Typically, European banks contribute more to systemic risk than American banks although the banks of both continents have similar exposure to systemic crises.⁸⁴⁶ Besides, the European banks having enormous lending power contribute to international systemic risk as their loan portfolio quality is lower.⁸⁴⁷ In contrast, the European banks' relative link with the other international economic systems is more significant. Finally, more severe capital adjustments are observed to lessen the average vulnerability of financial institutions to systemic hazards.⁸⁴⁸

The 2008 financial crisis clearly shows how the failure of giant companies can engender the downfall of the global economic system.⁸⁴⁹ Furthermore, after the 2008 crisis, the banking corporation was unified with several other companies globally.⁸⁵⁰ The failure of one major

Journal on Global Business Management & Research 60, 62.

⁸⁴² MS M Markose, Systemic Risk from Global Financial Derivatives: A Network Analysis of Contagion and Its Mitigation with Super-Spreader Tax (IMF 2012) 33.

⁸⁴³ AA Adeoye, 'Impact of Institutional Characteristics of Corporate Governance on Corporate Governance System in Sub-Saharan Africa Anglophone Countries (SSAA)' (2015) 3(2) European Journal of Accounting, Auditing and Finance Research 30, 34.

⁸⁴⁴ Adam Tooze, Crashed: How a Decade of Financial Crises Changed the World (Viking 2018) 41-44.

⁸⁴⁵ Markose SM and others, 'Too Interconnected to Fail: Financial Contagion and Systemic Risk in Network Model of CDS and Other Credit Enhancement Obligations of US Banks' (2012) 83(3) *Journal of Economic Behavior & Organization* 627.

846 A E Nasef, 'The Challenges Facing the Libyan Customs and Its Impact on the Libyan Economy' (2019) 8(2) *International*

⁸⁴⁷ Nout Wellink, 'Mitigating Systemic Risk in OTC Derivative Markets' (2010) Financial Stability Review 131, 133.

⁸⁴⁸ Denefa Bostandzic and Gregor Weiß, 'Why Do Some Banks Contribute More to Global Systemic Risk?' (2018) 35 *Journal of Financial Intermediation* 17, 20.

⁸⁴⁹ Vernon McKinley, 'Is There Value in Revisiting the Lehman Collapse' (2017) 40 Regulation 48, 50.

⁸⁵⁰ Claude Brunel and Gary Clyde Hufbauer, *Reviving Maghreb Integration: Recommendations* (Peterson Institute for International Economics, Policy Analyses in International Economics No 86, 2008) 163.

stakeholder on the linkage would have detrimental results on the whole financial system.⁸⁵¹ Consequently, important banks and other large establishments have been connected to banks to prevent catastrophes. Among the regulations put in place were capital conditions presently applied to banks. 852 Most banks and financial institutions have been encouraged to shrink their size and interconnect with other companies to regulate systemic risk. 853 The stated mitigating measure of shrinking the institutions has been addressed by increasing the capital requirements.

4.2.1 Systemic Risk Mitigation in the Domestic Context

Various studies have asserted that researching the elements of systemic risk helps create awareness of the susceptibility of the financial systems.⁸⁵⁴ However, creating awareness is insufficient to foretell a crisis, 855 but timely feedback can be managed and decided. 856

4.2.1.1 Capital in the Domestic Context

Additionally, capital has been implemented as a mitigating measure against systemic risk. Capital is an essential feature of secured and sound banks. Financial institutions like banks may usually incur losses on the risks they take when the said risks come about.⁸⁵⁷ The contention

⁸⁵¹ Marcel Bluhm and Jan Pieter Krahnen, 'Systemic Risk in an Interconnected Banking System with Endogenous Asset Markets' (2014) 13 Journal of Financial Stability 75, 78.

⁸⁵² Prasad Krishnamurthy, 'Rules, Standards, and Complexity in Capital Regulation' (2014) 43 Journal of Legal Studies S273,

⁸⁵³ Prasad Krishnamurthy, 'Rules, Standards, and Complexity in Capital Regulation' (2014) 43 Journal of Legal Studies S273, S279; Ryan Tracy and others, 'Fed Lifts Capital Requirements for Banks' Wall Street Journal (New York, 20 July 2015) http://www.wsj.com/articles/fed-set-to-finalize-amount-of-capital-big-banks-must-maintain-1437410401 September 2023.

⁸⁵⁴ RR Bliss and GG Kaufman, 'Derivatives and Systemic Risk: Netting, Collateral, and Closeout' (2006) 2(1) Journal of Financial Stability 55, 58.

⁸⁵⁵ M Aldredge, G Cooley and T Mallett, 'The Development of Theory in Accounting Research' (2017) 19(1) IOSR Journal of Business and Management 27, 30.

⁸⁵⁶ Business Process Incubator, 'Systemic Risk Explained: How to Measure and Identify Systemic Risk Items' https://www.businessprocessincubator.com/content/systemic-risk-explained-how-to-measure-and-identify-systemic-risk-explain items/ accessed 27 March 2023.

857 J Bullard, CJ Neely and DC Wheelock, 'Systemic Risk and the Financial Crisis: A Primer' (2009) 91 Federal Reserve Bank

of St Louis Review 403, 407.

lies in the amount of capital a bank should have. 858 Here, the more risks the company takes, the more capital it will need. It is thus crucial for banks to regularly assess the risks they are susceptible to and the losses they may suffer. 859 It is then the role of the bank supervisors to oversee and question the assessments of the bank. 860 The supervisors must keep track of the bank's financial health and examine the levels of capital reached by the bank. 861

Capital requirements represent the most widespread approach to protect against the failure of systemically important financial institutions. They are intended to protect those entities both against unexpected losses⁸⁶² and against becoming excessively leveraged⁸⁶³ by requiring them to hold minimum levels of capital. Capital requirements are implemented by setting minimum capital adequacy ratios, the ratio of a systemically important financial institution's capital to its risk-weighted assets.⁸⁶⁴

Moreover, capital has played a significant role in regulating systemic risks.⁸⁶⁵ The increase of capital conditions improves the steadiness of independent banks by making them more flexible to the unpredicted economic crisis.⁸⁶⁶ Thus, capital requirements are an efficient way of mitigating systemic risk.⁸⁶⁷ On the other hand, unexpected joint economic threats might be

⁸⁵⁸ H Meddeb, Precarious Resilience: Tunisia's Libyan Predicament (Istituto Affari Internazionali 2017) 12.

⁸⁵⁹ N Alvi, Development of Libyan Economy Since 1969 (PhD thesis, Aligarh Muslim University 1982) 75.

⁸⁶⁰ JA Allan (ed), *Libya Since Independence (RLE Economy of Middle East): Economic and Political Development* (Routledge 2014) 43.

European Central Bank, 'Why Do Banks Need to Hold Capital? https://www.bankingsupervision.europa.eu/about/ssmexplained/html/hold_capital.en.html accessed 27 February 2022.

⁸⁶² Kern Alexander and Steven L Schwarcz, 'The Macroprudential Quandary: Unsystematic Efforts to Reform Financial Regulation' in Ross P Buckley, Emilios Avgouleas and Douglas W Arner (eds), *Reconceptualising Global Finance and Its Regulation* (Cambridge University Press 2016) 35.

⁸⁶³ Hervé Hannoun, 'The Basel III Capital Framework: A Decisive Breakthrough' (BIS, 2010) https://www.bis.org/speeches/sp101125a.htm accessed 11 November 2021.

⁸⁶⁴ Steven L Schwarcz, 'Banking and Financial Regulation' in Francesco Parisi (ed), *The Oxford Handbook of Law and Economics: Volume 2 – Private and Commercial Law* (OUP 2017) 289.

⁸⁶⁵ N Hassan, 'Reviving Revolution: The Role of Market-Driven Transnationalism, Democracy, and Agents' (2013) *Mellon Mays Undergraduate Fellowship Journal* 69, 71.

⁸⁶⁶ Adam Tooze, Crashed: How a Decade of Financial Crises Changed the World (Viking 2018) 122–25.

⁸⁶⁷ DK Patro, M Qi and X Sun, 'A Simple Indicator of Systemic Risk' (2013) 9(1) Journal of Financial Stability 105, 107.

highly catastrophic for the system if they are unstable enough to lead one or more of the large banks to collapse. Refer Capital requirements for the largest, most interlinked institutions will reduce the likelihood and repercussions of transmission by generating financial advantages to shrink and detach to some extent.

In addition, after the 2008 crisis, adjustments were put forward that motivated the most extensive and most at-risk banks to overturn and detach while demanding those large and stable banks to have sufficient capital assets to sustain them in the event of an unpredicted crisis.⁸⁷⁰ These measures are not always accepted.⁸⁷¹ Improved capital requirements restrain growth as banks raise other capital for reserves used in a financial crisis.⁸⁷² Despite the challenges, the cost-effective value of the regulations put in place is clear. The uncertainty of a recurrent or much greater economic crisis similar to that of 2008 calls for increased adjustments.⁸⁷³

4.2.1.2 Corporate Governance in the Domestic Context

The collapse of the global business conglomerates across the world has brought the issue of corporate governance to the fore.⁸⁷⁴ Conversely, corporate systems and practices are the

⁸⁶⁸ MM Alfatiemy, *The Relationship Between Teaching Practices, Capabilities, and Resources with the Development of Core Competencies Among Libyan Accounting Students* (PhD thesis, Sultan Idris Education University 2013) 64.

Ryan Tracy and others, 'Fed Lifts Capital Requirements for Banks' *Wall Street Journal* (New York, 20 July 2015) http://www.wsj.com/articles/fed-set-to-finalize-amount-of-capital-big-banks-must-maintain-1437410401 accessed 11 November 2021.

⁸⁷⁰ L Alfaro, S Kalemli-Ozcan and V Volosovych, 'Capital Flows in a Globalized World: The Role of Policies and Institutions' in Sebastian Edwards (ed), *Capital Controls and Capital Flows in Emerging Economies: Policies, Practices, and Consequences* (University of Chicago Press 2007) 19.

⁸⁷¹ MA Centeno and others, 'The Emergence of Global Systemic Risk' (2015) 41 Annual Review of Sociology 65, 67.

⁸⁷² Steve H Hanke, 'Basel's Capital Curse' (CATO Institute, 2013) http://www.cato.org/publications/commentary/basels-capital-curse accessed 12 October 2023.

⁸⁷³ MA Weiss, 'Systemic Risk and the US Insurance Sector' (Center for Insurance Policy & Research, NAIC 2010) http://www.naic.org/documents/cipr weiss systemic risk 100223.pdf accessed 10 January 2023.

Masrur Reaz and Thankom Arun, 'Corporate Governance in Developing Economies: Perspective from the Banking Sector in Bangladesh' (2006) 7 *Journal of Banking Regulation* 94 https://link.springer.com/article/10.1057/palgrave.jbr.2340007 accessed 28 February 2022.

builders or the destroyers of any country's corporate system.⁸⁷⁵ Quality corporate systems and acceptable practices can lead to financial prudence mitigating the systemic risks.⁸⁷⁶ On the contrary, poor corporate systems and unethical systemic practices can breed financial consequences that a country's corporate system may take a very long-time to recover.⁸⁷⁷ Moreover, the same effect may be felt by the global corporate economy.⁸⁷⁸ From the year 1990 onwards, the stakeholders in the corporate sector, including =the corporate organizations, corporate system regulators,⁸⁷⁹ and researchers in the area of corporate governance, began to attend to the reforms and developments of efficient systemic practices and approaches to corporate governance.⁸⁸⁰

It is due to concerns about collapsing corporates that the international organizations became interested in matters of corporate governance,⁸⁸¹ and the trends in the world corporate structure.⁸⁸² This began a sensitization adventure encouraging corporate structures and institutions globally to incorporate accountability and responsibility in the business environment and in the processes of making corporate decisions.⁸⁸³ The argument is founded on the assurance that incorporating appropriate guidelines will aid in the fresh ideas in the

⁸⁷⁵ A Elfadli, Corporate Governance of Banks in Libya (De Gruyter Oldenbourg 2019) 27.

⁸⁷⁶ Dirk Vandewalle, 'Qadhafi's "Perestroika": Economic and Political Liberalization in Libya' (1991) 45(2) *Middle East Journal* 216, 219.

⁸⁷⁷ Rezart Dibra, 'Corporate Governance Failure: The Case of Enron and Parmalat' (2016) 12 European Scientific Journal 283, 285.

⁸⁷⁸ Leonardo Gambacorta and David Marques-Ibañez, 'The Bank Lending Channel: Lessons from the Crisis' (BIS Working Papers No 345, 2011) 7.

⁸⁷⁹ Y Baej, A Worthington and A Worthington, 'Prospects, Barriers and Impediments to Islamic Banking in Libya' in M Kabir Hassan and others (eds), *Contemporary Issues in Islamic Finance: Principles, Progress and Prospects* (Nova Science Publishers 2014) 109.

⁸⁸⁰ Christine Mallin, Giovanna Michelon and Davide Raggi, 'Monitoring Intensity and Stakeholders' Orientation: How Does Governance Affect Social and Environmental Disclosure?' (2013) 114 *Journal of Business Ethics* 29, 31.

⁸⁸¹ Fianna Jesover and Grant Kirkpatrick, 'The Revised OECD Principles of Corporate Governance and Their Relevance to Non-OECD Countries' (2005) 13 *Corporate Governance* 127, 130.

⁸⁸² Leyla Davarnejad, 'In the Shadow of Soft Law: The Handling of Corporate Social Responsibility Disputes under the OECD Guidelines for Multinational Enterprises' (2011) *Journal of Dispute Resolution* https://scholarship.law.missouri.edu/cgi/viewcontent.cgi?article=1630&context=jdr accessed 10 November 2023, 5.

⁸⁸³ D Anginer, A Demirgue-Kunt and M Zhu, 'How Does Competition Affect Bank Systemic Risk?' (2014) 23(1) *Journal of Financial Intermediation* 1, 4.

business dimensions. The value to be tapped from the integration and abiding by the guidance should be immeasurable in the long term.⁸⁸⁴

Contextually, due to the recent happenings in the Libyan crisis, corporate boards ought to provide a structured corporate blueprint and strategic plan that looks beyond the short-term performance of the corporate sector. 885 In so doing, the domestic and international corporations in Libya can mitigate the risks through anticipatory happenings that can prospectively and adversely affect the society and the corporate environment, thereby prudently ensuring that there are economic containment measures that would shield the corporations from the risk of reputational shock while also navigating through emerging and promising business gaps, hence investment opportunities. 886

Foreign investment in Libya's banking industry was enabled in due to the developments.⁸⁸⁷ Foreign merchants were granted the freedom to engage in direct commerce and compete with Libya's previously established banks and the capacity to compete and ensure that commercial⁸⁸⁸ and ethical issues such as transparency, accountability and responsibility were paramount in their operations.⁸⁸⁹ The principles included in the recommendations published by the OECD in 2004 were quite similar to the principles encapsulated in the guidelines provided by the OECD

⁸⁸⁴ Leonardo Gambacorta and Hyun Song Shin, 'Why Bank Capital Matters for Monetary Policy' (BIS Working Papers No 558, 2016) 3.

⁸⁸⁵ S Aiyar, C Calomiris and T Wieladek, 'Does Macro-Prudential Regulation Leak? Evidence from a UK Policy Experiment' (2014) 46(1) *Journal of Money, Credit and Banking* 181, 183; see also Anjan Thakor, 'Capital Requirements, Monetary Policy, and Aggregate Bank Lending: Theory and Empirical Evidence' (1996) 51 *Journal of Finance* 279, 282.

⁸⁸⁶ K Ellabbar, Capital Market and Accounting Disclosure in Emerging Economies: The Case of Libya (PhD thesis, University of Salford 2007) 94.

⁸⁸⁷ J Iqbal, S Strobl and S Vähämaa, 'Corporate Governance and the Systemic Risk of Financial Institutions' (2015) 82(1) *Journal of Economics and Business* 42, 44.

⁸⁸⁸ A Kumati, *Commercial Banking in Libya and the Potential for Islamic Banking* (PhD thesis, Durham University 2008) 103. ⁸⁸⁹ Jihad Dagher and others, 'Benefits and Costs of Bank Capital' (IMF Staff Discussion Note SDN/16/04, 2016) 9.

in 2004.⁸⁹⁰ As a result, the CBL ruled that the recommendations would apply to the Libyan banking industry.⁸⁹¹ The rules were subsequently put into action by the governor's directive No.79/2005, which instructed all banks operating in Libya to follow the criteria.

4.2.1.3 Financial Supervision in the Domestic Context

Financial supervision is mainly concerned with managing banks and other registered financial institutions and overseeing and supervising financial technology and remittance system.⁸⁹² It has been valued that the role of financial supervision in mitigating systemic risks is essential in stabilizing the banking system, the capital markets, and the general development of a country's economy.⁸⁹³ As regards the United States of America, the Federal Reserve System is mandated to supervise the financial activities of the banks in the country. The Federal Reserve System, commonly known as Fed, performs various functions regarding the regulation and supervision of the banking sector. Its functions include promoting the welfare of the banking institution, improving the stability in the commercial markets, and ensuring that the banks comply with the relevant laws and directives under its authority.

Consequently, supervision entails analysing the financial status of each bank and assessing their conformity with the laws and directives put in place.⁸⁹⁴ Following the 2008 financial crisis, which placed the financial institution and the larger global economy in significant losses, the

⁸⁹⁰ Jan Paulsson, 'May a State Invoke Its Internal Law to Repudiate Consent to International Commercial Arbitration?' (1986) 2 *Arbitration International* 90, 93.

⁸⁹¹ Luc Laeven and Ross Levine, 'Bank Governance, Regulation, and Risk-Taking' (2009) 93 *Journal of Financial Economics* 259, 261.

⁸⁹² Michael W Taylor and Alex Fleming, 'Integrated Financial Supervision: Lessons of Scandinavian Experience' (2000) 36(4) *Finance & Development* 42, 45.

⁸⁹³ A Woldie and IM Dofan, 'Bank Supervision and Surveillance: A Critical Case Study Analysis of the Bank of Commerce and Development (Libya)' (2007) *Google Scholar* 1, 3.

⁸⁹⁴ A Stela and A Abdulsalam, 'The Citizens Satisfaction Level on the Islamic Banking System of Libya' (2016) 7(6) *IOSR Journal of Economics and Finance* 12, 14.

Fed and other bank administrative branches formulated new laws and stipulations to improve the larger banking institutions' supervision, management and flexibility. The objectives of the new laws were to ensure that the banking organizations can overcome the broader variations in values that can negatively impact the institutions' capital, income and balance sheets. ⁸⁹⁵ To ensure adequacy, the regulators also analyse larger banks' capital estimations and predictions under the present and harsh circumstances. Larger banking institutions are also reviewed to ensure enough fluidity to conform with the present and stress requirements. Following the 2007-2008 global economic crisis, an international regulatory treaty called the Basel III was formed to mitigate the effects of the crisis and majorly to plan reforms meant for advancing the regulation, supervision, and controlling of risks in the financial and banking sector. It was also meant to improve the ability of banks to cope with financial strains, enhance risk control, and encourage transparency. The Basel reforms were aimed at improving the soundness and responsiveness to the risk of the systemized strategies for credit risk, credit valuation adjustment (CVA) risk, and operative risks, besides restricting the use of the internal models of the bank by initiating various model input floors in the trust risk section.

The Banking Authority of Europe issued a report that analyses the effects of the comprehensive application of the Basel III reforms to European Union banks.⁸⁹⁶ Additionally, the Core principles for efficient banking regulations, which entail the globally accepted principles for ensuring smooth wise supervision and regulation of banks was published to alleviate the

⁸⁹⁵ ZB Lawhaishy, 'English Legal and Regulatory Framework of Islamic Banking in Libya' (2018) 1(2) Al Mashalih – Journal of Islamic Law 46, 48.

⁸⁹⁶ JM Twati and JG Gammack, 'The Impact of Organisational Culture Innovation on the Adoption of IS/IT: The Case of Libya' (2006) *Journal of Enterprise Information Management* 26, 29.

impacts of systemic risks.⁸⁹⁷ The principles are globally accepted because they integrate the notion of proportionality, which accommodates a variety of banking systems and a wide range of banks. The prudential administrations use the core principles as a standard to analyse the quality of the administrative and financial frameworks and aid in advising upcoming work preferences.⁸⁹⁸

The International Monetary Fund and the World Bank also apply the core principles in evaluating the efficiency of countries' banking systems and their supervision as part of the programmes implemented to assess the financial sector. For adequate banking supervision, the core principles (CPs) outline the essential principles that expound on it. The principles include but are not limited to capital competence which entails placing some capital conditions for reviewing the undertaken risks. It will, in turn, encourage confidence in the banking system and ensure the viability of the banking system. Another principle is corrective mechanisms, which entail tools to mitigate the weaknesses that could create risks for the banking systems. The principle will provide early interventions and help supervisors reestablish the struggling banks. The principle of licensing standards gives the licensing authority the capacity to regulate licensing standards and reject applications that fail to meet

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⁸⁹⁷ M Abukhzam and A Lee, 'Factors Affecting Bank Staff Attitude Towards E-Banking Adoption in Libya' (2010) 42(1) *The Electronic Journal of Information Systems in Developing Countries* 1, 3.

⁸⁹⁸ S Elkrghli and A Yahya, 'Bankers' Views Towards Islamic Banking and Islamic Marketing: The Case of Libyan Main Wahda Bank in Benghazi City' (2018) 6(1) *Management Studies* 37, 39.

⁸⁹⁹ A Elijah and IL Ayemere, 'Audit Committee Attributes and Earnings Management: Evidence from Nigeria' (2015) 5(4) *International Journal of Business and Social Research* 14, 16.

⁹⁰⁰ MH El-Zamly and A Amin, 'Organization and Job Attractiveness to Applicants in Egypt and Its Relationship with Core Self-Evaluation' (2011) 1(4) *Review of Management* 39, 41.

⁹⁰¹ S Faraj and E El-Firjani, 'Challenges Facing IASs/IFRS Implementation by Libyan Listed Companies' (2014) 2(3) *Universal Journal of Accounting and Finance* 57, 59.

⁹⁰² YMAH Baej, A Comparison of Key Dimensions in Conventional and Islamic Banking: An International Perspective with Implications for the Bank Transformation Process in Libya (PhD thesis, Griffith University 2013) 120.

⁹⁰³ MT Fulop, 'The Role of the Audit Committee in Corporate Governance and the Influence of the Exchange Rates' (2014) 4(1) *International Journal of Academic Research in Accounting, Finance and Management Sciences* 279, 283.

the required criteria. 904 The principle will enable the authority to oversee the quality of banks that join the banking systems. 905

4.2.1.4 International Auditing and Reporting Standards and the Domestic Context

The metrics have been well-known as the International Accounting Standards (IAS). The organization that issued the standards was the International Accounting Standards Committee, abbreviated as the (IASC). During their reign from 1973 until 2000, the issued guidelines wanted to apply a method to the global standard governing accounting to bolster financial understanding across all the companies worldwide. The institution was thereafter replaced by the International Accounting Standard Board (IASB) on 1 April 2001. The new entity took charge of constructing an international standard of accounting that would govern international financial regulation that came to be named the IFRS. 907

The topic of IFRS has been on an upward trend after the European Union decided to converge how they dealt with financial reporting to conform to the IFRS,⁹⁰⁸ walking away from the United States of America's "Generally Accepted Principles of Accounting."⁹⁰⁹ Therefore, with globalization came the manifestation of IFRS, the financial reporting under the IFRS releasing consistent images, ⁹¹⁰ events at the multi-national level, and the nations that are still

⁹⁰⁴ AKS Edweib, Z Shafii and N Ahmad, 'Stock Market and Economic Growth in Libya' (2013) 2(1) *IOSR Journal of Economics and Finance* 43, 45.

⁹⁰⁵ B Frijns, O Dodd and H Cimerova, 'The Impact of Cultural Diversity in Corporate Boards on Firm Performance' (2016) 41 *Journal of Corporate Finance* 521, 524.

⁹⁰⁶ HA Al-Daragi, Choice of Capital Structure: A Study of Libyan Companies, A Comparison with UK Companies (PhD thesis, My Back Yard University 2011) 112.

⁹⁰⁷ IFRS Foundation, *The Conceptual Framework for Financial Reporting* (2010).

⁹⁰⁸ Basel Committee on Banking Supervision, A New Capital Adequacy Framework (Bank for International Settlements, June 1999)

⁹⁰⁹ I Latifah, C Asfadillah and R Sukmana, 'History and Development of IFRS and AAOIFI and Their Future Challenge' (Cambridge Business and Economics Conference, University of Cambridge, 2012).

⁹¹⁰ N Sawan and A Abdulaziz, 'Does Audit Quality in Libya Meet the International Standards Levels?' (2015) 10(6) *International Journal of Business and Management* 112.

developing.⁹¹¹ The manifestation is on the all-time high whereby over 115 nationally globally have either requested permission or permitted the use of the IFRS, including the EU, China, Australia, and South Africa.⁹¹² Even the United States of America, which was the promoted GAAP for a long time, accepted the use of IFRS within their corporate territory.

The rationale behind the encouragement by the international movement for the adoption of IFRS is because it safeguards the organization's investment interests and security because of the opportunities the model offers for verification, 913 especially in the realm of assessing the stakeholders and performance of investments. 914 The latter explains why Libya, just like other nations, has incorporated IFRS. 915 However, implementing the same has not been without challenges.

4.3 Challenges in Libya's Capital Markets

In the Libyan context, several challenges and problems have been faced by banks in attempts to improve their capital markets amid political crises affecting the country. The war between the government and the cartels has led to the decline of the Libyan economy. The cartels have taken control of most of the capital of Libya, which has been a significant worry as the

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⁹¹¹ H Daske and G Gebhardt, 'International Financial Reporting Standards and Experts' Perceptions of Disclosure Quality' (2006) 42(3–4) *Abacus* 461, 463.

⁹¹² KS Kituku and A Ahmad, 'Factors Influencing the Effectiveness of Malaysian Audit Committees in Performing Their Roles' (2016) 16 Contemporary Business Journal 1, 3.

⁹¹³ A Viterbo, 'The European Union in the Transnational Financial Regulatory Arena: The Case of the Basel Committee on Banking Supervision' (2019) 22(2) *Journal of International Economic Law* 205, 209.

⁹¹⁴ E Carson and C Dowling, 'The Production of Audit Services: Global Audit Firm Networks' Relationship Between Audit Support System Design and Audit Pricing' (Unpublished Working Paper, 2010) http://www.accg.mq.edu.au/Accg_docs/pdf/seminar_papers/2010/Carson_Dowling_22_April_10.pdf

⁹¹⁵ AH Mohammed, 'Application of IFRS for the Preparation of Financial Reports in the Oil Sector in Libya' in *Book of Proceedings* 128.

⁹¹⁶ CA Echevarría and J García-Enríquez, 'The Economic Consequences of the Libyan Spring: A Synthetic Control Analysis' (2019) 30(5) *Defence and Peace Economics* 592, 594.

cartel control paves the way for the criminal network in most businesses, ⁹¹⁷ political spheres, and even the country's leadership. ⁹¹⁸ Since the decline of the state funding to armed groups in 2015, the influential cartels have looked for other sources of revenue such as kidnapping, financial deceit and extortion. ⁹¹⁹ The regressive economic situation led to the armed militia infiltrating the financial system. ⁹²⁰ Also, the rise of militia control over the banking region with bank workers giving information on the bank's depositors to the militia further worsens the client confidence in the banking sector. ⁹²¹

Another challenge undermining capital in Libya is the diminishing rule of law in the banking sector. 922 It is much attributed to corruption cases with distortions in the markets, 923 such as the disparity between cheques and cash issued and between exchange charges resulting in opportunities for illegal transactions. 924 The different modes of corruption have been highlighted to include money laundering, money smuggling across the border, dishonest acquisition of debit cards, and misuse of pledged checks. Despite the banks being capitalized, it is only evident on paper. 925 The banks have reserved enough capital, despite the high levels of incompetent credits. 926 Analysts believe that despite the small amounts of funds in loans, the

⁹¹⁷ J Frait and Z Komárková, 'Financial Stability, Systemic Risk and Macroprudential Policy' in *Financial Stability Report* 2011 (Czech National Bank 2010) 96.

⁹¹⁸ M El-Katiri, *State-Building Challenges in a Post-Revolution Libya* (Strategic Studies Institute, US Army War College 2012) 19.

⁹¹⁹ NMMA Aimer, 'The Effects of Fluctuations of Oil Price on Economic Growth of Libya' (2016) 3(2) Energy Economics Letters 17, 20

⁹²⁰ A Khalil, AP Rathnasinghe and U Kulatunga, 'Challenges for the Implementation of Sustainable Construction Practices in Libya' (2021) 21(3) *Construction Economics and Building* 243, 247.

⁹²¹ IA Elbadawi, 'Reviving Growth in the Arab World' (2005) 53(2) Economic Development and Cultural Change 293, 295.

⁹²² RM Lastra, 'Systemic Risk, SIFIs and Financial Stability' (2011) 6(2) Capital Markets Law Journal 197, 200.

⁹²³ G Aras and others, 'Corporate Sustainability Measurement Based on Entropy Weight and TOPSIS: A Turkish Banking Case Study' (2017) 25(3) *Meditari Accountancy Research* 391, 394.

⁹²⁴ R Chami and others, *Libya Beyond the Revolution: Challenges and Opportunities* (International Monetary Fund, Middle East and Central Asia Department 2012) 33.

⁹²⁵ W Otman and E Karlberg, *The Libyan Economy: Economic Diversification and International Repositioning* (Springer 2007) 55.

⁹²⁶ M Zakari and K Menacere, 'The Challenges of the Quality of Audit Evidence in Libya' (2012) 1(1) African Journal of Accounting, Auditing and Finance 3, 5.

banks are underfunded and probably mostly indebted, including the state-owned bank, given that the rates on loan losses were high. Capital in Libya has also faced a significant challenge after the closure of the stock markets due to political instability. The main reason for its closure was to keep off political anarchy.

The importance of capital in allowing market participants to achieve their goals and satisfy their financial obligations cannot be overstated. Pro regulated financial players to satisfy their financial commitments, capital regulation must be included to reduce systemic risk for the protection of regulated financial players in the financial markets. In contrast, there is a significant difference between financial organizations specializing in mortgage security and those offering specialty mortgages. The disparity emerges when the role of intermediaries in the non-banking sector grows in prominence, particularly in risk-sharing markets. Participants and securities trading, markets and associated rules and markets are present in any financial system that has experienced a paradigm technical breakthrough.

To begin, market securities are referred to as investment items.⁹³² Every financial market transaction generates securities, and the resulting securities comprise a class of assets in the world of financial value.⁹³³ The assets are an asset to the person who owns them and a liability

⁹²⁷ Christian Koziol and Jan Vogt, 'Timing Ability of Corporate and Financial Issuers: Evidence from the German Market' (2016) 5 *Journal of Contemporary Management* 12.

⁹²⁸ Markose SM and others, 'Too Interconnected to Fail: Financial Contagion and Systemic Risk in Network Model of CDS and Other Credit Enhancement Obligations of US Banks' (2012) 83(3) *Journal of Economic Behavior & Organization* 627. ⁹²⁹ Che-Chun Lin and Lan-Chih Ho, 'Valuing Individual Mortgage Servicing Contracts: A Comparison between Adjustable Rate Mortgages and Fixed Rate Mortgages' (2005) 8 *Review of Pacific Basin Financial Markets and Policies* 131, 134.

⁹³⁰ Paul Kupiec and David Nickerson, 'Assessing Systemic Risk Exposure from Banks and GSEs under Alternative Approaches to Capital Regulation' (2004) 28 *Journal of Real Estate Finance and Economics* 123.

⁹³¹ N Kleist, 'Disrupted Migration Projects: The Moral Economy of Involuntary Return to Ghana from Libya' (2017) 87(2) *Africa* 322, 325.

⁹³² L Pradella and S Taghdisi Rad, 'Libya and Europe: Imperialism, Crisis and Migration' (2017) 38(11) *Third World Quarterly* 2411, 2414.

⁹³³ M Zeevaert, The (Un)Intended Effects of the United Nations on the Libyan Civil War Oil Economy (unpublished manuscript, 2018) 17.

to the person who issues them (hereinafter the issuer). Securities categorization may be done in a variety of ways. The many categorizations include, for example, who the issuer is, the denominational currency, the proprietorship, the maturity period, and income payments. ⁹³⁴ To cut a long tale short, capital markets are concerned with securities having a maturity of more than a year. Bonds that are more than a year old and have yet to maturity, as well as shares, are ideal examples of capital. Stock markets are classified as well-developed or under-developed, and the status of their capitalization is valued accordingly. ⁹³⁵

Libya has a stock market, much like any other economy. Due to its underdevelopment and undercapitalization, Libya falls short of the financial market criteria in both measures. A Resolution No.134 issued in June 2006 permitted the development of Libyan stock markets (LSM), which were eventually launched the following year. The stock exchange collaborated with the Cairo and Amman capital markets exchanges to establish regulations, regulatory frameworks and operational processes. P37 Following that, the LSM would develop an automated trading system called "Automated Trading System," based on an existing model in Egypt, as a supplement to the "Central Clearing Depository System," launched the same year. On the other hand, the promising capital market could not withstand the crisis that engulfed Libya, reversing previous advances and sinking it.

⁹³⁴ Derek Blades, 'A Short-Cut Method of Estimating Capital Stocks: When Can It Be Used and How Well Does It Work?' (2015) 61 Review of Income and Wealth 373, 375.

⁹³⁵ LCMA, 'About Us' (Lcma.gov.ly, 2013) https://lcma.gov.ly/en/about/ accessed 27 February 2022.

⁹³⁶ Ibid; Policies, Practices, and Representations Regarding Sub-Saharan Migrants in Libya: From the Partnership with Italy to the Post-Qadhafi Era in EurAfrican Borders and Migration Management (Palgrave Macmillan 2012) 129.

⁹³⁴ K Ellabbar and T Havard, 'The Effects of Absence of Capital Market on Libyan Privatisation Programmes' https://www.irbnet.de/daten/iconda/CIB14692.pdf accessed 27 February 2022.

⁹³⁸ RB St John, 'Libya: Reforming the Economy, Not the Polity' in Yahia H Zoubir and Haizam Amirah-Fernández (eds), North Africa: Politics, Region, and the Limits of Transformation (Routledge 2008) 77.

Furthermore, the Libyan capital markets' listings are mainly constituted of enterprises that have been privatized. The primary motivation for creating the LSM was to ease the privatization process of state-owned firms. As a strategy of preserving a perpetually pure state-owned economy, the businesses included controlling ownership of the largest banking institutions. In contrast to the early phases of the stock markets, banks, insurance firms and other financial organizations led the charts of the listings playing indirectly within the more prominent real sector spectrum. The state formerly owned the remaining enterprises. They had undergone streamlining and repackaging as part of the privatization process, while the Economic Social Development Fund Took up the supervisor's job. The rising trends in the financial markets predicted that corporations specialized in telecom services would likewise migrate into privately-held enterprises.

Another relevant issue is the enhanced but still ineffective Libya Stock Exchange monitoring. 943
The entire stock exchange system was instituted under the People's Committee for Economics,
Trade and Investment within the Ministry of the Economy. At the same time, CBL retained the
oversight role under the terms stipulated under the AML, ensuring the liquidity of the exchanges
and other arising concerns relating to systemic finance. 944 Under Law No. 11 of 2010, an
independent and distinct agency was founded although remained under the Economy Ministry's
arm, specifically to manage the regulation of the Libyan Stock Markets alongside LSM's

⁹³⁹ HA Troug and M Murray, 'The Asymmetric Effects of Fluctuations in Oil Prices on the Performance of the Libyan Economy: A VAR Approach' (2020) 10(5) *International Journal of Economics and Financial Issues* 282, 286.

⁹⁴⁰ KM Alrafadi, BH Kamaruddin and M Yusuf, 'Efficiency and Determinants in Libyan Banking' (2014) 5(5) *International Journal of Business and Social Science* 180.

⁹⁴¹ AA Alkizza and SAEED Akbar, *The Impact of Business Environment on Management Accounting Practices: Libyan Evidence* (PhD thesis, University of Liverpool 2006) 77.

⁹⁴² M El-Katiri, *State-Building Challenges in a Post-Revolution Libya* (Strategic Studies Institute, US Army War College 2012) 41.

⁹⁴³ A Ben-Naser, K Bhattarai and MM Elheddad, 'Estimating Equilibrium Real Exchange Rate and Misalignment in an Oil Exporting Country: Libya's Experience' (2018) 52(4) *Journal of Developing Areas* 249, 253.

⁹⁴⁴ PD Karam, Exchange Rate Policies in Arab Countries: Assessment and Recommendations (Arab Monetary Fund 2001) 47

operations such as performing transactions, listing and settlements.⁹⁴⁵ The legislation also lays the groundwork for developing investment vehicles and securities for international commerce. 946 Furthermore, clarification of the tax system about investments and securities is still core.947

4.3.1 Models of Capital

The Libyan financial market system is governed by norms and specific rules. All financial institutions relevant to the regulatory framework are supposed to adhere to the common goal of any activity or field encompassing organizational resource resources in that the operations' completions yield returns. Equally, banks and other financial auxiliary service providers are essential to the Libyan and global capital markets. 948 Moreover, the norms and rules culminate in crafting the models that seek to mitigate risks affiliated with capital liquidation. Therefore, the chapter seeks to illuminate more light on the models used to mitigate the risk in the financial markets of Libya.

4.3.1.1 Measurement of the Liquidity Risk Model's - Systemic Adjustment

The model is a mix of price choice and market information. The latter is placed into a balance sheet to measure the chance of entities' multiplicity experiencing a liquidity event. 949 The indicator is linked to a firm's maturity and asset versus the liability mismatch, total risk profile,

⁹⁴⁵ Law No 11 of 2010 on the Libyan Stock Market (Libya).

⁹⁴⁷ A Ben-Naser, K Bhattarai and MM Elheddad, 'Estimating Equilibrium Real Exchange Rate and Misalignment in an Oil Exporting Country: Libya's Experience' (2018) 52(4) Journal of Developing Areas 249, 256.

⁹⁴⁸ Elena Anton, 'Actual Banking Risk Approaches, Their Regulation, Policies, and Practices on Banking Risk Management' Annals **Economics** Administration of http://www.annals.seap.usv.ro/index.php/annals/article/viewArticle/1176 accessed 27 February 2024.

⁹⁴⁹ Basel Committee on Banking Supervision, 'Basel III: The Liquidity Coverage Ratio and Liquidity Risk Monitoring Tools' (Bank for International Settlements 2013) 7.

and financing stability concerning typical companies whose subjectivity is to a common language under market conditions. The model's novelty comes in its ability to quantify an institution's time savings and predicted contribution-led losses due to systemwide liquidity shortages. The second rationale relates to contingent price buttressing during times of stress within a macroprudential blueprint that provides incentives for liquidity managers in the internalization of externalities deemed damaging from the perspective of systemic risk with direct consequences on individual funding decisions. The model may also be used to assess stress for a particular institution or for financing in general, with shocks aimed at predicted generations about a liquidated system risk (and associated costs), with all possibilities being negative.

The Systemic Risk-Adjusted Index (SRAI) gauges how well the financial system is performing. In times of stress, a liquidity model produces a risk-adjusted, market price—based estimate of the number of firms suffering a liquidity event. Application of the technique leverages established regulatory liquidity risk requirements (e.g., the net stable funding ratio or NSFR) to analyse the effect of maturity mismatches when prudential data is unavailable, but market information is accessible. 955

⁹⁵⁰ V Acharya and O Merrouche, 'Precautionary Hoarding of Liquidity and Interbank Markets: Evidence from the Subprime Crisis' (2013) 16(1) Review of Finance 107, 112.

⁹⁵¹ T Adrian and HS Shin, 'Liquidity and Leverage' (2010) 19(3) Journal of Financial Intermediation 418, 425.

⁹⁵² X Freixas, BM Parigi and J-C Rochet, 'Systemic Risk, Interbank Relations, and Liquidity Provision by the Central Bank' (2000) 32(2) Journal of Money, Credit and Banking 611, 618.

⁹⁵³ M Brunnermeier and LH Pedersen, 'Market Liquidity and Funding Liquidity' (2009) 22(6) Review of Financial Studies 2201, 2215.

⁹⁵⁴ AA Jobst, 'Measuring Systemic Risk-Adjusted Liquidity (SRL) – A Model Approach' (2014) 71 Journal of Banking & Finance 189, 192.

⁹⁵⁵ Andreas A Jobst, 'Measuring Systemic Risk-Adjusted Liquidity (SRL) – a Model Approach' (2012) *SSRN Electronic Journal* https://ssrn.com/abstract=2154937 accessed 27 February 2024; Basel Committee on Banking Supervision, 'Basel III: The Net Stable Funding Ratio' (Bank for International Settlements 2014) 6.

The approach's nature Models are necessary for option pricing and multivariate parametric/nonparametric calculations. ⁹⁵⁶ Accounting data on all NSFR's primary balance sheet components; market data on the value of stocks and stock options; market rates (short-term sovereign rates with maturities ranging from 3 to 12 months), long-term sovereign rates with maturities ranging from 3 to 10 years, total equity market returns (domestic and other equity markets), financial bond rates (investment grade, both medium and long-term), local currency London interbank offered rate (maturities ranging from 3 to 12 months), and short-term domestic currency overnight indexed swap. ⁹⁵⁷

The model combines a prudential measure of liquidity risk with an advanced version of contingent claims analysis as inputs to a multivariate specification of joint liquidity risk.⁹⁵⁸ The approach can be used to: (1) quantify an individual institution's time-varying contribution to systemwide liquidity shortfalls; and (2) price contingent liquidity support during times of stress.⁹⁵⁹ However, there are assumptions to be made regarding the prudential measure of liquidity risk and the specification of the option pricing model; the influence of solvency risk on liquidity risk is not explicitly addressed, and the approach is sophisticated and resources consuming."⁹⁶⁰

⁹⁵⁶ AA Jobst, 'Measuring Systemic Risk-Adjusted Liquidity (SRL) – A Model Approach' (2014) 71 Journal of Banking & Finance 189, 195.

⁹⁵⁷ Li L Ong and Christoph Pazarbasioglu (eds), *A Guide to IMF Stress Testing: Methods and Models* (International Monetary Fund 2014) 287; V Acharya, D Gale and T Yorulmazer, 'Rollover Risk and Market Freezes' (2011) 66(4) Journal of Finance 1177, 1183.

⁹⁵⁸ AA Jobst, 'Measuring Systemic Risk-Adjusted Liquidity (SRL) – A Model Approach' (2014) 71 Journal of Banking & Finance 189, 198.

⁹⁵⁹ C Brownlees and R Engle, 'SRISK: A Conditional Capital Shortfall Measure of Systemic Risk' (2017) 30(1) Review of Financial Studies 48, 52.

⁹⁶⁰ T Adrian and MK Brunnermeier, 'CoVaR' (2016) 106(7) American Economic Review 1705, 1712.

4.3.1.2 Legal and Institutional Framework for Libya's Capital Markets

In 2006, the Libyan capital market was launched following General People's Committee Resolution No. 134.961 In recent years, the capital market has formulated several donative and supportive operations, mainly for the Islamic Bank of Libya.962 Additionally, several market regulations were formulated to increase capital on trade and investments.963 The executive management of the capital market law Number 10 of 2010 was amended to issue internal supervision of the expenditure funds. Administrative regulation for expenditure funds for Law Number 34 was amended to account for banks and include a provision on Islamic banking.964

Libya also amended several other domestic regulations in the capital market, intending to keep up with the emerging trends in the capital market. In addition to the enacted law, the market has been performing functions that include transferring ownership, dispensing profits, granting account statements and partners' records, administering inheritances, and formulating several workshops associated with economic markets, Islamic connection, and expenditure funds. Despite the institutional ownership of the Libyan capital market being intensified in financial establishments such as the development fund and the commercial banks of Libya, the Market

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⁹⁶¹ WA Otman and E Karlberg, 'The Libyan Legal System and Key Recent Legislation' in *The Libyan Economy* (Springer, Berlin 2007) 63.

⁹⁶² AA Alhaj and AM Awn, 'Financial Instruments and Their Impact on the Growth of Investment – A Study on the Libyan Market' (2020) 4(3) *European Journal of Economic and Financial Research* 17.

⁹⁶³ AH Mohammed, 'Application of IFRS for the Preparation of Financial Reports in the Oil Sector in Libya' in *Book of Proceedings* 128.

⁹⁶⁴ Muhammad Shahbaz, Muhammad-Ali Nasir and Amine Lahiani, 'Role of Financial Development in Economic Growth in the Light of Asymmetric Effects and Financial Efficiency' (2020) *International Journal of Finance and Economics* 1.

⁹⁶⁵ K Ellabbar, Capital Market and Accounting Disclosure in Emerging Economies: The Case of Libya (PhD thesis, University of Salford 2007) 101.

⁹⁶⁶ AMA Awn and SF Azam, 'The Role of Awareness and Shari'ah Compliance as Moderator on the Intention to Invest in Islamic Sukuk – A Study of Libyan Investors: Theory of Reasoned Action Approach' (2020) *European Journal of Economic and Financial Research* 134, 138.

⁹⁶⁷ N Masoud, 'Does Islamic Banking Contribute to Sharia Law: Critical Issues on Libyan Banking and Financial Markets' (2014) SSRN Working Paper No 2426291 https://ssrn.com/abstract=2426291 accessed 27 February 2022.

⁹⁶⁸ FM Buferna, K Bangassa and L Hodgkinson, 'Determinants of Capital Structure: Evidence from Libya' (2005) University of Liverpool Research Paper 8.

General Assembly has no role in the capital market despite being a vital mechanism of analysing the financial capabilities and investigating its ability to strive forward considering the suspension of the primary enterprise in the capital market.⁹⁶⁹ Also, the Assembly's regular revenues declined, which negatively impacted its economic structure and its potential to be sustainable.⁹⁷⁰

Even though legal frameworks were put in place, the capital market declined and stopped operations in 2014. The main reason for the decline, according to various analysts, is the loss of the potential to control the market value of the registered securities and the unwillingness of individuals to finance the financial institutions. Business commentators thought that the suspension of the activities of the capital market had alarming consequences on the investment environment in Libya, and it discouraged the ambitions and desires of its citizens to improve the role of the market in delivering to all parties in the capital market.

Besides the challenges mentioned above, other causes of market closure include negligence in providing disclosures, absence of transparency, the companies' disregard for the stipulated rules of governance given by the market. Also, opportunities have increased for corruption in the economic and governing sector of the registered companies. Libya also lacks an indicator of a

⁹⁶⁹ AA Alhaj and AM Awn, 'Financial Instruments and Their Impact on the Growth of Investment – A Study on the Libyan Market' (2020) 4(3) *European Journal of Economic and Financial Research* 213, 218.

⁹⁷⁰ ES Rosengren, 'Bank Capital: Lessons from the US Financial Crisis' (Speech delivered at the BIS Forum on Key Regulatory and Supervisory Issues in a Basel III World, Seoul, February 2013).

⁹⁷¹ KM Alrafadi, BH Kamaruddin and M Yusuf, 'Efficiency and Determinants in Libyan Banking' (2014) 5(5) *International Journal of Business and Social Science* 112.

⁹⁷² S Faraj and E El-Firjani, 'Challenges Facing IASs/IFRS Implementation by Libyan Listed Companies' (2014) 2(3) *Universal Journal of Accounting and Finance* 57, 60.

⁹⁷³ AM Awn and SF Azam, 'Libyan Investors' Intention to Invest in Islamic Sukuk: Theory of Planned Behaviour Approach' (2020) *European Journal of Economic and Financial Research* 234, 237.

developed economy, suggests insufficient opportunities to underwrite the private sector, and shows no indication of communication between shareholders and the companies.

Further, political instability has been appreciated as one of the leading causes of market closure and has influenced other problems faced by Libya's capital markets. Political instability has resulted in financial insecurity in the exchange rate. The unstable exchange rates have affected many investors unwillingly to invest in unstable capital, with the unavailability of cash fluidity. Investors opine that the administrative body of the market should implement relevant decisions within the framework to mitigate the problems justified.

With implementing laws governing the capital market, there was a separation of functions between supervision and regulation of trade in the market, with the law coming regarding regulatory conditions specified as capital markets.⁹⁷⁷ It resulted in forming a board of directors of the establishment and allocating funds to the body in the national budget.⁹⁷⁸ The approach comes to mitigate the need to reinvent the capital market authority and provide for a comprehensible period to trigger its function incompetent licensing and play a role in the restoration of capital market to function and collaborate with relevant bodies in the government,

⁹⁷⁴ A Mesnard, 'Temporary Migration and Capital Market Imperfections' (2004) 56(2) Oxford Economic Papers 242, 244.

⁹⁷⁵ G Abuselidze, 'Use of Hedging Instruments on the Example of the Grain Market' in 20th International Scientific Conference Engineering for Rural Development Proceedings (2021) 1655.

⁹⁷⁶ A Aljbiri, 'The Performance of Libyan Stock Market' (2013) 60(7) Acta Universitatis Agriculturae et Silviculturae Mendelianae Brunensis 27, 31.

⁹⁷⁷ Marc Quintyn and Michael W Taylor, *Strengths and Weaknesses in Securities Market Regulation* (IMF Working Paper WP/07/259, International Monetary Fund 2007) https://www.imf.org/external/pubs/ft/wp/2007/wp07259.pdf accessed 19 August 2024.

⁹⁷⁸ N Masoud, 'The Development of Accounting Regulation in the Libyan Region Countries in Africa' (2016) 7(12) *Research Journal of Finance and Accounting* 45.

the registered companies, and the Central Bank of Libya in coming up with a conducive surrounding for investment in Libya.⁹⁷⁹

The formation of the Libyan Stock Exchange in 2007 paved the way for Libya to contract with the international community. Its main objective on formation was the necessity for privatization and enterprise while encouraging the growth of capital markets. The stock exchange was meant to promote savings and create awareness on investments using approaches that can lead the savings to the financial branch for a likely more significant profit on their investments. It also helps in improving both economic and social growth through individual savings by utilizing activities that disseminate dealings and investment agreements. 980

The government also plays a vital role in restructuring and reinstating the capital market in most financial institutions. ⁹⁸¹ It can achieve this in the government's perspective to push the private sector and promote investments and personal and collaborative advantage. ⁹⁸² The government has also initiated bonds and Sukuk to fund the mitigating and investment projects through approaches to the capital market that encourages investments and promotes transparency. ⁹⁸³ Thus, the government is encouraged to embrace proposals that reintegrate the capital market circle, which all citizens ought to devote to executing a particular time frame.

⁹⁷⁹ N Masoud, 'What the Libyan Economy Can Learn from Emerging Countries' (Paper, University of Huddersfield Annual Learning and Teaching Conference, April 2010).

⁹⁸⁰ See L Gambacorta and HS Shin, 'Why Bank Capital Matters for Monetary Policy' (2016) BIS Working Papers No 558.
⁹⁸¹ A Slobodianyk and others, 'Stock Trading Indices: A Mechanism for Attracting Speculative Capital' in XIV International Scientific Conference INTERAGROMASH 2021 (Springer, Cham 2022) 897.

⁹⁸² RMH Farj, MB Jais and AHBM Isa, 'Importance of Accounting Information to Investors in the Stock Market: A Case Study of Libya' (2016) 7(1) *IOSR Journal of Economics and Finance* 70, 73.

⁹⁸³ Ibnu Qizam, 'Developing Financial Disclosure Quality in Sukuk and Bond Market: Evidence from Indonesia, Malaysia, and Australia' (2019) 63 *Journal of International Financial Markets, Institutions and Money* 74.

In comparison to Libya, the United Kingdom has also enacted legal frameworks relating to its capital market to mitigate the country's financial crisis of 2008. Amid the crisis, 984 the Prudential Regulation Authority was established under the supervisory authority of the Bank of England with the responsibility to efficiently regulate and manage the 1500 banks, leading economic establishments, 985 and other financial institutions. 986 Financial institutions and banks not subjected to the oversight of the Prudential Regulation Authority are governed by the Financial Conduct Authority. 987 The function of the Authority includes controlling and safeguarding the performance of financial institutions and firms that conduct regulated activities in the economic sector in the United Kingdom. 988

Even with the enactment of the Capital Market Law and its administrative by-laws, the Authority for its implementation has failed to restore the capital market. ⁹⁸⁹ Thus, emphasis has been provided on the necessity of the Authority to implement its objectives and formulate a scheme. ⁹⁹⁰ The Authority has been tasked with safeguarding the shareholders and investors in the financial markets from risks not relating to finance and guaranteeing that capital market transactions will be fair, efficient and transparent. ⁹⁹¹ They are also obliged to minimize the

⁹⁸⁴ Kenneth J Gordon, 'Risk-Based Capital Requirements: The Proper Approach to Safe and Sound Banking' (1991) 10 *Annual Review of Banking Law* 491.

⁹⁸⁵ M Maitah, K Zedan and B Shibani, 'Factors Affecting the Usage Level of Financial Analysis by Credit Officers in the Credit Decision in Libyan Commercial Banks' (2012) 3(10) *International Journal of Business and Social Science* 78, 80.

⁹⁸⁶ AMA Amhalhal, A Contingency-Based Investigation of the Effectiveness of the Use of Multiple Performance Measures in a Libyan Context (PhD thesis, University of Huddersfield 2013).

⁹⁸⁷ N Masoud, 'What the Libyan Economy Can Learn from Emerging Countries' (Paper, University of Huddersfield Annual Learning and Teaching Conference, April 2010).

⁹⁸⁸ A Joyce, 'Libyan Arab Foreign Bank v Bankers Trust: Common Law Meets Its Limits' (1988) 29 *Harvard International Law Journal* 451.

⁹⁸⁹ L Gambacorta and D Marques-Ibañez, 'The Bank Lending Channel: Lessons from the Crisis' (2011) BIS Working Papers No 345.

⁹⁹⁰ CM Buch and E Prieto, 'Do Better Capitalized Banks Lend Less? Long-Run Panel Evidence from Germany' (2012) University of Tübingen Working Papers in Economics and Finance No 37.

⁹⁹¹ Edite Ligere, 'Identifying Systemic Risk – A Risky Business' (2016) 133 Banking Law Journal 364.

likelihood of problems from financial transactions.⁹⁹² To promote the capital market, the Authority is mandated to investigate, conduct analysis and come up with relevant recommendations regarding laws to favour the objectives of the Authority. It is also mandated to collect data and information on economic markets, product markets, Sukuk, and other bodies managed and supervised by the Capital Market Authority and report their findings.

The framework for regulating banking is essential in ensuring a stable and efficient economic sector, which improves the general capital market and infrastructure. With the rise of Islamic Banking services in Libya, efficient frameworks to manage and protect the rights of all markets participants and assure the advancement of Islamic Banking have been formulated. The banking laws have provided the regulatory frameworks, regulatory authorities, dispute settlement and Sharia supremacy. Since Libya lacks an independent and specific law governing Islamic finance regarding the established banks, there is the need to establish comprehensive frameworks to mitigate the gap to enhance the advancement of economic investments in Islamic finance.

4.3 Role of the Central Bank of Libya

The Central Bank of Libya (CBL) has the authority to regulate the banking sector in the country. Law No. 1 of 2005 concerning banks is the primary law governing and managing banks in Libya. 996 The law permits the Central Bank of Libya to impact the activities of the banks even

⁹⁹² S Bhattacharya and D Gale, 'Preference Shocks, Liquidity and Central Bank Policy' in W Barnett and K Singleton (eds), *New Approaches to Monetary Economics* (Cambridge University Press 1987) 69.

⁹⁹³ MK Brunnermeier and M Oehmke, 'The Maturity Rat Race' (2013) 68 *Journal of Finance* 483.

⁹⁹⁴ NM Masoud, *Libya's Economic Reform Programme and the Case for a Stock Market* (PhD thesis, University of Huddersfield 2009).

⁹⁹⁵ N Masoud, 'The Determinants of Capital Structure Choice: Evidence from Libyan Firms' (2014) 5(1) Research Journal of Finance and Accounting 67.

⁹⁹⁶ S Benoit and others, 'Where the Risks Lie: A Survey on Systemic Risk' (2016) Review of Finance 1.

in deciding the interest rates. However, the CBL is much concerned about formulating decisions that concern the interest rate, the amount to be lent to investors, and the sector in which the commercial banks ought to lend their money to, together with the lending interest rate.⁹⁹⁷

The CBL is also mandated to oversee and control the commercial banks by ensuring that they keep up with their ratios in the prescribed requirements specified in the CBL. 998 The conditions include legal fluidity and cash reserve together with the provided mandate of the CBL. 999 The banking law recognizes the Central Bank of Libya as an independent establishment with the legal character and impartial financial disclosure. 1000 It also recognises CBL as the central bank of Libya with the responsibility to issue currencies, exercise capital policies, and guarantee financial stability. 1001 The CBL also governs and oversees the mode of monetary exchange by controlling the reserves of the banking sector and the standard and amount of credit.

Under the banking law, Commercial Banks are defined as "Any company that ordinarily accepts deposits in current demand accounts or time deposits, grants loans and credit facilities, and engages in other such banking activities according to the provisions of paragraph (II) of this article."¹⁰⁰²

The CBL allows investment banks to invest in the country under the Act. It allows the establishment of commercial banks, specialized banks, financial banks and investment banks,

⁹⁹⁷ AA Sharif, Examining the Adoption of Sukuk al-Ijarah for Economic Development in Libya (Master's thesis, International Islamic University Malaysia 2018).

⁹⁹⁸ S Benoit and others, 'Where the Risks Lie: A Survey on Systemic Risk' (2016) Review of Finance 1.

⁹⁹⁹ EERA Hosen, A Review of the Libyan Insolvency and Restructuring Laws Informed by Insolvency Law Theory and International Benchmarks (PhD thesis, Nottingham Trent University 2020).

¹⁰⁰⁰ Sec Banking Law No 1 of 2005 (Libya), as amended by Law No 46 of 2012, s 1.

¹⁰⁰¹ SP Bindra and IM Ezziany, 'Towards Enhancing the National Competitiveness of the Libyan Economy with Special Reference to Role of Yoga' (2016) 2(1) *International Journal of Health and Economic Development* 1.

¹⁰⁰² Banking Law No 1 of 2005 (Libya), as amended by Law No 46 of 2012, s 65(1).

and provide the rules meant to control those banks. 1003 The CBL is also empowered to allow other businesses to implement other banking operations which have no connection with commercial banks, specialized banks, financial banks and investment banks. As per article 16 of the law No. 1 of 2005, the board of directors of the CBL is mandated to "authorise the establishment of banks of all types (commercial and specialized banks, finance and investment banks, Islamic banks, etc.), exchange companies and offices, financial leasing companies, and investment funds; develop controls that regulate the exercise of their activities; and provide samples of their articles of association and statutes."

4.4 Shariah Principles, Islamic Banking and Non-Interest Banking

Libya has incorporated the Shariah principles in its legal framework to bolster its capital markets and banking services. ¹⁰⁰⁴ Following the 1969 revolution, many legislations were amended, ¹⁰⁰⁵ with others being made to conform with the Shariah principles, ¹⁰⁰⁶ which were then officially affected by the law. ¹⁰⁰⁷ The legislative committees worked intending to eliminate interests during commercial transactions. ¹⁰⁰⁸ The elimination was not successful as legislators

¹⁰⁰³ Ibid s 16(9).

¹⁰⁰⁴ WA Otman and E Karlberg, 'The Libyan Legal System and Key Recent Legislation' in *The Libyan Economy* (Springer, Berlin 2007) 63.

¹⁰⁰⁵ I Bardhan, S Lin and S Wu, 'The Quality of Internal Control over Financial Reporting in Family Firms' (2015) 29(1) *Accounting Horizons* 41.

¹⁰⁰⁶ M Ariff and SA Rosly, 'Islamic Banking in Malaysia: Unchartered Waters' (2011) 6(2) *Asian Economic Policy Review* 301.

¹⁰⁰⁷ A Bhattacherjee, *Social Science Research: Principles, Methods, and Practices* (Createspace Independent Publishing Platform 2012).

¹⁰⁰⁸ JL Bierstaker and others, 'Audit Committee Compensation, Fairness, and the Resolution of Accounting Disagreements' (2012) 31(2) *Auditing: A Journal of Practice & Theory* 131.

enacted other laws that managed the activities of commercial banks.¹⁰⁰⁹ Thus, no specific law was provided for the Islamic banks then until the enactment of the Law No. 46 of 2012.¹⁰¹⁰

4.4.1 Shariah Principles in Libyan Law

In Libya, it is required that all banks that deliver Islamic banking services ought to follow Sharia principles, ¹⁰¹¹ and must be subject to the Shariah Supervisory Authority (SSA). The SSA is mandated to ensure that Islamic banking products and activities follow the Shariah conditions. Also, the CBL is required to implement and enforce the decisions of the Sharia Supervisory Authority. ¹⁰¹² The SSA is also mandated to explore the help of professionals in the economic sector, business administration, and legal help to help SSA implement its duties. ¹⁰¹³

The Banking Law of 2005 provides that the composition of the SSA is to include several learned scholars equipped with knowledge on both the law and Sharia principles. ¹⁰¹⁴ It states that the primary aim of the SSA is to include providing oversight over the activities and contracts of the banks to ensure that they perform their duties under the Sharia requirements. ¹⁰¹⁵ The Act also requires that every Islamic bank that performs internal audit, ¹⁰¹⁶ auditing, and

¹⁰⁰⁹ E Shuaieb, Factors Affecting the Adoption of Internet Banking in Libya (Master's thesis, Eastern Mediterranean University,

North Cyprus 2013).

1010 A Elgharbawy and others, 'Does Compliance with Corporate Governance Code Hinder Corporate Entrepreneurship? Evidence from the UK' (2016) 16(4) *Corporate Governance* 765.

¹⁰¹¹ AM Abdulsaleh, 'The Introduction of Islamic Finance in Libya: Capturing the Opportunities for SMEs Development' (2017) 5(1) *Journal of Emerging Economies and Islamic Research* 39.

¹⁰¹² A Woldie and IM Dofan, 'Bank Supervision and Surveillance: A Critical Case Study Analysis of the Bank of Commerce and Development (Libya)' (2007) Google Scholar.

¹⁰¹³ M Mutize, E Tefera and M Nkhalamba, 'The Development of Financial Markets in Africa: Trends, Challenges and Prospects' (2020) 12(1J) *Journal of Economics and Behavioral Studies* 46.

¹⁰¹⁴ J Bédard and T Compernolle, 'The External Auditor and the Audit Committee' in David Hay, WR Knechel and M Willekens (eds), *Routledge Companion to Auditing* (Routledge 2014) https://ssrn.com/abstract=2423389 accessed 27 February 2024.

¹⁰¹⁵ Banking Law No 1 of 2005, as amended by Law No 46 of 2012, art 1(2).

¹⁰¹⁶ Y Baej, A Worthington and A Worthington, 'Prospects, Barriers and Impediments to Islamic Banking in Libya' in M Kabir Hassan and others (eds), *Contemporary Issues in Islamic Finance: Principles, Progress and Prospects* (Nova Science Publishers, New York 2014) 109–112.

conforming with accounts must have SSA, ¹⁰¹⁷ which comprises at least three individuals who know both the law and Shariah. ¹⁰¹⁸

The duties of SSA are spelled out in the Act to include overseeing and managing the activities of Islamic banks and ensuring that they conform with the Shari'ah doctrines. ¹⁰¹⁹ It is also mandated to advise Islamic banks on contracts essential in facilitating the bank's activities. ¹⁰²⁰ It is empowered to perform any other function prescribed by the Central Bank of Libya or specified by the Islamic Banks. ¹⁰²¹ Lastly, the SSA can be consulted by the Central Bank of Libya to give guidance on matters related to the activities of Islamic Banks. ¹⁰²²

4.4.2 Islamic Banking

The legal framework of Islamic Banking is provided for in the law No. 46 of 2012, which is an amendment of the Banking Law No. 1 of 2005. The amended Act expounds and explains on the meaning of Islamic banking. It provides that Islamic banks must exercise the banking operations allowed following the law. Besides the law, Islamic Banking must be free from transacting all kinds of interests and must adhere to the *Sharia* doctrines in its activities, whether in receiving deposits, investments, or any other Banking activities. The Act in *Article 2 (2)* also provides for various conditions for the operations of Islamic Banks in Libya. The CBL

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¹⁰¹⁷ Y Barghathi, D Collison and L Crawford, 'Earnings Management in Libyan Commercial Banks: Perceptions of Stakeholders' (2017) 13(2) *International Journal of Accounting, Auditing and Performance Evaluation* 123, 128.

¹⁰¹⁸ Banking Law No 1 of 2005, as amended by Law No 46 of 2012, art 6.

¹⁰¹⁹ S Ahmed and others, 'The Impact of Islamic Shariah Compliance on Customer Satisfaction in Islamic Banking Services: Mediating Role of Service Quality' (2021) *Journal of Islamic Marketing* 53, 59.

¹⁰²⁰ H Ullah, 'Shari'ah Compliance in Islamic Banking: An Empirical Study on Selected Islamic Banks in Bangladesh' (2014) *International Journal of Islamic and Middle Eastern Finance and Management* 234.

¹⁰²¹ YMAH Baej, A Comparison of Key Dimensions in Conventional and Islamic Banking: An International Perspective with Implications for the Bank Transformation Process in Libya (PhD thesis, Griffith University 2013) 98–101. ¹⁰²² Ibid 150–154.

¹⁰²³ AH Gait and AC Worthington, 'Attitudes of Libyan Banks Towards Islamic Methods of Finance' (2018) 11(2–3) *Current Politics and Economics of Africa* 185, 190.

¹⁰²⁴ Banking Law No 1 of 2005, as amended by Law No 46 of 2012, art 1(1).

states that the Islamic banks must meet some requirements to operate. The requirements include but are not limited to providing banking services economical and investment operations which are free from any interests. ¹⁰²⁵ It is also required to allure the savings and inactive wealth and introduce it to investment partnership using means that do not contravene the *Sharia* laws.

The Act provides for the activities of Islamic banks specified by the CBL Board of Directors. The activities include acceptance of the money of investors, in joint investment accounts, be they absolute or earmarked; utilization of the customers' money in joint investment accounts with the resources of the Islamic bank, according to the joint Modarba system, or in an earmarked investment account, based on a special agreement with the customer; exercise of direct or financial investment activities, in the interest of the Islamic bank, a third party, or in conjunction, including the acquisition of movables; conclusion of Mushrakah contracts; and establishment of companies that undertake or contribute to various aspects of economic activity. It is also empowered to execute banking activities regarding section 65(b) of the Banking Law as long as it does not contravene the Sharia law. It is mandated to manage direct underwriting for the Islamic banks, other agencies, or in a coalition with other banks as per the *Musharakah* contract. The Islamic banks may start institutions that manage various financial activities or regulate their shares. The Islamic banks are immune to the restrictions provided in Article 77 of the Banking Law as long as the bank performs its operations according to specified Sharia principles. In Principles.

¹⁰²⁵ ZA Ahmed, *The Barriers to Effective Marketization of Corporate Equity in Libya* (PhD thesis, University of Gloucestershire 2011) 87–90.

¹⁰²⁶ Banking Law No 1 of 2005, as amended by Law No 46 of 2012, art 3.

¹⁰²⁷ Rashesh Vaidya, 'Role of Accounting Information in Making Share Investment Decisions: A Survey of Investors in Nepalese Stock Market' (2021) 6(1) *Journal of Business and Social Sciences Research* 63, ¹⁰²⁸ Banking Law No 1 of 2005, as amended by Law No 46 of 2012, art 4(2).

4.4.3 Non-Interest Banking

The country has also enacted other legal frameworks to prohibit interest during financial transactions. Libyan Law No.1 of 2013 on the Prohibition of Interest was adopted by the legislative body of Libya in 2013 to forbid activities involving interests founded on financial transactions. The Act makes dealing involving Interest illegal in all civil and financial transactions. The law was enacted to improve Libya's capital and banking sector by eliminating all interests in financial undertakings. Article 1(1) of the Act underscores the Prohibition of interests. It states, "Interest on deposits and loans in all civil and commercial transactions between natural and legal entities shall be prohibited. All usurious Interest, whether evident or concealed, earned from such transactions shall be invalidated on an absolute basis."

Article 2 of the Act clarifies that interest cannot be legally enforced even though judges have heard and determined the case in which interest is in contention. It concludes that no interests will be heard and determined when the Act took effect, notwithstanding when the transaction was executed. The exception to the rule is provided in article 3, which provides that the law only revokes the undertaking to pay or receive interest. At the same time, the borrower will still be liable to pay the principal amount to the lender. Moreover, the Act provides for various penalties inflicted should the law be violated. Article 6(1) specifies that individuals who violate the prohibition of interest law will be imprisoned for two years or fined not less than 5000 Libyan Dinar and not more than 10,000 Libyan Dinar.¹⁰³⁰

¹⁰²⁹ Abdulaziz M Abdulsaleh, 'Corporate Governance Role of Audit Committees in the Banking Sector: Evidence from Libya' (2014) 8 World Academy of Science, Engineering and Technology, International Journal of Social, Behavioral, Educational, Economic, Business and Industrial Engineering 592.

¹⁰³⁰ LJ Abbott, B Daugherty, S Parker and GF Peters, 'Internal Audit Quality and Financial Reporting Quality: The Joint Importance of Independence and Competence' (2016) 54(1) *Journal of Accounting Research* 3, 7.

4.4.4 Dispute Resolution

The Libyan government has also implemented dispute resolution as a legal framework meant to mitigate the challenges experienced in promoting the capital market and the banking services in the country. Several legal and judicial problems led to various dispute resolution mechanisms. One of the main challenges was the lack of an independent law that governed and managed Islamic banking.

In resolving disputes in the banking sector, several analysts sought to incorporate arbitration as an effective means. ¹⁰³⁴ Despite the provision in the Pleading Law Articles for arbitration, the method is not popular among parties in dispute. ¹⁰³⁵ It has been asserted that the unpopularity of arbitration was because people lacked understanding of it and how it worked. ¹⁰³⁶ Despite the unpopularity, many people have considered it one of the most amicable and efficient ways of resolving Islamic banking and economics related to the capital market. ¹⁰³⁷ To resolve disputes under arbitration, they must be knowledgeable in Shariah, Islamic economics, and the law in

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¹⁰³¹ A Shaharuddin, 'Maslahah-Mafsadah Approach in Assessing the Shari'ah Compliance of Islamic Banking Products' (2010) 1(1) *International Journal of Business and Social Science* 128.

¹⁰³² H Ahmed, 'Islamic Banking and Shari'ah Compliance: A Product Development Perspective' (2014) 3(2) *Journal of Islamic Finance* 15, 22.

¹⁰³³ U Daya, 'The Manager's Role in Polish and Libyan Companies' in *Managing Intellectual Capital and Innovation for Sustainable and Inclusive Society: Proceedings of the MakeLearn and TIIM Joint International Conference 2015* (ToKnowPress 2015) 863, 869.

¹⁰³⁴ M Elmadani, *The Study of Service Quality in Libyan Commercial Banks* (PhD thesis, University of Huddersfield 2015) 143–146.

¹⁰³⁵ MA Eldlimi, MRA Aziz and MF Ibrahim, 'Implementing Management Information System in Libyan Islamic Financial Institutions' (Paper, 5th Islamic Economic System Conference, Kuala Lumpur 2013) 112–115.

¹⁰³⁶ SA Devi, S Sayyed and IA Bahr, 'Corporate Governance in the Banking Sector' (2017) 2(1) *International Journal of Multidisciplinary Empirical Research* 88, 92.

¹⁰³⁷ MA Laldin and H Furqani, 'Innovation versus Replication: Some Notes on the Approaches in Defining Shari'ah Compliance in Islamic Finance' (2016) 54(2) *Al-Jami'ah: Journal of Islamic Studies* 249, 254.

general. Despite having the required knowledge, many people cannot adopt arbitration because Islamic banking and finance-related laws are not taught in Libyan law schools. 1038

Despite the limitation, many have considered arbitration a more effective and impartial method of resolving disputes than taking disputes to court. ¹⁰³⁹ It is also a speedy method, and it is less expensive than court proceedings. ¹⁰⁴⁰ Moreover, arbitration is flexible in that the disputed parties are at liberty to choose their desired arbitrators and the time and location of the arbitration. ¹⁰⁴¹ However, the Pleadings Law that provides for arbitration in Libya has strict formal rules. ¹⁰⁴² The parties in dispute are obligated to comply with the legislative requirements for procedures and the timelines with which the cases are presented in court. ¹⁰⁴³ In conclusion, arbitration has been recognised as more private in terms of the hearing, the documents and the general rules which allow only the participation of the parties in dispute. ¹⁰⁴⁴

4.5 Entwined Corporate Governance and Financial Supervision in Libya

The Libyan corporate structure and the overreaching legal and economic concept of corporate governance received the much-needed concentration when the Central Bank of Libya issued its "Guidelines pertaining corporate governance among the Commercial banks in the country." 1045

Commercial Banks (PhD thesis, University of Gloucestershire 2011) 99–103.

¹⁰³⁸ AKS Edweib, Z Shafii and N Ahmad, 'Stock Market and Economic Growth in Libya' (2013) 2(1) *IOSR Journal of Economics and Finance* 43, 47.

¹⁰³⁹ KM Alrafadi, 'The Effect of Intellectual Capital on the Financial Performance of Libyan Banks' (2020) 5(4) European Journal of Business and Management Research 22.

 ¹⁰⁴⁰ I Elnihewi, FH Fadzil and R Mohamed, 'The Effect of Institutional Factors on the Organizational Performance through
 Performance Measures of Commercial Banks in Libya' (2014) 164 Procedia – Social and Behavioral Sciences 635, 640.
 1041 O Sharkasi, The Impact of Investment in Accounting Information Systems on Business Performance: The Case of the Libyan

¹⁰⁴² T Tuan, 'The Impact of Balanced Scorecard on Performance: The Case of Vietnamese Commercial Banks' (2020) 7(1) *Journal of Asian Finance, Economics and Business* 71, 74.

¹⁰⁴³ I Angeloni and E Faia, 'Capital Regulation and Monetary Policy with Fragile Banks' (2013) 60(3) *Journal of Monetary Economics* 27, 30.

¹⁰⁴⁴ AJ Khafafa and Z Shafii, 'Customer Satisfaction and Islamic Banking Awareness in the Islamic Banking Window System in Libya' (2013) 13(13) *Middle-East Journal of Scientific Research* 12.

¹⁰⁴⁵ Hashem Iswaissi and Kazem Falahati, 'Challenges to Corporate Governance Practices: Case Study of Libyan Commercial Banks' (2017) 1 Corporate Governance and Sustainability Review 67, 69.

The Guidelines lay the basis for the inaugural chapter for developing the commercial banks in Libya. ¹⁰⁴⁶ The regulatory framework came into operation when the Central Bank of Libya had conceived businesses to deregulate and restructure the whole banking system in Libya.

The Central Bank is the shareholder of public banks, while being the regulatory agency of the banking sector. This obviously presents a conflict of interests, including potential forbearance to supervise to the benefit of state-owned banks, as well as granting credit to well-connected beneficiaries. Libya is one of the few countries in the world where the state owns financial institutions through a central bank. The Russian Federation has a similar situation where the Central Bank of Russia (CBR) is both a regulator and the major shareholder of the largest bank (Sberbank). This arrangement has worked reasonably well in practice owing to solid corporate governance practices and a strong and professional team at Sberbank. Clear measures have also been taken over the years to ensure a separation between the ownership function of Sberbank and the supervisory function of the CBR. Nevertheless, this ownership arrangement may impede the longer-run transition to a more market-oriented and competitive banking system. Russia's experience can provide lessons for Libya to utilise in systemic risk mitigation. 1047

4.5.1 Ownership Structures and Shareholder Rights in Libyan Companies

4.5.1.1 Concentrated Ownership Patterns and Their Implications

The ownership structure of companies and banks in Libya presents a distinctive corporate governance landscape that significantly impacts stakeholders' ability to monitor management

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L Gambacorta and HS Shin, 'Why Bank Capital Matters for Monetary Policy' (2016) BIS Working Papers No 558, 14-16.
 World Bank, 'Libya Financial Sector Review' (2020) https://thedocs.worldbank.org/en/doc/288521600444837289-0280022020/original/LibyaFinancialSectorReviewEnglishFinal.pdf accessed 4 October 2023.

effectively. Under the Commercial Activity Law No. 23 of 2010, Libyan companies typically exhibit highly concentrated ownership patterns, where the state retains substantial shareholdings in major enterprises and financial institutions. This concentration manifests in two primary forms: direct state ownership through various governmental entities and indirect ownership through state-controlled investment funds and sovereign wealth vehicles.

The concentrated ownership structure creates what Jensen and Meckling describe as a principal-principal agency problem, where the interests of controlling shareholders may conflict with those of minority shareholders. In the Libyan context, this dynamic is particularly pronounced given the state's dual role as both regulator and significant owner of financial institutions. The Central Bank of Libya's position as both supervisor and shareholder of major banks exemplifies this tension, potentially compromising the independence required for effective prudential oversight.

Research by La Porta, Lopez-de-Silanes, and Shleifer demonstrates that concentrated ownership structures can either enhance or diminish corporate performance depending on the institutional framework and legal protections available to minority shareholders. In Libya's case, the Commercial Activity Law provides limited explicit protections for minority shareholders, particularly regarding access to information, voting procedures, and remedial mechanisms for addressing grievances. This limitation is compounded by the absence of

¹⁰⁴⁸ Law No 23 of 2010 Concerning Commercial Activity, arts 15-18.

¹⁰⁴⁹ Michael C Jensen and William H Meckling, 'Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure' (1976) 3 Journal of Financial Economics 305, 308-310.

¹⁰⁵⁰ Rafael La Porta, Florencio Lopez-de-Silanes and Andrei Shleifer, 'Corporate Ownership Around the World' (1999) 54 Journal of Finance 471, 491-493.

¹⁰⁵¹ Rafael La Porta and others, 'Investor Protection and Corporate Governance' (2000) 58 Journal of Financial Economics 3, 15-18.

¹⁰⁵² Law No 23 of 2010 Concerning Commercial Activity, arts 45-52.

developed capital markets that might otherwise provide alternative governance mechanisms through market discipline. 1053

The implications of concentrated ownership extend beyond traditional corporate governance concerns to encompass systemic risk considerations. When ownership is concentrated among state entities, commercial decision-making may become subject to political considerations that do not necessarily align with sound risk management principles. This divergence can create vulnerabilities that, in systemically important financial institutions, may propagate throughout the broader financial system. The Economic and Social Development Fund, which holds significant stakes in numerous Libyan enterprises, operates under mandates that may prioritise social and political objectives over commercial returns. 1054

4.5.1.2 State Ownership and Corporate Governance Challenges

The prevalence of state ownership in Libya's corporate sector introduces specific governance challenges that affect systemic risk mitigation. State-owned enterprises often operate under different incentive structures compared to privately-owned entities, with political considerations potentially influencing commercial decisions. The Organisation for Economic Co-operation and Development Guidelines on Corporate Governance of State-Owned Enterprises emphasise the importance of ensuring that SOEs operate according to commercial principles while maintaining appropriate oversight mechanisms. 1056

¹⁰⁵³ Eugene F Fama, 'Efficient Capital Markets: A Review of Theory and Empirical Work' (1970) 25 Journal of Finance 383, 387-389.

¹⁰⁵⁴ World Bank, 'Libya Financial Sector Review' (2020) https://thedocs.worldbank.org/en/doc/288521600444837289-0280022020/original/LibyaFinancialSectorReviewEnglishFinal.pdf accessed 4 October 2023.

¹⁰⁵⁵ Stijn Claessens and Burcin Yurtoglu, 'Corporate Governance in Emerging Markets: A Survey' (2013) 15 Emerging Markets Review 1, 8-12.

¹⁰⁵⁶ OECD, 'OECD Guidelines on Corporate Governance of State-Owned Enterprises' (OECD Publishing 2015) 23-27.

The state's ownership rights in Libya are exercised through various agencies, creating potential conflicts of interest that can undermine effective governance. These conflicts manifest in several ways: first, the state may use its ownership position to achieve policy objectives that conflict with commercial efficiency; second, political appointees to corporate boards may lack the technical expertise necessary for effective oversight; third, the blending of ownership and regulatory functions can compromise the independence required for effective supervision. 1057

The Banking Law No. 1 of 2005, as amended by Law No. 46 of 2012, attempts to address some of these concerns by establishing governance requirements for banks, including provisions for independent directors and audit committees. However, the practical implementation of these requirements remains constrained by the limited pool of qualified independent directors and the continuing influence of political appointees on bank boards. The shortage of qualified personnel reflects broader institutional capacity limitations that affect the quality of corporate governance across Libya's economy.

4.5.2 Board Structure and Supervisory Mechanisms

4.5.2.1 The Dual Board System and Management Oversight

Libya's corporate governance framework incorporates elements reminiscent of the German dual board system, featuring both management boards and supervisory mechanisms designed to enhance oversight. The Commercial Activity Law No. 23 of 2010 establishes requirements for

¹⁰⁵⁷ Ahmed M Gerged and Amal M Masli, 'Corporate Governance in Libya: A Systematic Review and Comparative Analysis with UK Standards' (2024) SSRN Working Paper https://www.ssrn.com/abstract=5282790 accessed 19 August 2024. ¹⁰⁵⁸ Banking Law No 1 of 2005, as amended by Law No 46 of 2012, arts 25-28.

¹⁰⁵⁹ Ahmed M Gerged and Amal M Masli, 'Corporate Governance in Libya: A Systematic Review and Comparative Analysis with UK Standards' (2024) SSRN Working Paper https://www.ssrn.com/abstract=5282790 accessed 19 August 2024.

companies to maintain board structures that separate executive and supervisory functions, though the practical implementation of this separation varies significantly across different types of enterprises.¹⁰⁶⁰

The existence of a second "board" aimed at supervising the management, similar to the German supervisory board model, represents an attempt to strengthen corporate oversight in Libya. ¹⁰⁶¹ This supervisory mechanism draws conceptual inspiration from the German Aufsichtsrat system, where the supervisory board oversees the management board to ensure effective corporate governance and strategic oversight. ¹⁰⁶² However, this supervisory mechanism has been substantially reformed and "watered down" by subsequent legislation, reducing its effectiveness as an independent oversight body. ¹⁰⁶³ The reforms have diminished the supervisory board's powers and independence, potentially compromising its ability to provide effective checks on management decisions.

The weakening of supervisory board powers represents a significant departure from international best practices and undermines the theoretical advantages of dual board systems. In the German model, supervisory boards possess substantial authority, including the power to appoint and dismiss management board members, approve major strategic decisions, and access comprehensive corporate information. Libya's diluted version of this system retains the

¹⁰⁶⁰ Law No 23 of 2010 Concerning Commercial Activity, arts 67-74.

¹⁰⁶¹ Klaus J Hopt and Patrick C Leyens, 'Board Models in Europe: Recent Developments of Internal Corporate Governance Structures in Germany, the United Kingdom, France, and Italy' (2004) European Company and Financial Law Review 135, 142-145.

¹⁰⁶² German Stock Corporation Act (Aktiengesetz), ss 95-116.

¹⁰⁶³ Ahmed M Gerged and Amal M Masli, 'Corporate Governance in Libya: A Systematic Review and Comparative Analysis with UK Standards' (2024) SSRN Working Paper https://www.ssrn.com/abstract=5282790 accessed 19 August 2024.
¹⁰⁶⁴ Klaus J Hopt, 'Comparative Corporate Governance: The State of the Art and International Regulation' (2011) 59
American Journal of Comparative Law 1, 15-18.

structural appearance of enhanced oversight without the substantive powers necessary to make it effective.

Research by Fauver and Fuerst on international board structures suggests that dual board systems can enhance corporate governance when properly implemented, particularly in environments with concentrated ownership. However, the effectiveness of such systems depends critically on the independence and expertise of supervisory board members, as well as their access to relevant information and legal authority to intervene when necessary. The German experience demonstrates that supervisory boards must have real power to influence management decisions if they are to serve as effective governance mechanisms.

4.5.2.2 Directors' Duties and Stakeholder Considerations

The nature of directors' duties in Libya raises fundamental questions about the purpose and accountability of corporate governance. The current legal framework provides limited clarity on whether directors are required to promote only the success of the company or whether their duties extend to consider broader stakeholder interests. This ambiguity reflects a broader international debate about the purpose of corporations and the appropriate scope of directors' responsibilities.

The Companies Act 2006 in the United Kingdom provides a useful comparative framework, as Section 172 requires directors to promote the success of the company for the benefit of

¹⁰⁶⁵ Larry Fauver and Alvaro G Taboada, 'Management and Governance of International Joint Ventures: Lessons for Emerging Markets' (2006) 15 International Review of Economics & Finance 423, 428-431.

¹⁰⁶⁶ Christine Mallin, Corporate Governance (6th edn, OUP 2019) 287-291.

¹⁰⁶⁷ Theodore Baums, 'Corporate Governance in Germany: System and Recent Developments' in Klaus J Hopt and others (eds), Comparative Corporate Governance: The State of the Art and Emerging Research (OUP 1998) 31-56.

¹⁰⁶⁸ Law No 23 of 2010 Concerning Commercial Activity, arts 78-82.

shareholders while having regard to various stakeholder interests, including employees, suppliers, customers, and the community. This approach represents a movement toward stakeholder capitalism that balances traditional shareholder primacy with broader social responsibilities. The UK legislation specifically requires directors to consider the likely consequences of decisions in the long term, the interests of employees, the need to foster business relationships with suppliers and customers, the impact of operations on the community and environment, the desirability of maintaining high standards of business conduct, and the

need to act fairly between members of the company. 1070

In contrast, Libya's Commercial Activity Law lacks explicit provisions requiring directors to consider stakeholder interests beyond shareholders, potentially creating a narrower conception of corporate responsibility. This limitation may have significant implications for systemic risk management, as directors focused solely on shareholder interests may not adequately consider the broader economic and social consequences of their decisions. Research by Freeman and Reed on stakeholder theory suggests that companies with broader stakeholder orientations may be better positioned to identify and manage systemic risks that could affect multiple constituencies. 1071

The absence of clear stakeholder consideration requirements in Libyan corporate law becomes particularly problematic in the financial sector, where institutional decisions can have far-reaching consequences beyond immediate shareholders. Banks and other financial institutions operate in interconnected systems where individual institution failures can generate spillover

¹⁰⁶⁹ Companies Act 2006, s 172.

¹⁰⁷⁰ Ibid s 172(1)(a)-(f).

¹⁰⁷¹ R Edward Freeman and David L Reed, 'Stockholders and Stakeholders: A New Perspective on Corporate Governance' (1983) 25 California Management Review 88, 94-97.

effects throughout the economy. Directors who focus exclusively on maximising shareholder returns may engage in excessive risk-taking that threatens not only their institution but also broader financial stability.¹⁰⁷²

4.5.3 Monitoring Mechanisms and Information Asymmetries

4.5.3.1 Shareholder Monitoring Capabilities

The ability of shareholders to monitor the board and management represents a crucial component of effective corporate governance. In Libya's concentrated ownership environment, the monitoring function is primarily exercised by large shareholders, particularly state entities, while minority shareholders face significant information asymmetries and limited enforcement mechanisms. This disparity in monitoring capabilities creates governance challenges that may contribute to systemic risk.

The Commercial Activity Law No. 23 of 2010 establishes basic information rights for shareholders, including access to annual reports and participation in general meetings. 1074 However, these provisions fall short of international best practices regarding transparency and disclosure. The Organisation for Economic Co-operation and Development Principles of Corporate Governance emphasise the importance of timely and accurate disclosure of material information, including financial performance, ownership structures, and governance

¹⁰⁷² Viral V Acharya, Lasse H Pedersen, Thomas Philippon and Matthew Richardson, 'Measuring Systemic Risk' (2017) 30 Review of Financial Studies 2, 12-15.

¹⁰⁷³ Andrei Shleifer and Robert W Vishny, 'A Survey of Corporate Governance' (1997) 52 Journal of Finance 737, 745-748.1074 Law No 23 of 2010 Concerning Commercial Activity, arts 89-95.

arrangements. 1075 Libya's disclosure requirements remain limited compared to these international standards, constraining shareholders' ability to monitor management effectively.

The limited development of Libya's capital markets further constrains shareholder monitoring capabilities. Without active securities markets, shareholders lack important signals about company performance and management effectiveness that would otherwise be provided through market mechanisms. Market-based monitoring relies on the ability of investors to buy and sell shares based on their assessment of management performance, creating incentives for effective governance. The absence of such mechanisms in Libya places greater importance on internal governance structures, which, as discussed above, face significant limitations. 1077

Information asymmetries between controlling and minority shareholders create additional governance challenges. Controlling shareholders, particularly state entities, may have access to information that is not available to minority shareholders, enabling them to make decisions that favour their interests at the expense of other stakeholders. This problem is exacerbated by the lack of strong legal protections for minority shareholders and limited judicial capacity to enforce existing protections.

4.5.3.2 Regulatory Monitoring and Supervisory Oversight

The Central Bank of Libya's role in monitoring financial institutions illustrates the challenges facing regulatory oversight in concentrated ownership environments. As both supervisor and

¹⁰⁷⁶ Eugene F Fama, 'Efficient Capital Markets: A Review of Theory and Empirical Work' (1970) 25 Journal of Finance 383, 387-389.

¹⁰⁷⁵ OECD, 'G20/OECD Principles of Corporate Governance' (2015) 37-42.

¹⁰⁷⁷ Marco Becht, Patrick Bolton and Ailsa Roell, 'Corporate Governance and Control' in George M Constantinides, Milton Harris and Rene M Stulz (eds), Handbook of the Economics of Finance (Elsevier 2003) 1-109.

shareholder, the CBL faces inherent conflicts of interest that may compromise its independence and effectiveness. ¹⁰⁷⁸ This dual role creates situations where the central bank's supervisory decisions may be influenced by its ownership interests, potentially undermining effective prudential oversight.

International best practices, as outlined by the Basel Committee on Banking Supervision, emphasise the importance of operational independence for banking supervisors and the need to minimise conflicts of interest. ¹⁰⁷⁹ The Basel Core Principles for Effective Banking Supervision specifically require that supervisory authorities have operational independence, transparent processes, sound governance, and adequate resources to carry out their mandate. ¹⁰⁸⁰ These requirements reflect the recognition that effective supervision requires freedom from inappropriate political and commercial interference.

The supervisory framework established under the Banking Law includes provisions for on-site examinations, off-site monitoring, and corrective actions. However, the effectiveness of these mechanisms is constrained by capacity limitations, technological challenges, and the complex relationships between the CBL and the institutions it supervises. How World Bank's 2020 Libya Financial Sector Review highlighted these limitations and recommended significant enhancements to the supervisory framework. The review found that supervisory capacity

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¹⁰⁷⁸ World Bank, 'Libya Financial Sector Review' (2020) https://thedocs.worldbank.org/en/doc/288521600444837289-0280022020/original/LibyaFinancialSectorReviewEnglishFinal.pdf accessed 4 October 2023.

¹⁰⁷⁹ Basel Committee on Banking Supervision, 'Core Principles for Effective Banking Supervision' (Bank for International Settlements 2012) Principle 1.

¹⁰⁸⁰ Ibid Principles 1-2.

¹⁰⁸¹ Banking Law No 1 of 2005, as amended by Law No 46 of 2012, arts 35-42.

World Bank, 'Libya Financial Sector Review' (2020) https://thedocs.worldbank.org/en/doc/288521600444837289-0280022020/original/LibyaFinancialSectorReviewEnglishFinal.pdf accessed 4 October 2023.
 Ibid.

was limited by insufficient human resources, outdated information systems, and weak enforcement mechanisms.

4.5.4 Case Law and Judicial Precedents

4.5.4.1 Enforcement of Corporate Governance Standards

The enforcement of corporate governance standards in Libya faces significant challenges due to limited judicial experience with complex commercial disputes and the underdeveloped state of commercial law jurisprudence. Unlike jurisdictions with well-established corporate law traditions, Libya lacks a substantial body of case law interpreting directors' duties, shareholder rights, and corporate governance obligations. This absence of jurisprudential guidance creates uncertainty about how courts will interpret and enforce corporate governance requirements.

The few reported cases involving corporate governance disputes have primarily focused on basic procedural issues rather than substantive questions about fiduciary duties or stakeholder considerations. This limitation reflects both the relatively recent development of Libya's corporate law framework and the judicial system's limited experience with complex commercial matters. The result is a legal environment where corporate governance standards exist on paper but lack the interpretive guidance necessary for consistent enforcement.

¹⁰⁸⁴ Abdulaziz M Abdulsaleh, 'Corporate Governance Role of Audit Committees in the Banking Sector: Evidence from Libya' (2014) 8 World Academy of Science, Engineering and Technology, International Journal of Social, Behavioral, Educational, Economic, Business and Industrial Engineering 592, 595-597.

¹⁰⁸⁵ Ali A Zagoub, 'Concept and Practices of Corporate Governance in Libyan Banks' (2019) Libyan Academy for Graduate Studies Journal 67, 71-73.

¹⁰⁸⁶ Ahmed M Gerged and Amal M Masli, 'Corporate Governance in Libya: A Systematic Review and Comparative Analysis with UK Standards' (2024) SSRN Working Paper https://www.ssrn.com/abstract=5282790 accessed 19 August 2024.

A recent development in Libyan jurisprudence illustrates both the potential for legal evolution

and the current limitations of the system. On 3 December 2024, the Libyan Supreme Court,

sitting in combined chambers, issued a significant judgment revising its earlier principle on the

legal representation of joint-stock companies before the courts. ¹⁰⁸⁷1169 In its earlier decision

(Civil Appeal 64/730 Q), the Court had affirmed that legal representation of a joint-stock

company was vested exclusively in the chairman of the board of directors, even in cases where

the company had appointed a general manager. 1088

The new judgment departs from this restrictive approach by recognising that, where the

company's articles of association expressly provide, the general manager may also serve as the

company's legal representative before the courts. 1089 This ruling interprets Article 180 of

Commercial Activity Law No. 23 of 2010, which designates the chairman as the company's

legal representative, as a supplementary rather than a mandatory rule. 1090 The Court reasoned

that while mandatory rules cannot be derogated from because they relate to public order,

supplementary provisions may be varied by agreement among shareholders through the

company's articles of association.

The Court's analysis relied on Articles 189 and 190 of the Commercial Activity Law, which

specifically provide for the appointment of a general manager and allow for the conferral of

representational authority upon such an officer. ¹⁰⁹¹ By affirming that the articles of association

express the collective will of shareholders, provided they do not contravene a mandatory legal

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¹⁰⁸⁷ Libyan Supreme Court (Combined Chambers), 3 December 2024 (decision amending Civil Appeal 64/730 Q).

¹⁰⁸⁸ Ibid

¹⁰⁸⁹ Ibid

¹⁰⁹⁰ Commercial Activity Law No 23 of 2010, art 180.

¹⁰⁹¹ Commercial Activity Law No 23 of 2010, arts 189, 190.

rule, the Court broadened the interpretive space available for corporate self-regulation and governance design in Libya. 1092

This development carries particular significance for the governance of banks and other financial institutions, where clarity regarding corporate representation is essential for contractual certainty, litigation, and supervisory relations. It also reflects the tensions inherent in Libyan company law between statutory centralisation of authority in the chairman and the pragmatic realities of modern management structures, where general managers and chief executive officers often exercise substantial authority.¹⁰⁹³

However, despite this advance in clarifying representational authority, the Supreme Court's decision did not extend to questions of substantive directors' duties, including whether directors and managers are required to take account of systemic risk considerations or the interests of stakeholders beyond shareholders. Consequently, while the judgment strengthens corporate autonomy and provides flexibility in defining internal authority, it leaves unresolved the broader doctrinal issue of whether Libyan law should move towards a stakeholder-inclusive conception of directors' duties akin to that found in comparative jurisdictions such as the United Kingdom or Germany. 1094

This limited jurisprudential development contrasts sharply with jurisdictions like Delaware in the United States, where extensive case law has developed sophisticated frameworks for addressing corporate governance issues. Decisions such as Revlon, Inc. v MacAndrews &

¹⁰⁹² Libyan Supreme Court (Combined Chambers), 3 December 2024 (decision amending Civil Appeal 64/730 Q).

¹⁰⁹³ Ahmed M Gerged and Amal M Masli, 'Corporate Governance in Libya: A Systematic Review and Comparative Analysis with UK Standards' (2024) SSRN Working Paper https://www.ssrn.com/abstract=5282790 accessed 19 August 2024.

¹⁰⁹⁴ Companies Act 2006, s 172; German Stock Corporation Act (Aktiengesetz), ss 76-77; OECD, 'G20/OECD Principles of Corporate Governance' (2015) 15-18.

Forbes Holdings, Inc. and Unocal Corp. v Mesa Petroleum Co. have established important precedents regarding directors' duties in different circumstances. ¹⁰⁹⁵ Libya would benefit from similar jurisprudential development to provide greater clarity and consistency in corporate governance enforcement.

4.5.4.2 Dispute Resolution and Alternative Mechanisms

The resolution of corporate governance disputes in Libya relies primarily on traditional court proceedings, though the Commercial Activity Law does provide for alternative dispute resolution mechanisms. 1096 However, the capacity of the judicial system to handle complex corporate governance cases remains limited, creating incentives for parties to seek alternative resolution methods. 1097 The challenges facing the judicial system include limited expertise in commercial matters, inadequate resources, and lengthy procedures that may discourage the pursuit of legitimate grievances.

The development of specialised commercial courts, as recommended by the World Bank, could enhance the quality and consistency of corporate governance enforcement. Such courts would be staffed by judges with specific expertise in commercial and corporate law matters, improving the quality of judicial decision-making and creating more predictable outcomes for litigants. The establishment of commercial courts would represent a significant step toward

1097 World Bank, 'Libya Financial Sector Review' (2020) https://thedocs.worldbank.org/en/doc/288521600444837289-0280022020/original/LibyaFinancialSectorReviewEnglishFinal.pdf accessed 4 October 2023.

¹⁰⁹⁵ Revlon, Inc v MacAndrews & Forbes Holdings, Inc 506 A2d 173 (Del 1986); Unocal Corp v Mesa Petroleum Co 493 A2d 946 (Del 1985).

¹⁰⁹⁶ Commercial Activity Law No 23 of 2010, arts 120-125.

¹⁰⁹⁸ World Bank, 'Libya Financial Sector Review' (2020) https://thedocs.worldbank.org/en/doc/288521600444837289-0280022020/original/LibyaFinancialSectorReviewEnglishFinal.pdf accessed 4 October 2023.

creating the institutional infrastructure necessary for effective corporate governance enforcement.

4.5.5 Proposed Regulatory Reforms for Enhanced Corporate Governance

4.5.5.1 Strengthening Stakeholder-Oriented Governance

To address the identified deficiencies in Libya's corporate governance framework, amendments to the Commercial Activity Law should explicitly require directors to consider stakeholder interests when making corporate decisions that could have systemic implications. ¹⁰⁹⁹ This reform would align Libya's approach with international trends toward stakeholder capitalism while providing a legal foundation for considering systemic risks. Such stakeholder-oriented duties would be particularly relevant for systemically important financial institutions, where directorial decisions can have far-reaching consequences for financial stability and economic welfare beyond immediate shareholder interests. ¹¹⁰⁰

The proposed amendments should incorporate provisions similar to those found in the UK Companies Act 2006, Section 172, requiring directors to act in good faith to promote the success of the company while having regard to the likely consequences of decisions in the long term, the interests of employees, the need to foster business relationships with suppliers, customers, and others, the impact of operations on the community and environment, the desirability of maintaining high standards of business conduct, and the need to act fairly between members of the company. These requirements would create a legal framework that

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¹⁰⁹⁹ Companies Act 2006, s 172; Delaware General Corporation Law, s 102(b)(7).

¹¹⁰⁰ Basel Committee on Banking Supervision, 'Corporate Governance Principles for Banks' (Bank for International Settlements 2015) 8-12.

¹¹⁰¹ Companies Act 2006, s 172(1)(a)-(f).

encourages directors to consider the broader implications of their decisions, potentially reducing the likelihood of excessive risk-taking that could threaten systemic stability.

The implementation of stakeholder-oriented governance would require supporting changes to corporate law, including enhanced disclosure requirements that would allow stakeholders to monitor compliance with these broader duties. Directors would need to explain in annual reports how they have considered stakeholder interests in their decision-making processes, creating transparency and accountability mechanisms that support effective governance. 1102

4.5.5.2 Enhanced Supervisory Board Powers

The second major reform should focus on strengthening the supervisory board mechanism that exists within Libya's corporate governance framework. Drawing from the German experience with Aufsichtsrat (supervisory boards), Libya should consider establishing more powerful supervisory bodies with enhanced independence and authority. The German dual board system provides a useful model for how supervisory and management functions can be effectively separated to enhance corporate oversight.

The reformed supervisory boards should possess independent appointment mechanisms that reduce political influence and enhance professional qualifications, enhanced information rights and comprehensive access to company records and management reporting, authority to approve major strategic decisions, mergers, acquisitions, and executive compensation packages, power

¹¹⁰² Andrew Keay, 'The Duty to Promote the Success of the Company: Is It Fit for Purpose?' (2010) University of Leeds School of Law Research Paper, 12-15.

¹¹⁰³ Klaus J Hopt and Patrick C Leyens, 'Board Models in Europe: Recent Developments of Internal Corporate Governance Structures in Germany, the United Kingdom, France, and Italy' (2004) European Company and Financial Law Review 135, 158-162

¹¹⁰⁴ German Stock Corporation Act (Aktiengesetz), ss 95-116.

to dismiss management for cause, including failure to manage systemic risks appropriately, and requirements for financial, legal, and risk management expertise among board members. These enhanced powers would create supervisory boards that can serve as effective checks on management decisions and ensure that appropriate attention is paid to risk management and stakeholder interests.

Research by Gorton and Schmid on the German dual board system demonstrates that effective supervisory boards can significantly improve corporate performance and risk management, particularly in environments with concentrated ownership. The German model's success stems from clear separation of oversight and management functions, coupled with supervisory boards' substantial legal powers and access to information. Libya's adoption of similar mechanisms would require careful attention to the appointment processes for supervisory board members to ensure that they possess the necessary expertise and independence to perform their oversight functions effectively.

4.5.5.3 Minority Shareholder Protection Enhancements

The third area for reform involves strengthening protections for minority shareholders through enhanced disclosure requirements and procedural safeguards. Libya should implement provisions requiring detailed disclosure of related-party transactions with clear identification of conflicts of interest, independent director approval for material conflicts of interest involving controlling shareholders, enhanced voting procedures for minority shareholders, including

¹¹⁰⁶ Gary Gorton and Frank A Schmid, 'Capital, Labor, and the Firm: A Study of German Codetermination' (2004) 2 Journal of the European Economic Association 863, 874-877.

¹¹⁰⁵ OECD, 'G20/OECD Principles of Corporate Governance' (2015) 28-32.

¹¹⁰⁷ Theodore Baums, 'Corporate Governance in Germany: System and Recent Developments' in Klaus J Hopt and others (eds), Comparative Corporate Governance: The State of the Art and Emerging Research (OUP 1998) 45-62.

cumulative voting rights, mandatory tender offer rules for significant ownership changes that could affect minority interests, and improved access to judicial remedies for shareholder grievances, including derivative actions.¹¹⁰⁸

These reforms would help address the principal-principal agency problems inherent in concentrated ownership structures while promoting more effective capital allocation and risk management. Enhanced minority shareholder protections are particularly important in the financial sector, where poor governance can lead to systemic risks affecting the broader economy. The implementation of these protections would require supporting changes to judicial procedures and capacity building to ensure that courts can effectively handle minority shareholder disputes.

4.5.5.4 Separation of Ownership and Regulatory Functions

Perhaps most importantly, Libya should consider structural reforms to address the conflicts of interest arising from the Central Bank's dual role as a regulator and a shareholder. This structural conflict represents a fundamental challenge to effective prudential oversight and systemic risk management. The reform options include transferring ownership functions to a separate state holding company with professional management and clear commercial objectives, establishing clear operational separation between regulatory and ownership activities within existing institutional structures, implementing enhanced disclosure and transparency

¹¹⁰⁸ OECD, 'G20/OECD Principles of Corporate Governance' (2015) 55-61.

¹¹⁰⁹ Stijn Claessens and others, 'Disentangling the Incentive and Entrenchment Effects of Large Shareholdings' (2002) 57 Journal of Finance 2741, 2745-2748.

¹¹¹⁰ Ross Levine, 'The Corporate Governance of Banks: A Concise Discussion of Concepts and Evidence' (World Bank Policy Research Working Paper 3404, 2004) 12-18.

¹¹¹¹ Marc Quintyn and Michael W Taylor, 'Regulatory and Supervisory Independence and Financial Stability' (2003) 40 CESifo Economic Studies 259, 267-272.

requirements for state-owned entities to improve market discipline, and developing professional management standards and appointment criteria for state appointees to corporate boards.¹¹¹²

The experience of other jurisdictions provides useful guidance for implementing such reforms while maintaining necessary state involvement in strategic sectors. The Russian Federation's gradual separation of regulatory and ownership functions demonstrates how such reforms can be implemented over time while maintaining financial system stability.¹¹¹³ The Norwegian Government Pension Fund Global model also demonstrates how state ownership can be exercised through professional investment management with clear governance principles and independence from regulatory functions.¹¹¹⁴

4.5.6 Integration with Systemic Risk Mitigation Strategies

4.5.6.1 Corporate Governance as Systemic Risk Management

The enhanced corporate governance framework proposed above should be explicitly integrated with broader systemic risk mitigation strategies. This integration requires recognition that corporate governance failures in systemically important institutions can generate spillover effects throughout the financial system.¹¹¹⁵ Research by Erkens, Hung, and Matos on corporate governance during the 2008 financial crisis demonstrates that banks with weaker governance

1113 ergei Guriev and William Megginson, 'Privatization: What Have We Learned?' in François Bourguignon and Boris Pleskovic (eds), Annual World Bank Conference on Development Economics 2007: Beyond Transition (World Bank 2007) 249-296.

¹¹¹² World Bank, 'Libya Financial Sector Review' (2020) https://thedocs.worldbank.org/en/doc/288521600444837289-0280022020/original/LibyaFinancialSectorReviewEnglishFinal.pdf accessed 4 October 2023.

¹¹¹⁴ Government Pension Fund Global, 'Responsible Investment Government Pension Fund Global' (Ministry of Finance Norway 2020) https://www.regjeringen.no/en/topics/the-economy/the-government-pension-fund/responsible-investments/id1439299/ accessed 15 November 2023.

¹¹¹⁵ Viral V Acharya, Lasse H Pedersen, Thomas Philippon and Matthew Richardson, 'Measuring Systemic Risk' (2017) 30 Review of Financial Studies 2, 8-15.

structures experienced worse performance and required more government support.¹¹¹⁶ These findings underscore the importance of strong corporate governance as a component of systemic risk prevention, particularly in concentrated financial systems like Libya's where individual institution failures can have disproportionate effects.

The interconnected nature of systemic risk and corporate governance manifests through several channels. Board oversight failures can lead to excessive risk-taking that threatens institutional stability. Inadequate risk management frameworks may fail to identify and mitigate emerging threats. Misaligned compensation structures can incentivise short-term profit maximisation at the expense of long-term stability. Poor stakeholder engagement can result in inadequate consideration of systemic impacts. These interconnections demonstrate that corporate governance reform cannot be treated as separate from broader financial stability objectives.

4.5.6.2 Coordination with Prudential Regulation

The corporate governance reforms should be coordinated with prudential regulatory requirements to ensure consistency and avoid regulatory arbitrage. This coordination is particularly important given the Central Bank of Libya's role in both corporate governance oversight and prudential supervision. The Basel Committee's Corporate Governance Principles for Banks provide a framework for integrating governance and prudential requirements, emphasising the importance of board oversight of risk management and strategy, including systemic risk considerations, senior management implementation of board-approved

¹¹¹⁶ David H Erkens, Mingyi Hung and Pedro Matos, 'Corporate Governance in the 2007-2008 Financial Crisis: Evidence from Financial Institutions Worldwide' (2012) 18 Journal of Corporate Finance 389, 401-404.

¹¹¹⁷ Basel Committee on Banking Supervision, 'Corporate Governance Principles for Banks' (Bank for International Settlements 2015) 15-19.

¹¹¹⁸ Donato Masciandaro and Marc Quintyn, 'The Governance of Financial Supervision: Recent Developments' (2016) 11 Journal of Economic Surveys 470, 475-478.

policies with clear accountability mechanisms, effective risk governance frameworks that identify, measure, and manage all material risks, and appropriate compensation and incentive structures that align with long-term institutional stability.¹¹¹⁹

Integration of governance and prudential oversight should include regular assessment of governance effectiveness through supervisory review processes, with governance failures treated as prudential concerns that may warrant corrective action. This approach recognises that governance weaknesses can undermine the effectiveness of other prudential measures and contribute to systemic vulnerabilities. The supervisory assessment of governance should consider not only compliance with formal requirements but also the effectiveness of governance mechanisms in promoting sound risk management and strategic decision-making.

4.5.6.3 Long-term Implementation Strategy

The implementation of these corporate governance reforms should follow a phased approach that allows for capacity building and institutional development. The strategy should include initial pilot programs with selected state-owned enterprises to test and refine governance mechanisms before broader implementation, training and professional development for directors, regulators, and legal professionals to build expertise in modern corporate governance practices, gradual expansion to privately-owned companies with appropriate transition periods and technical assistance, regular monitoring and evaluation of reform effectiveness through

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¹¹¹⁹ Basel Committee on Banking Supervision, 'Corporate Governance Principles for Banks' (Bank for International Settlements 2015) 20-25.

¹¹²⁰ Financial Stability Board, 'Thematic Review on Supervisory Frameworks and Approaches for SIBs' (FSB 2015) 23-28.

quantitative metrics and qualitative assessments, and adjustment of requirements based on implementation experience and evolving international best practices. 1121

This phased approach recognises the practical constraints facing Libya's institutional development while maintaining momentum toward improved corporate governance standards that can contribute to systemic risk mitigation and economic development. Success will depend on sustained political commitment, adequate resources for implementation, and engagement with international technical assistance providers to access global expertise and best practices. The reform process should also include mechanisms for stakeholder consultation to ensure that proposed changes are practical and receive appropriate support from the business community and other affected parties.

4.6 Legal and Institutional Framework for Financial Supervision in Libya

4.6.1 Central Bank of Libya

The Central Bank of Libya (CBL) is bestowed with the authority to supervise the financial activities in the country's banking sector.¹¹²⁴ The bank is obliged to assist in maintaining the stability of the prices in the markets, ensure financial balance and promote an environment that supports the stable development of the country's economy.¹¹²⁵ The focal point is banking supervision with efficient tools to regulate an impartial and secure banking and financial sector.

¹¹²¹ Financial Stability Institute, 'Proportionality in Banking Regulation: A Survey on Current Practices' (Bank for International Settlements 2021) 34-41

¹¹²² World Bank, 'Libya Financial Sector Review' (2020) https://thedocs.worldbank.org/en/doc/288521600444837289-0280022020/original/LibyaFinancialSectorReviewEnglishFinal.pdf accessed 4 October 2023.

¹¹²³ Arab Monetary Fund, 'Banking Supervision in Arab Countries' (AMF 2020) 45-52.

¹¹²⁴ NM Husien, Financial Sector Development, Savings and Economic Performance: A Case Study of Libya (PhD thesis, University of Salford 2007) 77.

¹¹²⁵ Libya Financial Sector Review (World Bank, February 2020), emphasizing the importance of banking supervision and institutional reforms for maintaining sector stability.

Law No 1 of 2005 provides that banks comply with the Libyan Banking Law. The main objective of the Central Bank of Libya in financial supervision and compliance is to nurture the soundness and honesty of the banking sector and the stability of the country's financial institution.

After the global economic crisis of 2008, the CBL formulated strategic approaches to bolster supervision authority over the operations of commercial banks in Libya. The strategic plan centres on some development actions. 1126 It aims to be up to date on the new developments in banking administration and macro-prudent advancements in the sector and regularly analyse the tools needed in supervision and the emerging laws and guidelines in financial supervision. 1127 The action includes implementing banking supervision and harmonization in the office and field in conformity with the provided global standards. Lastly, it aims at applying international auditing and accounts standards to comply with the objectives of financial impartiality and discovery.

The CBL has invested in improving banking supervision over the past several years. This was at least partially a result of an IMF capacity-building programme. The CBL has a regular banking supervision programme that includes both on-site and off-site visits. It requires regular statements from the banks, including a monthly balance sheet and income statement. The credit portfolio is graded against the classic 1-5 overdue classifications (Current, Watch List, etc.) with a general provision of 1 percent against all credit risk and a total required write-off after 360 days. There is no additional classification requirement to reflect Basel 2 evolution. Few

¹¹²⁶ M Emhemed, *The Potential Economic Impacts of Financial Liberalization in Libya in Case of Accession to the World Trade Organization (WTO)* (PhD thesis, University of Huddersfield 2016) 158.

¹¹²⁷ A Kumati, *Commercial Banking in Libya and the Potential for Islamic Banking* (PhD thesis, Durham University 2008) 121–124.

banks in Libya have any kind of internal risk-based (IRB) classification system and the building blocks for eventual advanced IRB provisioning are not in place. 1128

The CBL has a distinct classification system for Islamic banks, with six classifications. The justification for the separate classification system was not clear (see Islamic Banking and Finance, below). The CBL has instituted a deposit insurance programme which covers current accounts at both conventional and Islamic banks. A fee of 0.2 percent is charged against deposits to cover the costs. Despite the investments, supervisory capacity remains weak. The lack of digital capacity, at the banks and at the CBL, forces reliance on paper trails with high error rates. The lack of systematic risk management at the banks also hampers supervision. Bank supervisors need expanded capacity and better tools, including risk-based management and early warning systems. The CBL does not have the legal and technical capacity to impose sanctions for defaults. T It also does not have a clear understanding of the distinct risks of shariah compliant products and approaches. 1129

4.6.2 The Libyan Stock Market Law

The legislation came into force following the formation of the Libyan Stock Market (LSM) by issuing decision number 134 of 2006. 1130 At the time of its establishment, the LSM had acquired LYD capital accumulating by the force of such a regulation. 1131 The supervision and monitoring

World Bank, 'Libya Financial Sector Review' (2020) https://thedocs.worldbank.org/en/doc/288521600444837289-0280022020/original/LibyaFinancialSectorReviewEnglishFinal.pdf accessed 4 October 2021.

¹¹²⁸ Libya Financial Sector Review (World Bank, February 2020) [4.2.4 Banking supervision and oversight] (detailing IMF-supported capacity building and the current status of supervisory tools, monthly reporting requirements, credit classification, and IRB systems).

¹¹³⁰ A Aljbiri, 'The Performance of Libyan Stock Market' (2013) 60(7) Acta Universitatis Agriculturae et Silviculturae Mendelianae Brunensis 27, 30.

¹¹³¹ NS Bayoud and M Kavanagh, 'Corporate Social Responsibility Disclosure: Evidence from Libyan Managers' (2012) 6(5) *Global Journal of Business Research* 73, 78.

duty is done by the "General Public Committee of the Investment,¹¹³² Economic and Commerce." Concerning decision number 3.¹¹³³ The judgment similarly outlined the LSM's goals as follows.

- a) Creating an enabling investment environment to accomplish the general welfare of the market and stakeholders.
- b) To develop a culture of saving and the practice of increasing the level of investment to guarantee that capital investment is directed to the most advantageous areas.
- c) To assure the control and the observation of the financial transactions.
- d) Serves as the basis for socio-economic growth and development.
- e) acts as a facilitator to the privatization of the firms held by the state. 1134
- f) Undertaking the study and gathering statistical data on the listed firms.
- g) Establishing the criteria necessary to verify and secure the accuracy of the transactions happening within the Libyan Financial markets.¹¹³⁵
- h) To build a feeling of competence of the staff within LSM via capacity training.
- i) Developing the cooperative links with other regions and the financial markets within the worldwide market space and managing the organization of the stocks, notably within the firms that are being or have been freshly incepted or formed.¹¹³⁶

¹¹³² TK Kick and A Pfingsten, 'The Importance of Qualitative Risk Assessment in Banking Supervision Before and During the Crisis' (2011) SSRN Electronic Journal https://ssrn.com/abstract=2794064 accessed 27 May 2024.

¹¹³³ Nassr Saleh Mohamad Ahmad and Fathi Ramadan Mousa, 'Corporate Environmental Disclosure in Libya: A Little Improvement' (2011) 6(1–2) *World Journal of Entrepreneurship, Management and Sustainable Development* 149, 152.

¹¹³⁴ C Di Noia and G Di Giorgio, 'Should Banking Supervision and Monetary Policy Tasks Be Given to Different Agencies?' (1999) 2(3) *International Finance* 361, 365.

¹¹³⁵ M Schüler, 'Incentive Problems in Banking Supervision: The European Case' (2003) ZEW Discussion Paper No 03-62, Zentrum für Europäische Wirtschaftsforschung, Mannheim, 12.

¹¹³⁶ CA Goodhart, 'The Organizational Structure of Banking Supervision' (2002) 31(1) Economic Notes 1, 3.

Furthermore, following the decision, according to Article 29, the regulatory framework stipulates that all the private and public enterprises, whose LYD capital is one million or over the value, need to register in the Libyan stock exchanges. Additionally, in light of article 55, as per the decision, the financial reports of the listed firms need to pass through the process of auditing in compliance with the IASs plus the "International standards of performing the auditing."

4.6.3 Libya and International Auditing and Reporting Standards

4.6.3.1 Regulations of Auditing and Accounting in Libya

Libya's auditing and accounting rules were instituted in 1988 following the establishment of the Institute of Public Control (IPC). 1140 The institute is responsible for auditing all the agencies of the state's financial transactions, departmental purchases and sales, 1141 as well as organization with the help of the receipt of the loans granted by the government altogether with other corporations whose contribution of capital is valued above 25 percent of their corporate capital.

And not even feel the roles of IPC have been stretched to encompass foreign companies audit and other ventures with joint proprietorship in the Libyan state, 1142 with the core role being to ensure that the operations of the companies conform to Libya's laws and regulations

¹¹³⁷ OM Elsakit, *The Disclosure and Use of Social and Environmental Information by Libyan Banks* (PhD thesis, Griffith University 2015) 102.

¹¹³⁸ A AlHares and C Ntim, 'A Cross-Country Study of the Effects of Institutional Ownership on Credit Ratings' (2017) 12(8) *International Journal of Business and Management* 80, 85.

¹¹³⁹ Nassr Saleh Mohamad Ahmad and Sydney S Gao, 'Corporate Environmental Disclosure in Libya' (2004) 24(1) *Social and Environmental Accounting Journal* 20.

¹¹⁴⁰ MA Zakari, 'Challenges of International Financial Reporting Standards (IFRS) Adoption in Libya' (2014) 4(2) *International Journal of Accounting and Financial Reporting* 390, 402.
¹¹⁴¹ Ibid 394.

¹¹⁴² NS Bayoud, M Kavanagh and G Slaughter, 'Factors Influencing Levels of Corporate Social Responsibility Disclosure in Libyan Firms: A Mixed Study' (2012) 4(4) *International Journal of Economics and Finance* 13, 16.

underpinning governance of both the public and the private corporations.¹¹⁴³ The institute's membership is the alternative qualification at the professional level of the Libyan Auditors working in the Republic's sector.¹¹⁴⁴

The developments and increasing challenges in the 1970s led to the necessity for building a general accounting and auditing framework. The framework developed from the evidently empty regulatory mechanism that could govern relevant issues, accounts and audits, and the need for a uniform code of practice. The satisfy the legislature, established an Act about accounting that mandated to establish the Libyan Accountants and Auditors Association (LAAA); to oversee the registration of the accountants; to oversee the whole exercise of the profession; the professionals should pay a fee; to handle matters, pensions, and "contribution funds; to set the auditors and the accountants' obligations; the payment of penalties. 1147

The establishment of the LAAA in the year in 1974 had the following objectives such as the organization and advancement of the accounting profession and to level up the accountants' standards and the auditors in the professional, academic and political aspects. It is expected to be involved in the organization of and participation in seminars, conferences and other discourses attached to the field of accounting either at an internal level or an external space for us to keep tabs with new trends, publications of scientific nature, lectures on accountancy, and

¹¹⁴³ K Hamuda and N Sawan, 'Perceptions of Auditor Independence in Libyan Audit Market' (2024) 7(2) *International Business Research* 120, 124.

¹¹⁴⁴ Najeb Masoud, 'The Development of Accounting Regulation in the Libyan Region Countries in Africa' (2016) 7(12) *Research Journal of Finance and Accounting* 45.

¹¹⁴⁵ MA Zakari, 'Challenges of International Financial Reporting Standards (IFRS) Adoption in Libya' (2014) 4(2) *International Journal of Accounting and Financial Reporting* 390, 395.

¹¹⁴⁶ N Sawan and A Alzeban, 'Does Audit Quality in Libya Meet the International Standards Levels?' (2024) 10(6) *International Journal of Business and Management* 155, 160.

¹¹⁴⁷ Accounting and Auditing Professions Law No 116 (1973)

¹¹⁴⁸ P Öhman and E Wallerstedt, 'Audit Regulation and the Development of the Auditing Profession: The Case of Sweden' (2012) 17(2) *Accounting History* 241, 244.

other functions. Establishment overfond connected to Matt's pension to secure the retirement benefits of its members. Finally, LAAA is supposed to fortify under developing collaboration cooperation between the employers and members, to ensure that their rights and freedoms are safeguarded and respected and taking measures against members in breach of the professional ethics and traditions.¹¹⁴⁹

Firms concerned with auditing and accounting services in Libya need to undergo registration and be provided with a licence by the LAAA. ¹¹⁵⁰ It is through such a licence that the firms can render services in the accounting field encompassing preparations of the financial report, undertaking of audits, ¹¹⁵¹ services related to taxation law, matters relating to bankruptcy, consultative management, installation, ¹¹⁵² and design of financial systems. ¹¹⁵³ Because of the shortage of skill and expertise and walk experience in many areas of corporate governance in Libya, ¹¹⁵⁴ coupled with the organizations and companies demanding other diminishing services, most public accountants have resorted to focusing on preparing and auditing financial reports. ¹¹⁵⁵ The latter explains why other services that need to be offered are relatively infrequent.

¹¹⁴⁹ C Goodhart, *The Basel Committee on Banking Supervision: A History of the Early Years 1974–1997* (Cambridge University Press 2011).

¹¹⁵⁰ E El-Firjani, K Menacere and R Pegum, 'Developing Corporate Accounting Regulation in Libya: Past and Future Challenges' (2014) 4(1) *Journal of Accounting in Emerging Economies* 22, 25.

¹¹⁵¹ CK Eller, Can Using the Internal Audit Function as a Training Ground for Management Deter Internal Auditor Fraud Reporting? (PhD thesis, Virginia Commonwealth University 2014).

¹¹⁵² MM Larbsh, An Evaluation of Corporate Governance Practice in Libya: Stakeholders' Perspectives (PhD thesis, Nottingham Trent University 2010)

¹¹⁵³ M Laga, 'Obstacles of Adoption and Implementation of IFRS in Libya' (2013) 8(1) *European Journal of Business and Economics* 1, 5.

¹¹⁵⁴ S El-Halaby and K Hussainey, 'Determinants of Compliance with AAOIFI Standards by Islamic Banks' (2016) 9(1) *International Journal of Islamic and Middle Eastern Finance and Management* 143, 147.

¹¹⁵⁵ B Ritchie and E Khorwatt, 'The Attitude of Libyan Auditors to Inherent Control Risk Assessment' (2007) 39(1) *The British Accounting Review* 39, 42.

4.6.3.2 International Reporting Standards (IFRS) in Libya

Among the most significant examples of difficulties that Libya still encounters in the implementation of the International Reporting Standards (IFRS) is a lack of technical capabilities and insufficiency of the know-how of Libyan accountants of the professional standards. There also lies a big challenge in architecture ring and enhancing the accounting systems in place. The current legislative framework has been relatively sluggish to catch up with social-economic growth. Despite the excellent aim and complexity that the worldwide financial reporting standards bring to the table, the applicability still stays at half the hurdle on the promise of limited understanding about the same. Fortunately, several economic and corporate experts have provided suggestions that may facilitate seamless implementation of the IFRS programme in the accounting profession to facilitate systemic risk mitigation in the Libyan corporate sector that has undergone an overhaul and massive evolution.

The proposals to mitigate the challenges include, among others, providing adequate capacity building and professional training today professional accountants in the Libyan sector, solidifying the professional accountancy body, 1161 Libyan accountants and auditors'

¹¹⁵⁶ Samuel C Thompson, Accounting for a Developing World: A Look at International Standards on Developing Countries (Chancellor's Honors Program Project, University of Tennessee, Knoxville, May 2016) https://trace.tennessee.edu/utk_chanhonoproj/1986 accessed 19 August 2024.

¹¹⁵⁷ AAM Hawashe, 'Commercial Banks' Attributes and Annual Voluntary Disclosure: The Case of Libya' (2016) 5(2) *International Journal of Accounting and Financial Reporting* 208, 212.

¹¹⁵⁸ S Lay, Empirical Assessment of International Financial Reporting Standards Adoption in Cambodia (PhD thesis, Lincoln University 2019)

¹¹⁵⁹ M Kribat, 'Perceptions of the Users of Financial Information about the Content and Usefulness of Libyan Banks' Annual Reports' (2015) 42(2) *Dirasat: Administrative Sciences* 643, 648.

¹¹⁶⁰ P Brown, 'International Financial Reporting Standards: What Are the Benefits?' (2011) 41(3) Accounting and Business Research 269, 272.

¹¹⁶¹ ML Davis, 'Regulating Banks by Regulating Capital' (2018) 41 Regulation 38, 42.

association, 1162 as well as consistent revision of existing laws and regulatory framework on accounting matters. 1163

4.7 Conclusion

Recent crises in the corporate sector give the idea that lack of attention to the role the capital, corporate governance, and absence of specific financial rules makes the international business system riskier than previously. A notable illustration involves the financial catastrophes that befell the Lehman brothers. Putting Libya in the middle position of the systematic risk mitigation, for Libya to mitigate gate risks that might befall the corporate and the whole banking systems, there was the need to regulate laws, adopt models, and implement strategic approaches to avert any looming financial risks. To understand the manner, Libya navigated through in implementing such crucial laws, and the doctrinal research method chapter investigated the Capital's role, governance of the Libyan corporate sector, and regulation of the finances is done by the corporations and commercial banks and other financial and non-financial institutions play in ensuring that risks that could bring a corporation down to their knees are mitigated.

The legislative framework and other systematic models and techniques have all sought to guarantee that the firms inside Libya keep liquidated and risks are handled, and the company keeps a solid listing within the Libyan stock market. The influential actor in the establishment and approval of International and national financial law frameworks such as the OECD 2004 and the 2010 recommendations is the Central Bank of Libya. It has played a Key role in

¹¹⁶² Basel Committee on Banking Supervision, *Principles for Sound Liquidity Risk Management and Supervision* (BIS, September 2008).

¹¹⁶³ J Shariha, 'The Role of Audit Bureau in Eradicating Financial Corruption in Libya' (2014) 5(1) *Jurnal Akuntansi Multiparadigma* 18, 22.

ensuring that all the conceivable holes that can lead to the financial crises of a business entity are plugged in, and the approaching hazards are avoided. The laws primarily pertain to commerce, the Libyan stock market, capital, and the body of frameworks dealing with financial supervision. Whether the regulatory system, techniques, and mechanical aims have limited internal risks throughout the turbulent times and endless wars that ravaged the Libyan economy and business system. The essential mitigation role that laws played a vital part in reducing internal risks is that they have helped minimize the 2008 global crisis both locally and globally.

Moreover, the doctrinal research methodology chapter has established the strict financial regulatory framework, ensuring that all the corporate entities incorporated or have a branch in Libya do not derogate from such framework for uniformity in systemic efficiency to mitigate the risks.

Moreover, Libya as a nation professes to the Islamic faith. Moreover, there are Islamic banks that are incorporated. Such banks comply with rigorous Sharia rules focused on Islamic beliefs. Such sharia-based principles play a key role in ensuring that the country's economic development and its capacity to engage in international markets are on an upward commercial trajectory to keep up with growing trends in the capital markets.

Much like any sector of any developed or developing world, Libya's business sector has not been one without obstacles. Nonetheless, despite the challenges caused by the global economic crisis and the closure of the Libyan economy in 2014, the lack of improvement of banking systems has delayed restoring the Libyan economy and weaken confidence among investors in the importance of the corporate world, especially the banking system. Additionally, the supervision of banks and other financial institutions by the Central Bank of Libya requires much

effort to control and regulate finances, boost the welfare of banking institutions, and support the stability of the financial markets.

In guaranteeing that the financial regulatory system shall be bolstered on all fronts, the rules crosscut the entire financial system. To begin with, the regulatory framework and the established International financial standards. Libya is on the capacity development process and system installation to guarantee that all the accounting operations and auditing processes correspond to the Modern IFRS system that replaces the American accounting framework. However, despite the prospects IFRS systems present in terms of uniformity of the accounting procedures across all the incorporated commercial entities in Libya, Libya lacks the skill-set and expertise with a wealth of knowledge to fast-track the whole systemic implementation. One step at a time and Libya as a country shall be there.

The finishing shot sets Libya on the appropriate trajectory of utilizing the aptest financial and capital models, processes, and frameworks to assure an efficient corporate management system. Despite the setbacks, at a time, the adoption of the modern technologies and financial system shall soon complete re-innovating the whole corporate system, ensuring that the chances of any corporation going under are at its bare minimum due to an installed water-tight corporate systemic risk mitigation network of mechanisms.

Chapter Five: An Integrated Approach for Systemic Risk Mitigation in Libya

5.1 Introduction

The pursuit of reform within the Libyan corporate governance framework, capital requirements, and financial supervision is a response to the evolving exigencies of the global financial architecture and the need to align with international standards. This chapter titled "Proposed Reforms" argues for an integrated approach to systemic risk mitigation to overhaul of Libya's financial regulatory system to enhance the robustness, transparency, and efficiency of its financial institutions.

At the heart of these proposed reforms is the adoption of a corporate governance framework that strives for the delicate balance between stringent oversight and the promotion of sound risk-taking behaviours. This recalibration seeks to embed best practices in corporate governance that are recognised as the bedrock for financial stability and investor confidence, as underscored by the international bodies such as Basel Committee and the OECD. 1164 Furthermore, the revision of capital requirements is informed by the Basel III framework, which sets forth a more resilient capital framework for banks worldwide. 1165 The reforms are expected to not only bolster the capital adequacy of Libyan banks but also to ensure that their capital reserves are commensurate with the underlying risks these institutions bear. This is particularly

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Organisation for Economic Co-operation and Development, OECD Principles of Corporate Governance (OECD 2015).
 Basel Committee on Banking Supervision, Basel III: A Global Regulatory Framework for More Resilient Banks and Banking Systems (BIS 2011).

salient given the findings of Laeven and Levine, who demonstrate the importance of strong capital bases in maintaining bank solvency and financial sector stability.¹¹⁶⁶

Moreover, the chapter advocates for the enhancement of the financial supervisory regime in Libya. Drawing inspiration from the Financial Stability Board's recommendations, 1167 the envisaged supervisory structure aims to be robust enough to prevent financial crises while being sufficiently adaptable to respond to an ever-changing financial landscape. The International Monetary Fund's (IMF) Financial Sector Assessment Programme (FSAP) has been instrumental in evaluating the adequacy of financial systems across the globe, and its insights serve as a critical touchstone for the proposed supervisory reforms. Thus, the reforms proposed in this chapter represent a concerted effort to recalibrate Libya's financial regulatory framework in alignment with international standards, thereby fostering a financial system that is resilient, transparent and conducive to sustainable economic growth.

5.2 An Integrated Approach to Systemic Risk Mitigation

The banking sector forms the backbone of a country's financial system and economy. 1169
However, banks also introduce risks that need to be properly regulated and supervised to ensure financial stability. In recent decades, policymakers and regulators around the world have focused on enhancing banking laws and regulations to mitigate systemic risk better while enabling banks to support economic growth. 1170 Mitigating risk transmission requires urgent

¹¹⁶⁶ L Laeven and R Levine, 'Bank Governance, Regulation, and Risk Taking' (2009) 30(3) *Journal of Financial Economics* 259, 262.

¹¹⁶⁷ Financial Stability Board, Key Attributes of Effective Resolution Regimes for Financial Institutions (FSB 2014).

¹¹⁶⁸ World Bank, Financial Sector Assessment: A Handbook (World Bank 2005).

¹¹⁶⁹ S Claessens and L Laeven, 'Financial Dependence, Banking Sector Competition, and Economic Growth' (2005) 3(1) *Journal of the European Economic Association* 179, 183.

¹¹⁷⁰ S Claessens and LE Kodres, *The Regulatory Responses to the Global Financial Crisis: Some Uncomfortable Questions* (IMF 2014).

governance reforms adapted from global standards on bank supervision and lessons from emerging markets experiencing systemic crises.¹¹⁷¹ An appropriate legal and regulatory framework that keeps pace with the evolving banking landscape is crucial to balance risk-taking in banking with the safety and soundness of the overall system.¹¹⁷² A sound banking law provides an overarching framework, while regulations and subsidiary legislation contain more details on implementation that can be modified more easily as industry practices evolve.¹¹⁷³ Hence, several jurisdictions have adopted a two-tiered approach - keeping banking laws highlevel while shifting prescriptive details to regulations overseen by the banking supervisor.¹¹⁷⁴

The Basel Core Principles for Effective Banking Supervision advocate for countries to have a well-founded legal framework that provides clear responsibilities for banking supervision. However, sound banking regulation goes beyond laws and requires substantive rules and policies by the banking supervisor to address risks. Regulations enable implementation of the law, filling gaps, keeping pace with innovations, and refining rules based on industry feedback and supervisory experience. This enables the law to provide high-level objectives and powers while regulations address implementation aspects and can be updated faster through administrative procedures rather than lengthy legislative processes. Such a framework

¹¹⁷¹ M Čihák and others, 'Bank Regulation and Supervision Around the World: A Crisis Update' (2012) World Bank Policy Research Working Paper No 6286; OECD, *Risk Mitigation and Allocation in Infrastructure, Including Public-Private Partnerships in APEC Economies: Selected Good Practices* (OECD, Global Infrastructure Hub and Asian Development Bank, October 2017).

¹¹⁷² JR Barth, G Caprio Jr and R Levine, 'Bank Regulation and Supervision in 180 Countries from 1999 to 2011' (2013) 5 *Journal of Financial Economic Policy* 111, 118.

¹¹⁷³ World Bank, *Good Practices for Financial Consumer Protection* (World Bank 2012); Financial Stability Board, *Thematic Review on Risk Governance* (FSB, February 2013).

¹¹⁷⁴ J Palmer and C Cerruti, 'Is There a Need to Rethink the Supervisory Process?' (Discussion paper, World Bank and Banco de España Conference on Reforming Financial Regulation and Supervision: Going Back to Basics, Madrid, 15 June 2009); J Black, M Hoper and C Band, 'Making a Success of Principles-Based Regulation' (2007) 1 *Law & Financial Markets Review* 191, 194.

¹¹⁷⁵ Basel Committee on Banking Supervision, Core Principles for Effective Banking Supervision (BIS 2012).

¹¹⁷⁶ World Bank, Good Practices for Financial Consumer Protection (World Bank 2012).

¹¹⁷⁷ L Garslian, 'Towards a Universal Model Regulatory Framework for Derivatives: Post-Crisis Conclusions from the United States and the European Union' (2016) 37 *University of Pennsylvania Journal of International Law* 941, 947.

balances the stability benefit of banking laws with the flexibility of regulations to modify norms as industry practices develop. Clarity and adaptability of processes and procedures are essential components of an integrated approach to systemic risk mitigation. Singapore's banking regulatory framework demonstrates a good example of a two-tiered structure balancing law and regulations. The Banking Act sets broad objectives, but supervision policies and implementation details are covered under MAS Notices and Guidelines that can be updated faster by the banking supervisor MAS.¹¹⁷⁸ In the European Union, the Capital Requirements Directive IV has also adopted a similar approach – setting broad requirements for banks at the directive level that then get implemented through detailed technical standards developed by the European Banking Authority (EBA).¹¹⁷⁹ This has provided more flexibility to modify norms through the EBA rather than changing the primary directive. Such country examples highlight the growing recognition of high-level banking laws supported by evolvable regulations and policies set by the supervisor to enhance governance and risk management while responding better to market changes.

Alignment with the Basel Core Principles (BCPs) is another essential component of an integrated approach to systemic risk mitigation. The argument for having an appropriate balance between banking laws and regulations closely aligns with international standards set under the BCPs for bank regulation and supervision. The BCPs explicitly call for (a) high-level banking laws to provide clear responsibilities and objectives for supervision; (b) sufficient

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¹¹⁷⁸ CY Ting and W-Q Li, 'Banking Laws and Regulations: Singapore' in *Global Legal Insights: Banking and Finance Laws and Regulations* (GLI, 10 March 2023) https://www.globallegalinsights.com/practice-areas/banking-and-finance-laws-and-regulations/singapore accessed 6 January 2024.

regulations/singapore accessed 6 January 2024.

1179 European Banking Authority, 'Regulatory Technical Standards on the Content Lists of Conditions to be Used by the European Banking Authority When Drafting Regulatory Technical Standards on the Application of Article 7(3) of Regulation (Capital Requirements) No 575/2013' (2013) https://www.eba.europa.eu accessed 7 January 2024.

1180 Basel Committee on Banking Supervision, Core Principles for Effective Banking Supervision (BIS 2012).

legal powers to issue regulations and detailed rules to be followed by banks; and (c) ongoing modifications and refinements of regulations in line with industry changes.¹¹⁸¹

Hence, the BCPs recognize having detailed and responsive regulations under the banking law as crucial for supervision effectiveness. This enables translating high-level legal requirements into implementable norms for sound governance and risk management by banks. However, in terms of coverage, while the BCPs expect key powers and responsibilities to be directly embedded in the law, operational procedures and prescriptive details can be housed under subsidiary regulations. This helps avoid codifying transient aspects in laws that require lengthy procedures to modify from time to time. Therefore, global standards see benefit in bifurcating the banking regulatory architecture across adaptable regulations and oversight policies set by the supervisor alongside a higher banking law catering to fundamental responsibilities and powers.

An integrated approach to systemic risk mitigation must include fintech. The transforming power fintech wields over finance, the fusing of technology with services traditionally intermediaries by banks, is proving one of the most impactful innovations in developing economies. What began as a series of insurgent money transfer and lending models built around mobile communications and big data analytics has opened opportunities for technology

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¹¹⁸¹ Basel Committee on Banking Supervision, 'Core Principles for Effective Banking Supervision' (BIS, 14 September 2012) https://www.bis.org/publ/bcbs230.htm accessed 7 January 2024.

¹¹⁸² R Dewantara, M Munir, Sihabudin and Sukarmi, 'Supervision of Banking Institutions in Achieve Sound Banking in Indonesia' (2015) 41 *Journal of Law, Policy and Globalization* 97, 102.

¹¹⁸³ IMF, 'United Kingdom Financial Sector Assessment Program: Banking Supervision and Issues in Financial Stability' (IMF Country Report No 22/105, 2022) https://www.imf.org/-/media/Files/Publications/CR/2022/English/1GBREA2022006.ashx accessed 7 January 2024.

¹¹⁸⁴ Basel Committee on Banking Supervision, 'Basel III: A Global Regulatory Framework for More Resilient Banks and Banking Systems – Revised Version June 2011' (BIS, 1 June 2011) https://www.bis.org/publ/bcbs189.htm accessed 7 January 2024

¹¹⁸⁵ C Brummer and Y Yadav, 'Fintech and the Innovation Trilemma' (2019) 107 Georgetown Law Journal 235, 239.

firms, fintech start-ups and hybrid mobile network operator banks to disrupt longstanding market structures. 1186

Cryptocurrencies leveraging decentralized encryption for stored value without traditional issuers or processors represent another dimension – one highlighting risks posed to consumers and financial stability absent adequate oversight frameworks. Yet caution regarding crypto should not distract from the enormous potential of responsible fintech - if harnessed correctly based on thoughtful regulation - to drive financial access and efficiency in places long overlooked by conventional providers. Capturing opportunities while mitigating risks poses an enormous governance challenge. When accounting giant PwC surveyed financial execs worldwide in 2017, approximately 60 percent said keeping pace with fintech advancements was their top concern. 80 percent felt at risk of losing business. Most expected partnerships, mergers and outsourcing to bridge innovation gaps faster than internal change could deliver. But that requires updated rules and capacities enabling sustainable evolution. 1187

Without urgent governance, risk management and cultural reforms, Libya's banking sector will continue lurching from crisis to crisis - further destabilizing the wider economy and political environment. Libya's economy exhibits deep interconnectedness between a fragile fiscal situation and state-owned banks that dominate the financial system. With over 90% of sector assets in public banks, distress poses systemic threats that can disrupt wider economic functions. The risks escalated after the 2011 due to fluctuating institutional capacity,

¹¹⁸⁶ A Pelletier, S Khavul and S Estrin, 'Innovations in Emerging Markets: The Case of Mobile Money' (2020) 29(2) *Industrial and Corporate Change* 395, 399.

¹¹⁸⁷ PwC, 'Global Fintech Report 2017 – Redrawing the Lines' (PwC 2017) https://www.pwc.com/gx/en/industries/financial-services/assets/pwc-global-fintech-report-2017.pdf accessed 24 January 2024.

¹¹⁸⁸ I Lukonga, Islamic Finance, Consumer Protection, and Financial Stability (IMF 2018).

¹¹⁸⁹ Yakup Asarkaya and Serkan Özcan, 'Determinants of Capital Structure in Financial Institutions: The Case of Turkey' (2007) 1 *Journal of BRSA Banking and Financial Markets* (Banking Regulation and Supervision Agency) 91, 95.

outdated oversight approaches, and weak internal controls in leading banks that propagate sovereign contagion channels. An integrated approach to systemic risk mitigation synthesizes priorities for public banks in Libya, accounting for the nation's unique legal traditions, state ownership structures and political economy constraints.

5.3 Corporate Governance Dimensions of Integrated Approach to Systemic Risk Mitigation in Libya

Libya's banking sector has witnessed significant instability and allegations of corruption in recent years, undermining public trust and the economy. Poor governance and control environments within banks have enabled misconduct such as fraud, self-dealing and corruption, as well as contributing to capital and liquidity problems. Several Libyan banks have suffered in recent years from poor lending practices, questionable transactions, or liquidity issues, sparking panic and protests among depositors unable to access savings. These problems reflect inadequate board oversight, blinkered management culture, concentration of power and poor internal controls at some Libyan banks. Management have pursued risky objectives like rapid loan growth without sufficient analysis of portfolio quality. 1195

The corporate governance elements of an integrated approach to systemic risk mitigation include recommendations that target enhanced shareholder rights, disclosures, board

https://thedocs.worldbank.org/en/doc/288521600444837289-

0280022020/original/LibyaFinancialSectorReviewEnglishFinal.pdf accessed 11 January 2024, 14.

¹¹⁹⁰ Rami Zeitun, 'Determinants of Islamic and Conventional Banks' Performance in GCC Countries Using Panel Data Analysis' (2012) 5(1) *Global Economy and Finance Journal* 53, 56.

¹¹⁹¹ R Jalloul and M Haque, 'Systemic Risk and Commercial Bank Stability in the Middle East and North Africa (MENA) Region' (2025) 13 *Risks* 120.

¹¹⁹² Michael E Porter, National Economic Strategy: Libya's Moment for Action (Monitor Group, 22 February 2007)

¹¹⁹³ World Bank, 'Libya Financial Sector Review' (World Bank, February 2020)

¹¹⁹⁴ Ibid 26.

¹¹⁹⁵ Ibid 47.

competencies and risk management practices per gaps in prevailing oversight frameworks flagged in IMF Financial Sector Assessment Program (FSAP) reviews. The integrated approach suggests that corporate governance and risk mitigation provisions are better covered by subsidiary law (regulations). The argument highlights certain specific requirements related to corporate governance including fit and proper assessments, audit and valuations, and supervisory inspections that may be better shifted into regulations rather than banking laws. Under each area, the rationale and country examples are discussed regarding housing these under regulations.

5.3.1 Capable and ethical leadership in banks

Banks play a pivotal role in economies by connecting savers, investors and borrowers. However, by transforming short-term deposits into long-term loans, they also inherently court liquidity risks. 1196 Poor decision-making and oversight can thus spark crises cascading into the wider system. 1197 Research overwhelmingly shows that effective governance and integrity-focused bank leadership curbs hazards via scrutiny, accountability and measured policies -promoting resilience despite complexity. 1198

Unlike most firms, imprudent banks endanger whole economies since public confidence determines their viability.¹¹⁹⁹ If questions emerge over deposit safety due to lax controls, it

¹¹⁹⁶ Frederic S Mishkin, *Monetary Policy Strategy: Lessons from the Crisis* (National Bureau of Economic Research Working Paper No w16755, 2011)

¹¹⁹⁷ Patrick Lagadec, *Preventing Chaos in a Crisis* (McGraw-Hill, Maidenhead 1993).

¹¹⁹⁸ Frederick Tung, 'Pay for Banker Performance: Structuring Executive Compensation for Risk Regulation' (2011) 105 *Northwestern University Law Review* 1205, 1210.

¹¹⁹⁹ Hyun Song Shin, 'Reflections on Northern Rock: The Bank Run That Heralded the Global Financial Crisis' (2009) 23(1) *Journal of Economic Perspectives* 101, 104.

sparks fear-induced bank runs further destabilizing the system.¹²⁰⁰ By inheriting control over societal savings, banks also assume fiduciary stewardship duties around safeguarding and cautiously managing funds under their care.¹²⁰¹ However wayward leadership detached from stakeholder needs repeatedly violates such obligations in pursuit of unrestrained enrichment or power, fuelling instability.¹²⁰²

Consequently, banks warrant tighter oversight protections including competent directors scrutinizing management, accountability mechanisms such as transparency laws, extensive external audits, strict internal controls, and consumer protections. ¹²⁰³ Leadership standards must also aim higher. Without ethical stewardship and diligent governance, risks mount rapidly.

Research overwhelmingly demonstrates that effective governance and ethical leadership in banks promotes stability and reduces misconduct. ¹²⁰⁴ Capable and integrity-focused boards and managers that encourage strong internal controls are essential given the risks banks pose to wider economy. ¹²⁰⁵ Banks rely significantly on public trust and confidence due their intermediary role. ¹²⁰⁶ Consequently, they have special duties of integrity, stewardship and

¹²⁰⁰ Itay Goldstein and Ady Pauzner, 'Demand–Deposit Contracts and the Probability of Bank Runs' (2005) 60(3) *The Journal of Finance* 1293, 1296.

¹²⁰¹ Jennifer Arlen and Marcel Kahan, 'Corporate Governance Regulation through Nonprosecution' (2017) 84 *University of Chicago Law Review* 323, 326.

¹²⁰² Steven L Schwarcz, 'Corporate Governance of SIFI Risk-Taking' (2018) 41 *Dublin University Law Journal* 33, 38. ¹²⁰³ Steven L Schwarcz, 'Regulating Shadow Banking: Inaugural Address for the Inaugural Symposium of the *Review of Banking & Financial Law*' (2012) 31 *Review of Banking and Financial Law* 619, 622.

 ¹²⁰⁴ Lucia Ana Tomic, David Tomasek and Marko Zunic, 'Fit and Proper Assessment of Board Members' (2020) 7
 InterEULawEast: Journal for the International and European Law, Economics and Market Integrations 263, 266.
 ¹²⁰⁵ Simone M Sepe, 'Regulating Risk and Governance in Banks: A Contractarian Perspective' (2012) 62 *Emory Law Journal* 327, 332.

¹²⁰⁶ L Chernykh, D Davydov and J Sihvonen, 'Financial Stability and Public Confidence in Banks' (2023) 69 *Journal of Financial Stability* 101187, 101190.

resilience. Leadership plays a crucial role in embedding ethics and prudence into organizational culture. 1207

First, board oversight curbs excessive risk taking. Studies show banks with more independent and expert directors have better asset quality, capital adequacy and transparency - key markers of stability. Diverse boards considering decisions from multiple lenses cuts groupthink and constructively challenging management around strategy, controls, lending and appointments reduces hazards. Similarly, responsible managers focused on sustainability over short-term profits build resilience. Their duty of stewardship requires considering stakeholder needs when framing policies. Ethical leaders embed prudence and compliance through values-based messaging and incentives.

In contrast, incapable or docile boards that rationalize or defer to unethical managers pose clear financial and integrity threats. ¹²¹² Rogue CEOs and self-serving directors can thus destabilize entire sectors without safeguards. Reforms promoting expertise, accountability and integrity in bank leadership must therefore complement any strengthening of financial regulations.

The Central Bank of Libya's (CBL) regulations have introduced entry criteria including experience, qualifications and a clear disciplinary record for directors and senior manager

¹²⁰⁷ Mark DH Nelemans, 'Financial Regulation and Corporate Governance in Banks' (2019) 11 *European Journal of Comparative Corporate and Financial Law (EJCCL)* 21, 24. ¹²⁰⁸ Ibid 27.

¹²⁰⁹ C Fernandes and others, 'The Impact of Board Characteristics and CEO Power on Banks' Risk-Taking: Stable versus Crisis Periods' (2021) 22 *Journal of Banking Regulation* 319, 323.

¹²¹⁰ Suzanne Le Mire, 'Independent Directors: Partnering Expertise with Independence' (2016) 16 *Journal of Corporate Law Studies* 1, 4.

¹²¹¹ C Fernandes and others, 'The Impact of Board Characteristics and CEO Power on Banks' Risk-Taking: Stable versus Crisis Periods' (2021) 22 *Journal of Banking Regulation* 319, 329.

¹²¹² M Cikaliuk, L Eraković and B Jackson, *Responsible Leadership in Corporate Governance: An Integrative Approach* (Routledge 2023).

appointments.¹²¹³ This presents a significant foundation for enhancing leadership standards. The regulations require bank CEOs, board chairs, directors and senior managers in control functions (chief financial, risk, compliance and technology officers) to meet thresholds around qualifications, banking exposure and misconduct to assume positions.¹²¹⁴

The regulations prescribe minimum benchmarks, for example, CEOs must hold relevant university degrees, have at least 10 years financial sector experience with 5 in a senior role, and not have an undischarged bankruptcy, criminal conviction or regulatory penalty. Similar criteria are mandated for other senior posts like chairs. However, when it comes to assessing suitability, banks must submit documentation showing that the candidates have met stipulated benchmarks for the Central Bank of Libya's (CBL) assessment prior to formal appointment or reappointment. This allows the regulator to gauge suitability and block improper candidates that lack skills, integrity or competence.

Ongoing screening during tenures further allows the CBL to monitor culture and performance, requesting additional employee records where concerns emerge around capabilities or conduct. Regular reporting obligations also enhance transparency. Such regulatory approach does not come without limitations and challenges. While the regulations bring Libya closer to international fit and proper standards for senior bankers, effectiveness depends on rigorous implementation and calibrated criteria. For example, benchmarks must keep pace

¹²¹³ Central Bank of Libya, Circular No 03 of 2022: Requirements for Membership on the Boards of Directors of Banks.

¹²¹⁴ Central Bank of Libya, Circular No 06 of 2022: Controls for Appointing Directors of Key Departments (Internal Audit, Risk Management, and Sharia Audit) as Well as Their Deputies.

¹²¹⁵ Central Bank of Libya, Circular No 08 of 2023: Evaluation of the Performance of General Managers in Banks.

¹²¹⁶ Central Bank of Libya, Circular No 15 of 2023: Framework for Evaluating Chairpersons and Members of the Boards of Directors of Banks Operating in Libya.

¹²¹⁷ David Walker, 'A Review of Corporate Governance in UK Banks and Other Financial Industry Entities' (26 November 2009) https://www.ecgi.global/sites/default/files/codes/documents/walker review 261109.pdf accessed 12 January 2024, 12.

with industry risk and complexity for the tests have bite - but unrealistic thresholds can also shrink talent pools during shortages. Regulatory capture risks around appointments also persist without additional reforms. Persist without additional reforms.

Nonetheless this regulation provides the platform for a wider shakeup of leadership expectations. Additional touches like mandatory interviews, incentives and protections for internal whistleblowers, expanded CBL powers to sanction and ongoing professional education can consolidate integrity gains. National regulators such as the UK Financial Conduct Authority see interviews as central to filtering out those lacking competence or integrity otherwise masked by qualifications. Applied alongside updated criteria, structured interviews would significantly strengthen approval processes.

5.3.2 Fit and Proper Criteria for Board/Management

Fit and proper assessments aim to ensure that banks have qualified boards and senior management in line with their scale and complexity of operations. However, prescribing exhaustive fit and proper criteria within banking laws risks being disproportionate, insufficiently flexible as conditions evolve, and not keeping up with international governance standards. Hence, global principles around fit and proper frameworks for banks advocate

¹²¹⁸ Michael S Barr, Sendhil Mullainathan and Eldar Shafir, *Behaviorally Informed Financial Services Regulation* (Asset Building Program Policy Paper, New America Foundation 2008).

¹²¹⁹ Dan Awrey, 'Complexity, Innovation, and the Regulation of Modern Financial Markets' (2012) 2 *Harvard Business Law Review* 235, 236.

¹²²⁰ Rushil Deshpande, 'Whistle Blowers Protection under Corporate Governance System' (2023) *International Journal of Law, Management and Humanities* 947, 951.

¹²²¹ Financial Services Authority, *Competence and Ethics* (Consultation Paper CP10/12, 2010) https://www.fca.org.uk/publication/consultation/cp10 12.pdf accessed 15 January 2024.

¹²²² Financial Conduct Authority, 'DP18/2: Transforming Culture in Financial Services' (12 March 2018) https://www.fca.org.uk/publications/discussion-papers/dp18-2-transforming-culture-financial-services accessed 21 January

¹²²³ OECD, *G20/OECD Principles of Corporate Governance* (OECD Publishing, Paris 2015) http://dx.doi.org/10.1787/9789264236882-en accessed 21 January 2024.

having high-level expectations set in law calling for board and management to have adequate skills, experience, integrity and independence.¹²²⁴ But detailed criteria are better established through guidelines and regulations by the banking supervisor in line with industry profile rather than codifying transient aspects in legislation.¹²²⁵

Such an approach balances legal backing for fit and proper assessments with flexibility for the supervisor to modulate expectations via regulations as market and risk profiles change. Prescriptive fit and proper criteria also help address concerns around excessive board tenure and lack of refreshment that have been linked with heightened risk-taking and financial stress at banks. Without capable, ethical leaders that encourage transparency, compliance and internal oversight, governance will continue to falter, exposing banks and the wider economy to repeated crises. Therefore, reforms such as a fit and proper regime for bank directors and managers, to address governance and compliance failures undermining stability and trust are highly recommended. Unethical and incapable leaders have contributed to repeated crises through poor oversight, domination of power, a disregard for controls, and the pursuit of excessively risky policies.

Poor governance and compliance cultures within Libyan banks have exacerbated significant challenges in recent years, including political instability, economic uncertainty, and allegations

https://thedocs.worldbank.org/en/doc/288521600444837289-

0280022020/original/LibyaFinancialSectorReviewEnglishFinal.pdf accessed 11 January 2024, 52.

¹²²⁹ Ibid 63.

¹²²⁴ Michael W Taylor, 'The Road from Twin Peaks – and the Way Back' (2009) 16 *Connecticut Insurance Law Journal* 61, 65.

¹²²⁵ Financial Stability Board, 'Implementation and Effects of the G20 Financial Regulatory Reforms' (9 November 2015) https://www.fsb.org/2015/11/implementation-and-effects-of-the-g20-financial-regulatory-reforms/ accessed 7 January 2024. 1226 Chris Brummer, 'How International Financial Law Works (And How It Doesn't)' (2011) 99 Georgetown Law Journal 257, 260.

¹²²⁷ Maiju Muller-Kahle and Krista B Lewellyn, 'Did Board Configuration Matter? The Case of US Subprime Lenders' (2011) 19 *Corporate Governance: An International Review* 405, 408.

¹²²⁸ World Bank, 'Libya Financial Sector Review' (World Bank, February 2020)

of corruption, contributing to an erosion of public trust. ¹²³⁰ Governance challenges extend beyond board competence to issues of integrity. Cronyism and self-dealing are also endemic in appointments - which see capable experts side-lined for personal allies. Managers consequently enjoy a free reign. This results in corruption risks around lending, self-dealing and potential support for militia groups according to experts. Reports suggest some Libyan banks indirectly financed terrorism by failing to conduct sufficient customer due diligence. Major embezzlement scandals have also undermined public trust. Opacity of data and transactions create opportunities for such misconduct and fraud.

Implementing a comprehensive "fit and proper" regime for key personnel in banks represents an important opportunity to strengthen governance, integrity and stability within the sector. Libya requires a fit and proper test for directors and senior managers at banks to ensure that only ethical and capable individuals control these influential institutions. Introducing a robust fit and proper regime for vetting and approving directors and senior managers is vital for strengthening governance, integrity and stability in Libya's banking sector. Recent regulation presents progress, but a more refined model with additional Central Bank of Libya (CBL) oversight powers can facilitate deeper cultural change. 1231 There is also minimal transparency or meaningful information sharing around lending practices, policy deliberations or outcomes amidst a highly politicized governance environment. 1232 Boards consequently struggle to fully

¹²³⁰ Derick W Brinkerhoff, 'Rebuilding Governance in Failed States and Post-Conflict Societies: Core Concepts and Cross-Cutting Themes' (2005) 25(1) *Public Administration and Development: The International Journal of Management Research and Practice* 3, 6-9.

¹²³¹ Financial Conduct Authority, *Individual Accountability: Extending the Senior Managers & Certification Regime to all FCA Firms* (Consultation Paper CP17/25, July 2017) https://www.fca.org.uk/publication/consultation/cp17-25.pdf accessed 11 January 2024.

¹²³² Stijn Claessens and B Burcin Yurtoglu, 'Corporate Governance in Emerging Markets: A Survey' (2013) 15 Emerging Markets Review 1, 4.

understand risk exposures or exercise their oversight duties. ¹²³³These weaknesses manifest in poor asset quality, weak capital buffers, and short-term liquidity shortfalls - especially at smaller banks. ¹²³⁴ When economic shocks hit, governance and risk flaws are amplified, sparking wider crises. ¹²³⁵

A fit and proper regime would empower the Central Bank of Libya (CBL) to assess the suitability of candidates for key posts, based on criteria such as integrity, competence, experience and qualifications. By filtering out unethical or incompetent directors and managers, this regime would gradually transform culture and capability within banks. By legally requiring key personnel to meet ethics, experience and competence standards, the CBL can gradually transform the banking culture and capacity. Over the long-term, higher calibre leadership focused on transparency and effective governance will renew public confidence, facilitate sustainable growth, and mitigate systemic risks. 1236 The CBL should now follow through with implementation, using its oversight powers to incentivise banks towards better governance and compliance. But legal measures need to be paired with wider cultural change across the sector focused on integrity, accountability and sound stewardship.

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¹²³³ Abhishek Srivastav and Jens Hagendorff, 'Corporate Governance and Bank Risk-Taking' (2016) 24(3) *Corporate Governance: An International Review* 334, 337.

¹²³⁴ Financial Stability Board, IMF and World Bank, *Financial Stability Issues in Emerging Market and Developing Economies: Report to the G-20 Finance Ministers and Central Bank Governors* (2 November 2011) 4. ¹²³⁵ Ibid 19.

https://www.unodc.org/documents/corruption/G20-Anti-Corruption and Ensuring Integrity in State-Owned Enterprises (2018)
https://www.unodc.org/documents/corruption/G20-Anti-Corruption-Resources/Accountability-and-Monitoring-Reports/2018 G20 High-Level Principles for Preventing Corruption and Ensuring Integrity in State-Owned Enterprises.pdf accessed 11 January 2024; United Nations, An Anti-Corruption Ethics and Compliance Programme for Business: A Practical Guide (UNODC 2013) https://www.unodc.org/documents/corruption/Publications/2013/13-84498 Ebook.pdf accessed 11 January 2024.

5.3.3 Criteria and Procedures for Appointing Auditors/Valuers

Robust external oversight through audits and collateral valuation practices are crucial for sound bank governance and risk management. Hence, the criteria for appointing qualified and independent auditors and valuers need legal backing. However, stipulating exhaustive appointment norms or procedures for auditors and valuers in banking laws risks material gaps emerging over time with international standards and may require lengthy legislative processes for enhancements. This has led major jurisdictions to cover auditor/valuer appointment expectations only at a high-level under banking law along with explicit powers for the supervisor to define detailed accreditation requirements and procedures through regulations. The EU's Capital Requirements Regulation requires banks to have robust policies and procedures for appointing qualified auditors and valuers. But specific accreditation criteria and oversight processes are housed under technical standards set by the EBA and these standards get updated periodically based on industry feedback and supervisory lessons. Leal Such regulatory architecture provides agility in responding to issues around poor-quality audits or

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¹²³⁷ James R Barth, Gerard Caprio Jr and Ross Levine, *Guardians of Finance: Making Regulators Work for Us* (MIT Press 2012).

¹²³⁸ 'Basel Committee on Banking Supervision, 'External Audits of Banks' (Bank for International Settlements, 31 March 2014) https://www.bis.org/publ/bcbs244.pdf accessed 7 January 2024.

¹²³⁹ Martin Gelter and Aurelio Gurrea-Martinez, 'Addressing the Auditor Independence Puzzle: Regulatory Models and Proposal for Reform' (2020) 53 *Vanderbilt Journal of Transnational Law* 787, 790.

¹²⁴⁰ Regulation (EU) No 575/2013 of the European Parliament and of the Council of 26 June 2013 on prudential requirements for credit institutions and investment firms (Capital Requirements Regulation). Specifically: Article 73 of the CRR requires banks to have in place robust governance arrangements, including a clear policy on the appointment of external auditors and valuation experts; Article 74 calls for transparent procedures for appointment and replacement of statutory auditors or firms carrying out statutory audits. It also outlines requirements regarding independence of auditors; Article 105 requires banks to establish a clear policy for appointment of external valuation experts, including assessment and documentation of their qualifications.

¹²⁴¹ European Banking Authority, *Single Programming Document Years* 2024–2026 (June 2023) https://www.eba.europa.eu/sites/default/files/2024-01/a9b1c021-821b-4718-9a9b-2691bba32cc3/EBA%202024-2026%20SPD%20FINAL.pdf accessed 8 January 2024, 12.

collateral valuations to ensure sound monitoring while avoiding codifying transient rules under legislation.

5.3.4 General Governance Provisions

Sound bank governance constitutes a key pillar of financial stability, with boards responsible for setting the tone at the top and institutionalizing the risk culture. 1242 Hence, high-level expectations around governance and board responsibilities warrant coverage under the banking law to emphasize their foundational role. 1243 However, stipulating exhaustive governance provisions under legislation risks material redundancy with broader corporate law requirements and listing rules. 1244 This could also constrain modifications needed as bank governance standards and international principles get updated. 1245

Most jurisdictions have addressed this by keeping general governance articles high-level under banking laws mapped to corporate statutes while detailed expectations are set under banking regulations and guidelines aligned with Basel norms. 1246 Such delegation helps to tailor and update governance policies for the banking sector's unique challenges such as systemic risk and complex business models while avoiding regulatory duplication across statutes. 1247 Streamlined governance requirements under regulation also encourage better enforcement by supervisors

https://legalinstruments.oecd.org/public/doc/322/322.en.pdf accessed 9 January 2024.

¹²⁴² Financial Stability Board, Thematic Review on Risk Governance – Peer Review Report (12 February 2013) https://www.fsb.org/wp-content/uploads/r 130212.pdf accessed 9 January 2024, 5.

¹²⁴³ Basel Committee on Banking Supervision, Core Principles for Effective Banking Supervision (Bank for International Settlements, 20 December 2011) https://www.bis.org/publ/bcbs213.htm accessed 9 January 2024.

¹²⁴⁴ Christopher M Bruner, 'Corporate Governance Reform in a Time of Crisis' (2011) 36 Journal of Corporation Law 309,

¹²⁴⁵ OECD, Recommendation of the Council on Principles of Corporate Governance (OECD 2023)

¹²⁴⁶ OECD, Risk Management and Corporate Governance (OECD 2014) https://www.oecd.org/daf/ca/risk-management-

corporate-governance.pdf accessed 9 January 2024, 8.

1247 Prasanna Gai and Nicholas Kiyotaki, 'Regulatory Complexity and the Quest for Robust Regulation' (Advisory Scientific Committee Report, 2 February 2019) https://ideas.repec.org/p/srk/srkasc/20198.html accessed 9 January 2024.

compared to compliance dispersion when similar norms sit across multiple laws. 1248 Therefore, expansive governance stipulations are better avoided under banking legislation with detailed expectations and international standard alignment governed through regulatory and supervisory policies.

5.3.5 Interfaces with Broader Corporate Law

While detailed governance provisions for banks may be better housed under regulations, there remain crucial interfaces with generic corporate and listing rules that warrant consideration regarding wider reforms. ¹²⁴⁹ Banking regulatory architecture continues to be supported through foundations around board duties and shareholder rights under corporate legal systems. ¹²⁵⁰ Hence, gaps or lags in underlying corporate laws can constrain bank governance and supervision effectiveness despite robust banking regulations on aspects like fit and proper norms or risk committees. ¹²⁵¹ For instance, ambiguities in director liability statutes were seen to hamper improved governance for Australian banks despite tighter prudential regulations. ¹²⁵² More broadly, weaknesses around minority shareholder protections under prevailing corporate laws may dilute supervisory efforts to address dominant owners' self-dealing risks at banks. ¹²⁵³

¹²⁴⁸ OECD, 'The Corporate Governance Landscape' in *Corporate Governance in Costa Rica* (OECD iLibrary, 2020) https://www.oecd-ilibrary.org/sites/24976f26-en/index.html?itemId=%2Fcontent%2Fcomponent%2F24976f26-en/accessed 9 January 2024.

 ¹²⁴⁹ Elena Zharikova, Post-crisis Reforms to the UK Regulation of the Corporate Governance of Banking Institutions: An Analysis of Changes to the UK Risk Governance Framework (PhD thesis, University of Manchester 2018).
 1250 Robert J Rhee, 'The Neoliberal Corporate Purpose of Dodge v Ford and Shareholder Primacy: A Historical Context 1919–2019' (2023) 28 Stanford Journal of Law, Business and Finance 202, 205.

¹²⁵¹ Kevin T Jackson, 'Global Corporate Governance: Soft Law and Reputational Accountability' (2010) 35 *Brooklyn Journal of International Law* 41, 45; Young Shim, 'Fit and Proper Regulation for Controlling Shareholders of Financial Companies' (2021) 11 *Yonsei Law Journal* 51, 53.

¹²⁵² Financial Sector Reform (Hayne Royal Commission Response—Protecting Consumers (2019 Measures)) Bill 2019 (Cth, Australia).

¹²⁵³ Financial Stability Board, *Peer Review Report on Risk Governance: Thematic Review on Risk Governance* (Thematic Peer Review Report, 12 February 2013).

Such examples underscore the need for assessments regarding necessary improvements in underlying company laws and commercial codes as a precursor to realizing full benefits from banking governance regulations. This requires better dialogue between bank regulators and lawmakers working on corporate legal reforms.

5.3.6 Incentives and protections for internal challenge

Safe internal escalation channels are essential for exposing misconduct early before issues become crises. 1254 Whistleblower protections shield employees raising concerns in good faith from retaliation, while confidential hotlines and rewards incentivize speaking up. 1255 Currently Libyan bank staff have minimal means or incentives to safely highlight improper practices internally. By affording anonymity, fair dismissal rights and potential monetary awards to whistleblowers, governance and compliance would benefit from enhanced transparency and accountability. 1256 But robust mechanisms are needed so that reforms do not inadvertently discourage reporting. 1257

The CBL needs to issue detailed guidelines and oversee new frameworks, hence employees trust channels. Presently, when it comes to sanction powers over improper persons, the CBL's powers to punish improper conduct by senior bankers seems limited to revoking approvals or general institution-based penalties.¹²⁵⁸ These risks absolving culpable individuals from

¹²⁵⁴ Anthony D Molina, 'A Systems Approach to Managing Organizational Integrity Risks: Lessons from the 2014 Veterans Affairs Waitlist Scandal' (2018) 48 *American Review of Public Administration* 872, 875.

¹²⁵⁵ Yuval Feldman and Orly Lobel, 'The Incentives Matrix: The Comparative Effectiveness of Rewards, Liabilities, Duties, and Protections for Reporting Illegality' (2010) 88 *Texas Law Review* 1151, 1155.

¹²⁵⁶ Stelios Andreadakis, 'Enhancing Whistleblower Protection: It's All About the Culture' (2019) 30(6) *European Business Law Review* 859, 862.

¹²⁵⁷ Stelios Andreadakis, Francesco De Pascalis and Arad Reisberg, 'Editorial: Reforming Corporate Governance: New Rules or New Culture?' (2019) 30(6) *European Business Law Review* 853.

¹²⁵⁸ Banking Law No 1 of 2005 (Libya), as amended by Law No 46 of 2012

responsibility. Extended powers to directly sanction, penalize and ban senior staff for non-compliance even after departing a bank would provide stronger deterrence and accountability. The CBL can publish a penalty guideline for personal breaches of banking laws such as oversight failures, deception, negligence or abuse of power, with remedies such as fines, suspension, dismissal requirements or prohibition from re-entering industry for set periods. Py tackling impunity, such expanded measures would underscore accountability.

5.3.7 Board Oversight and Risk Management

Across industries, engaged boards matter for performance and risk management.¹²⁶¹ But diligent oversight by capable, independent directors is especially pivotal in banks given the externalities from bank failures. As the first line of defence, boards crucially probe, challenge and guide executives towards sustainable practices.¹²⁶²

A foundational duty of bank boards is monitoring senior managers on behalf of shareholders and wider stakeholders like depositors.¹²⁶³ Appointing independent chairs and populating boards with expert outsiders provides distance from management, greatly enabling impartial oversight.¹²⁶⁴ Studies across banking contexts confirm that higher independent director ratios

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 ¹²⁵⁹ John Armour, Jeffrey Gordon and Geeyoung Min, 'Taking Compliance Seriously' (2020) 37 Yale Journal on Regulation
 1, 3; Brandon L Garrett and Gregory Mitchell, 'Testing Compliance' (2020) 83 Law and Contemporary Problems 47, 50.
 1260 Michael Nietsch, 'Corporate Illegal Conduct and Directors' Liability: An Approach to Personal Accountability for
 Violations of Corporate Legal Compliance' (2018) 18 Journal of Corporate Law Studies 151, 154; Amy Deen Westbrook,
 Does Banking Law Have Something to Teach Corporations Law about Directors' Duties' (2016) 55 Washburn Law Journal
 397, 401.

¹²⁶¹ I Brown, A Steen and J Foreman, 'Risk Management in Corporate Governance: A Review and Proposal' (2009) 17 *Corporate Governance: An International Review* 546, 549.

¹²⁶² Lisa M Fairfax, 'The Uneasy Case for the Inside Director' (2010) 96 *Iowa Law Review* 127, 130.

¹²⁶³ Kern Alexander, 'UK Corporate Governance and Banking Regulation: The Regulator's Role as Stakeholder' (2004) 33 Stetson Law Review 991, 995.

¹²⁶⁴ Sanjai Bhagat and Bernard Black, 'The Non-Correlation between Board Independence and Long-Term Firm Performance' (2002) 27 *Journal of Corporation Law* 231, 234.

substantially lower risk exposures. Unfettered CEOs alternatively accumulate outsized power to pursue self-interested expansion, hazardously leveraging their institution. 1265

Without understanding the drivers of institutional complexity, boards become captive to manager assertions. Expertise among directors further strengthens risk analysis, inquisition and deliberation. 1266 Accounting, legal, technology and compliance backgrounds are particularly relevant for interrogating complex transactions such as derivatives trades or questioning cyberdefences.¹²⁶⁷ In Europe, for example, researchers found that highly qualified directors with international banking credentials curbed loan concentrations.

Beyond composition and capabilities, boards reduce risks simply by virtue of existing. Frequent meetings with management compel systematic information sharing and interrogation even amidst harmony. 1268 Knowledge gaps surface, requiring credible responses. While overt conflict between boards and executives suggests underlying tensions, constructive friction through questioning and accountability ultimately strengthens oversight and accountability. By channelling scrutiny, boards unlock truth. However diligent oversight alone cannot save banks without equally prudent and ethical executives focused on long-term stewardship over selfenrichment. The foundational 'tone from the top' substantially filters down in shaping institutional culture. Values-based leadership thus curbs hazardous conduct. Character debates following the 2008 financial crisis underscored that integrity in banking requires prioritizing fairness, stewardship and sustainability above aggressive profits. Duty-bound CEOs and

¹²⁶⁵ Allen N Berger, Thomas Kick and Klaus Schaeck, 'Executive Board Composition and Bank Risk Taking' (2014) 28 Journal of Corporate Finance 48, 51.

¹²⁶⁶ Martin Edwards, 'Expert Directors' (2019) 90 University of Colorado Law Review 1051, 1054.

¹²⁶⁷ Ron Shapira and Yaron Nili, 'Specialist Directors' (2023) https://www.runi.ac.il/media/3utcvvk3/specialist-directors-

ssrn-2023.pdf accessed 22 January 2024, 2.

1268 Jeffrey S Linck, Jeffrey M Netter and Tina Yang, 'The Effects and Unintended Consequences of the Sarbanes-Oxley Act on the Supply and Demand for Directors' (2008) 22 Review of Financial Studies 3287, 3290.

directors accordingly consider needs of customers, staff, shareholders and society alongside bottom lines in strategizing. ¹²⁶⁹

However, 'tone from the top' equally enables large scale misconduct when senior bankers singularly pursue enrichment through perverse incentives. In notorious cases such as Wells Fargo, leaders fostered ruthless competitiveness and insatiable sales culture, driving thousands into unneeded accounts for bonuses.¹²⁷⁰ Rogue bankers thus wield outsized influence due to their power in embedding and normalizing ethics.

In practice bank oversight and executive conduct wield synergistic influence. Capable boards allowing CEOs to dominate risk losing independence to provide accountability, enabling hazardous conduct. Conversely, integrity-focused executives may still falter without oversight "sparring partners" probing policies. Good governance and leadership are thus interdependent for stability.¹²⁷¹ In sum, diligent oversight and prudent leadership significantly bolsters bank resilience and system stability by promoting accountability, transparency and risk balancing.¹²⁷² However excessive risk originates when directors become captive to unfettered executives or self-interest.¹²⁷³ Reforms targeting board competence and management integrity are thus hugely impactful for deterring hazards. More independent, knowledgeable directors combined with far-sighted CEOs focused on stewardship provide the bedrock for stability.

¹²⁶⁹ David Zaring, 'Regulating Banking Ethics: A Toolkit' (2020) 43 Seattle University Law Review 555, 560. ¹²⁷⁰ Ibid 561-562.

¹²⁷¹ Tony Porter, 'Technical Systems and the Architecture of Transnational Business Governance Interactions' (2014) 8(1) *Regulation & Governance* 110, 117.

¹²⁷² Franklin Allen, Elena Carletti, Itay Goldstein and Agnese Leonello, 'Moral Hazard and Government Guarantees in the Banking Industry' (2015) 30(1) *Journal of Financial Regulation and Compliance* 89, 91.

¹²⁷³ Steven L Schwarcz, 'Misalignment: Corporate Risk-Taking and Public Duty' (2016) 92(1) Notre Dame Law Review 1, 5.

5.4 Expanding Libya's Regulatory Perimeter to Embrace Financial Innovation

Financial innovation is rapidly transforming services in developing markets, expanding access through mobile platforms but also creating risks as oversight gaps emerge regarding new products, providers and delivery technologies. Libya has an opportunity to harness fintech advancements supporting inclusion, efficiency and rebuilding — but must first expand regulations to mitigate dangers vulnerable consumers face from current legal mismatches with market evolution. This part of the chapter examines the global emergence of innovative models in lending, payments, investments and money transfer services enabled by platforms from mobile and internet firms leveraging big data, artificial intelligence and encryption. Benefits for Libya are weighed in the context of enduring gaps in traditional banking penetration. Risks are also considered, arguing that an outdated legal framework leaves consumers and systemic stability exposed as poorly licensed operators enter a long under-regulated playing field.

Highlighting precedents worldwide, an activity-based regulatory approach is proposed emphasizing functions over institutional types or technologies. Rules would regulate deposit-like liabilities, lending, crowdfunding, e-money and payments based on risks posed regardless of whether providers identify as financial tecknologies, banks or telecoms companies. Graduated requirements aim to spur innovation without neglecting accountability. It calibrated well, an expanded perimeter can make Libya's financial oversight regime innovation-ready, enabling emerging services to drive access and efficiency

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¹²⁷⁴ Theodore Walker, Esmaeil Nikbakht and Mustapha Kooli, *The Fintech Disruption: How Financial Innovation Is Transforming the Banking Industry* (Springer, Palgrave Macmillan 2023).

¹²⁷⁵ Silvio Andrae, 'FinTech Regulation: A Macro-Structural Approach' in Daisy Chou, Conall O'Sullivan and Vassilios G Papavassiliou (eds), *FinTech Research and Applications: Challenges and Opportunities* (World Scientific Publishing 2023) 93

¹²⁷⁶ Tobias Adrian and Adam B Ashcraft, 'Shadow Banking Regulation' (2012) 4(1) *Annual Review of Financial Economics* 99, 101.

with appropriate safeguards.¹²⁷⁷ Though fintech is no silver bullet for financial inclusion shortfalls, legal reforms deserve priority given the pace of change. Modernized governance promises benefits for economic rebuilding and social stability alike.

Like much of North Africa and the Middle East, Libya suffers from an extremely underdeveloped financial services market despite boasting high mobile phone penetration. 1278. There are opportunities to leverage that infrastructure in responsible ways fragile states can struggle to grasp. 1279 Persistent instability has left gaps across regulatory frameworks, infrastructure and skills. 1280 But a thirst for upgrading as reconstruction proceeds offers chances to reboot governance around modernization goals, if priorities align with local realities. 1281 That demands ensuring integrity protections keep pace with digital innovation cycles challenging analogue-era controls. 1282 Without expanding regulatory boundaries, Libya risks an oversight race to the bottom as new entrants exploit grey areas. Yet done right, harnessing technology and enterprise holds enormous potential to sustainably accelerate financial inclusion and efficiency - delivering social returns key to cementing post-conflict stabilization. 1283

Scholarly examinations of financial innovation trends argue regulators expanding governance perimeters to keep pace with advancing services are better positioned to manage disruptions

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¹²⁷⁷ Cristie Ford, *Innovation and the State: Finance, Regulation, and Justice* (Cambridge University Press 2017).

¹²⁷⁸ Rabah Arezki, Lili Mottaghi and Andrea Barone, Middle East and North Africa Economic Monitor (World Bank 2018).

¹²⁷⁹ Robert B Zoellick, 'Fragile States: Securing Development' (2008) 50(6) Survival 67, 69.

¹²⁸⁰ Robert Osei-Kyei and Albert PC Chan, 'Developing Transport Infrastructure in Sub-Saharan Africa through Public–Private Partnerships: Policy Practice and Implications' (2016) 36(2) *Transport Reviews* 170, 172.

¹²⁸¹ Brian Levy, Working with the Grain: Integrating Governance and Growth in Development Strategies (Oxford University Press 2014).

¹²⁸² Dmitry Plekhanov, Henrik Franke and Tor H Netland, 'Digital Transformation: A Review and Research Agenda' (2023) 41 *European Management Journal* 821, 824.

¹²⁸³ Douglas W Arner, Ross P Buckley, Dirk A Zetzsche and Robin Veidt, 'Sustainability, FinTech and Financial Inclusion' (2020) 21(1) European Business Organization Law Review 7, 10.

that can displace institutions important for stability.¹²⁸⁴ Tech-driven shifts towards platform models are inevitable, so oversight must engage the pace and direction of change rather than react once risks swell. Standardizing activity-based rules for functions over entities allows market-wide consistency able to govern emerging operators.¹²⁸⁵ Outcomes matter more than institutional types or tools used. Regulatory "passporting" then grants licenses determining scope. Sandboxes temporarily allow testing under supervision.¹²⁸⁶

Neutrality promotes competitiveness and choice while ensuring level playing fields, says World Bank research. Consumer protection is vital. Vulnerable, inexperienced borrowers and payment platform users are more exposed to abusive practices like predatory rates and excess penalties. Without literacy improvements and transparency requirements, harms can scale rapidly amid enthusiastic adoption. Market expansion should match strengthening oversight not precede it. However, most argue staggered approaches suit developing markets facing acute disruption risks, prioritizing integrity then efficiency. Revolutionary models may promise instant benefits but demand gradual integration, so reforms match absorptive capacities. Revolutionary financial governance change is rarely sustainable.

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¹²⁸⁴ Ioannis Anagnostopoulos, 'FinTech and RegTech: Impact on Regulators and Banks' (2018) 100 *Journal of Economics and Business* 7, 9.

¹²⁸⁵ Niels Pedersen, Financial Technology: Case Studies in Fintech Innovation (Kogan Page 2021).

¹²⁸⁶ Maryam Khalid and Sherin Kunhibava, 'Fintech Regulatory Sandboxes in Australia and Malaysia: A Legal Analysis' (2020) 28 *International Islamic University Malaysia Law Journal (IIUMLJ)* 1, 3.

¹²⁸⁷ World Bank, 'Chapter 17 – Competition Policy' (10 December 2020)

https://pubdocs.worldbank.org/en/969761607633234293/Chapter-17-Competition-Policy.pdf accessed 24 January 2024. Lindsay Sain Jones and Goldburn P Maynard Jr, 'Unfulfilled Promises of the Fintech Revolution' (2023) 111 California Law Review 801, 804.

¹²⁸⁹ Hilary J Allen, *Driverless Finance: Fintech's Impact on Financial Stability* (Oxford University Press 2022) 17–19.

¹²⁹⁰ Yesha Yadav, 'Fintech and International Financial Regulation' (2020) 53 *Vanderbilt Journal of Transnational Law* 1109, 1112.

5.4.1 Precedents for Function-based Fintech Regulation

Jurisdictions today exhibit a spectrum of strategies balancing the risks and opportunities technology introduces to finance, providing models Libya might adapt to its unique transitioning context. Trends point towards regulating activities over entities yet most remain anchored in analogue-era thinking that places firms into buckets of bespoke restrictions and requirements. 1292

For example, the European Union's Revised Payment Services Directive (PSD2) governs a range of accounts and transaction services based on functions. Rules cover conduct, disclosure and security practices based on systemic importance regardless of whether a bank IT provider or ecommerce site handles funds. Standardizing "passporting" then extends compliance across the EU.¹²⁹³ The Monetary Authority of Singapore takes a similar "activity based" approach focused on functions. Licences determine regulated activities engaged ranging from capital market services to insurance broking to banking and payments. The framework encompasses banks along with non-financial players like ecommerce payments processors under common obligations. Sandboxes support testing.¹²⁹⁴ Nigeria's Central Bank recently began licensing payment service banks to extend financial services through agents and physical hardware

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¹²⁹¹ Chris Brummer and Yesha Yadav, 'Fintech and the Innovation Trilemma' (2019) 107 *Georgetown Law Journal* 235, 238.

¹²⁹² Douglas W Arner, Janos Barberis and Ross P Buckley, 'FinTech, RegTech, and the Reconceptualization of Financial Regulation' (2017) 37 *Northwestern Journal of International Law and Business* 371, 375.

¹²⁹³ Directive (EU) 2015/2366 of the European Parliament and of the Council of 25 November 2015 on Payment Services in the Internal Market [2015] OJ L337/35, art 4.

¹²⁹⁴ OECD, 'Fintech and Macroprudential Policy in Emerging Asia: Preparing for the Digital Era' in *Strengthening Macroprudential Policies in Emerging Asia* (OECD 2021) <a href="https://www.oecd-ilibrary.org/sites/a3358152-en/index.html?itemId=%2Fcontent%2Fcomponent%2Fa3358152-en/index.html?itemId=%2Fcontent%2Fcomponent%2Fa3358152-en/index.html?itemId=%2Fcontent%2Fcomponent%2Fa3358152-en/index.html?itemId=%2Fcontent%2Fcomponent%2Fa3358152-en/index.html?itemId=%2Fcontent%2Fcomponent%2Fa3358152-en/index.html?itemId=%2Fcontent%2Fcomponent%2Fa3358152-en/index.html?itemId=%2Fcontent%2Fcompone

enabling digital transfers, cash in/out functions and bill pay without engaging intermediation

risks like lending. 1295

Restricted models limit risks for now. Critics argue underdeveloped trust in advanced functions

necessitates a slow opening. Therefore, activity-based regulation is gaining traction even among

emerging markets once hesitant around disruptive advancements. The urgency financial access

voids create is spurring strategies to graft new services onto oversight capabilities more

harmoniously as standalone policy "fixes" underdeliver.

5.4.2 Proposed Fintech Regulatory Model for Libya

In the wake of its civil conflict, Libya stands at a critical juncture where the rebuilding of its

economy offers a fertile ground for integrating financial technology (fintech) within its

financial sector. The Central Bank of Libya (CBL), having recently unified after a long-standing

split due to the civil war, now possesses the potential to foster economic stability and pave the

way for fintech governance frameworks to flourish, thereby enhancing financial inclusion and

accessibility. 1296 The emergence of fintech presents an opportunity to redesign Libya's financial

services landscape to accommodate a more comprehensive regulatory model that addresses the

fundamental financial service functions such as payments processing, e-money, and

lending/borrowing mechanisms. It is essential that any new regulatory frameworks take into

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¹²⁹⁵ Isa Alade and Zehra G Kavame Eroglu, 'Disruptive Innovations or Enhancing Financial Inclusion: What Does Fintech Mean for Africa?' (2023) 56 *Vanderbilt Journal of Transnational Law* 673, 676.

1296 Middle East Monitor, 'Libya Central Bank Re-established after 10 Years' (22 August 2023)

https://www.middleeastmonitor.com/20230822-libya-central-bank-re-established-after-10-years/ accessed 25 January 2024.

account the systemic importance, user risks, and operational intricacies unique to the country's context. 1297

A phased approach to market opening could begin with non-bank payment services, gradually progressing towards more complex financial intermediation activities. Such a strategy would allow for a smoother transition and align with the market and regulatory bodies' capacity to adapt. 1298 Moreover, it is crucial to establish a baseline of regulations across the board to ensure integrity and fair competition, while imposing more rigorous standards on larger, more influential institutions. The licensing process ought to be centred around specific activities, requiring firms to demonstrate their capability and risk management strategies to the regulators. 1299

The CBL's initiative should also emphasize financial integrity, with strict security, conduct and transparency standards that safeguard consumers and prevent fraud. These standards must be non-negotiable and apply uniformly to all licensed entities. Furthermore, the regulatory environment should be structured to encourage competition, ensuring that traditional banks and new fintech disruptors are on an equal playing field. The focus on interoperability and open banking architectures is critical, as it can stimulate incumbents to innovate and compete on the merits of their technology, not on market monopolies. The goal is to have a regulatory

 ¹²⁹⁷ International Monetary Fund, The Impact of Fintech on Central Bank Governance: Key Legal Issues (IMF, 24 August 2021) https://www.imf.org/en/Publications/FIN/Issues/2021/08/24/The-Impact-of-Fintech-on-Central-Bank-Governance-Key-Legal-Issues-463305 accessed 25 January 2024, 4.
 1298 Valeriya Goffe, 'Supporting Financial Sector Development in Libya in Hope that Peace Will Follow' (World Bank

¹²⁹⁸ Valeriya Goffe, 'Supporting Financial Sector Development in Libya in Hope that Peace Will Follow' (World Bank Blogs, 18 September 2020) https://blogs.worldbank.org/arabvoices/supporting-financial-sector-development-libya-hope-peace-will-follow accessed 25 January 2024.

¹²⁹⁹ Marianne Bechara, Wouter Bossu and Yan Liu, *The Impact of Fintech on Central Bank Governance: Key Legal Issues*, Fintech Note No 2021/001 (International Monetary Fund 24 August 2021), 5.

¹³⁰⁰ Valeriya Goffe, Supporting financial sector development in Libya in hope that peace will follow (World Bank Blogs, 18 September 2020) https://blogs.worldbank.org/arabvoices/supporting-financial-sector-development-libya-hope-peace-will-follow accessed 25 January 2024.

framework that governs through principles and standards rather than micromanaging the market, thus promoting transparency and allowing for the market's self-correction. 1301

In sum, the CBL's role in fostering a fintech ecosystem is integral to Libya's broader economic reconstruction efforts. By prioritizing governance frameworks that support fintech, the CBL can aid in building a more resilient, inclusive, and forward-looking financial sector. This will be a step towards diversifying Libya's economy beyond oil, as the country seeks to stabilize and grow in the post-conflict era. However, advancing such a regime demands expanding CBL capacities on multiple fronts to equip staff with relevant competencies and oversight processes attuned to interpreting innovative risks not contemplated during analogue-era legislative drafting. Without knowledge resources, idealized regulations will flounder during implementation. Shallow governance writing cannot resolve deep governance problems.

The reform also requires iterative strategic thinking as services enabled today may look quite different within years. Static rules that quickly lose touch with market evolution cause new risks. 1303 Feedback channels between regulators and industry can help alignment. But discretion to respond to developments is equally key. 1304 Properly structured governance model holds promise to capture opportunities from responsible innovation benefiting Libyan banks while steering the rapid change afoot towards constructive ends prioritizing integrity. 1305 The walls

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¹³⁰¹ International Monetary Fund, *The Impact of Fintech on Central Bank Governance: Key Legal Issues* (FinTech Note No 2021/001, International Monetary Fund, 24 August 2021) https://www.imf.org/en/Publications/FIN/Issues/2021/08/24/The-Impact-of-Fintech-on-Central-Bank-Governance-Key-Legal-Issues-463305 accessed 25 January 2024.

¹³⁰² Victor Rizopoulos and Markos Zachariadis, 'The Impact of the FinTech Revolution on the Future of Banking: Opportunities and Risks' (2022) 81 *International Review of Financial Analysis* 101203, 101205.

¹³⁰³ Alan McQuinn, 'Supporting Financial Innovation through Flexible Regulation' (Information Technology and Innovation Foundation, November 2019) https://www2.itif.org/2019-fintech-regulations.pdf accessed 26 January 2024, 3.

¹³⁰⁴ Ioannis Anagnostopoulos, 'Fintech and Regtech: Impact on Regulators and Banks' (2018) 100 *Journal of Economics and Business* 7, 9.

¹³⁰⁵ Golam Khandaker Enamul Hossen, 'Consumer Perceptions of the Barriers to Adoption of Internet Banking: A Case Study in Libya' (University of Southern Queensland, 1970) https://research.usq.edu.au/item/q3286/consumer-perceptions-of-the-barriers-to-adoption-of-internet-banking-a-case-study-in-libya accessed 26 January 2024, 12.

and ceilings framework promises expanding foundations able to support modern, inclusive finance. Getting ahead on regulation also promises to boost Libya's investment attractiveness for fintech ventures at a time when clarifying rules, strengthening infrastructure and establishing sector leadership offer advantages that fast followers would envy. First mover integrity could attract capital and skills.

5.4.2 Enhancing Regulatory Outcomes by Applying a Consultative Approach

Applying a consultative approach before issuing new regulations would minimise unintended consequences and facilitate implementation as a proposed reform to Libya's bank governance framework to enhance systemic risk mitigation. ¹³⁰⁶ Consultation with key stakeholders is a vital process in developing effective financial regulations that mitigate systemic risk. ¹³⁰⁷

International standards emphasise stakeholder engagement in regulatory initiatives to leverage expertise, secure buy-in, and align reforms with market realities. ¹³⁰⁸ Libya should accordingly engage banks, industry groups and relevant public agencies when formulating new prudential rules. ¹³⁰⁹ Extensive consultation enables regulators to anticipate implementation obstacles, drafting challenges, and unintended outcomes. ¹³¹⁰ It provides an essential channel for the banking sector to highlight concerns, objections and grounds for opposition. ¹³¹¹ Vetting proposals with stakeholders reduces uncertainty, clarifies expectations, and improves

¹³⁰⁶ Julia Black, 'The Role of Risk in Regulatory Processes' in Robert Baldwin, Martin Cave and Martin Lodge (eds), *The Oxford Handbook of Regulation* (Oxford University Press 2010) 302.

¹³⁰⁷ Robert Baldwin and Julia Black, 'Really Responsive Regulation' (2008) 71(1) Modern Law Review 59, 61.

¹³⁰⁸ Eilís Ferran, 'Institutional Design: The Choices for National Systems' in Niamh Moloney, Eilís Ferran and Jennifer Payne (eds), *The Oxford Handbook of Financial Regulation* (Oxford University Press 2015) 89.

¹³⁰⁹ Heidi Mandanis Schooner and Michael W Taylor, *Global Bank Regulation: Principles and Policies* (Academic Press 2009) 23.

¹³¹⁰ Tony Porter, 'Technical Systems and the Architecture of Transnational Business Governance Interactions' (2015) 8(1) *Regulation & Governance* 110, 113.

¹³¹ Julia Black, 'Learning from Regulatory Disasters' (2014) LSE Law, Society and Economy Working Papers 24/2014, 6.

regulatory coherence.¹³¹² This upfront engagement mitigates risks of subsequent non-compliance driven by misunderstandings or lack of readiness.

Consultations additionally create opportunities to coordinate with other planned regulatory changes and minimise inconsistencies. From a bank governance perspective, early dialogue allows directors and managers to prepare compliance measures and adjust internal systems. ¹³¹³ It promotes greater awareness of supervisory expectations and requirements for oversight and risk management procedures. ¹³¹⁴ Through consultations, regulators can signal priorities, address interpretive ambiguities, and establish guidance. ¹³¹⁵ This provides clarity for banks' governance processes and helps avoid gaps or frictions with existing practices. ¹³¹⁶ Constructive two-way communication enables regulators to incorporate industry feedback into more effective rules that are stakeholder-informed. ¹³¹⁷ It can facilitate compromises and concessions where regulations create significant burdens or challenges. ¹³¹⁸

Key international standard setters in banking regulation emphasise consultation as an indispensable step to systemic risk mitigation. BCBS Core Principle 9 highlights that bank supervisors must have processes for consulting with the industry regarding proposed changes. The IAIS ICPs state that policy measures significantly affecting insurers should be

¹³¹² Cristie Ford, Innovation and the State: Finance, Regulation, and Justice (Cambridge University Press 2017) 41.

¹³¹³ John Armour and others, *Principles of Financial Regulation* (Oxford University Press 2016) 12.

¹³¹⁴ Eilís Ferran and Kern Alexander, 'Can Soft Law Bodies Be Effective? Soft Systemic Risk Oversight Bodies and the Special Case of the European Systemic Risk Board' (University of Cambridge Faculty of Law Research Paper No 36/2011, 2010) https://ssrn.com/abstract=1676140 accessed 26 January 2024, 8.

¹³¹⁵ Julia Black, 'Restructuring Global and EU Financial Regulation: Character, Capacities, and Learning' in Eddy Wymeersch, Klaus J Hopt and Guido Ferrarini (eds), *Financial Regulation and Supervision: A Post-Crisis Analysis* (Oxford University Press 2012) 79.

¹³¹⁶ Robert Baldwin, Martin Lodge and Martine McCrudden, Regulation and Public Law (Hart Publishing 2019) 15.

¹³¹⁷ Tony Porter, 'Technical Systems and the Architecture of Transnational Business Governance Interactions' (2015) 8(1) Regulation & Governance 110, 115.

¹³¹⁸ Julia Black, 'The Role of Risk in Regulatory Processes' in Robert Baldwin, Martin Cave and Martin Lodge (eds), *The Oxford Handbook of Regulation* (Oxford University Press 2010) 305.

¹³¹⁹ Basel Committee on Banking Supervision, *Core Principles for Effective Banking Supervision* (Bank for International Settlements 2012) principle 1.

developed in a consultative process.¹³²⁰ And the FSB underscores that the flexibility and effectiveness of reforms depends partly on whether the measures reflect adequate consultation and dialogue.¹³²¹ Domestically, jurisdictions like Singapore, Australia and Canada have sophisticated consultation practices hardwired into their regulatory review and design processes.¹³²²

Comparatively far-reaching consultation procedures have contributed to more resilient financial systems. 1323 Libya should follow this emerging consensus and make industry engagement an integral phase when formulating new bank governance regulations to enhance systemic resilience. 1324 Critics contend that extensive consultations create delays, complexity, and invite industry interference diluting rules. However, careful processes can minimise these risks and lend further legitimacy. 1325 Public consultations provide transparency and compel regulators to justify proposals. 1326 Confidential talks with individual banks enable commercially sensitive details to be discussed discreetly. 1327

Ultimately an intensive consultation process improves regulatory dynamism and responsiveness. It fosters shared responsibility between regulators and stakeholders. And it leads to better regulatory outcomes. As Libya looks to update its bank governance framework,

¹³²⁰ International Association of Insurance Supervisors, *Insurance Core Principles* (IAIS 2019) 4.

¹³²¹ Financial Stability Board, *Implementing the FSB Principles for Sound Compensation Practices and Their Implementation Standards* (FSB 2019) 2.

¹³²² Dan W Puchniak and Luh Luh Lan, 'Independent Directors in Singapore: Puzzling Compliance Requiring Explanation' (2017) 65(2) *American Journal of Comparative Law* 179, 183.

¹³²³ Dimity Kingsford Smith and Olivia Dixon, 'The Consumer Interest and the Financial Markets' in Eilís Ferran and others (eds), *The Oxford Handbook of Financial Regulation* (Oxford University Press 2015) 521.

¹³²⁴ Julia Black, 'Restructuring Global and EU Financial Regulation: Character, Capacities, and Learning' in Eilís Ferran and others (eds), *The Regulatory Aftermath of the Global Financial Crisis* (Cambridge University Press 2012) 68.

¹³²⁵ David Levi-Faur, 'Regulatory Governance' in David Levi-Faur (ed), *Handbook on the Politics of Regulation* (Edward Elgar 2011) 9.

¹³²⁶ Sharon Gilad, 'It Runs in the Family: Meta-Regulation and Its Siblings' (2010) 4(4) *Regulation & Governance* 485, 487. ¹³²⁷ Cristie L Ford, 'New Governance in the Teeth of Human Frailty: Lessons from Financial Regulation' (2010) *Wisconsin Law Review* 101, 104.

embedding mandatory and structured consultation mechanisms in review processes will strengthen systemic risk management. Regulators should publish discussion papers for public comment. Confidential submissions should be facilitated to address commercial sensitivities. Adequate timelines are needed for informed responses from diverse stakeholders. Industry bodies, consumer groups, auditors, international financial institutions, and relevant public agencies should be engaged. 1329

At minimum, consultations should cover all materially affected groups within the banking sector. Regulators can also host symposiums, roundtables and bilateral meetings to workshop proposals. Where substantive objections are raised, these should be methodically addressed. 1330 Regulators should publish consultation conclusions explaining how feedback was incorporated and they should be ready to adjust or repropose aspects that require further refinement after garnering stakeholder perspectives. Thus, mandating procedural consultation requirements will significantly improve the effectiveness of Libya's bank governance regime reforms by tapping dispersed expertise, revealing blind spots, and aligning measures with commercial realities. Extensive research shows that following structured consultation processes increases the rigour, legitimacy and efficacy of regulation across contexts. 1331 Libya should follow global precedents and firmly embed consultative practices into its regulatory review and design procedures as a key pillar of systemic risk management.

¹³²⁸ Vibeke Lehmann Nielsen and Christine Parker, 'Testing Responsive Regulation in Regulatory Enforcement' (2009) 7(4) *Regulation & Governance* 376, 379.

¹³²⁹ Julia Black, 'Learning from Regulatory Disasters' (2014) LSE Law, Society and Economy Working Papers 24/2014, 8.

¹³³⁰ Robert Baldwin and Julia Black, 'Really Responsive Regulation' (2008) 71(1) Modern Law Review 59, 63-65.

¹³³¹ John Armour and others, *Principles of Financial Regulation* (Oxford University Press 2016) 18.

5.5 Capital Dimensions of Integrated Approach to Systemic Risk Mitigation in Libya

The global financial crisis revealed the consequences of weak prudential regulation, excessive risk-taking, and undercapitalization. Subsequently, the Basel Committee issued the Basel III framework to enhance banks' loss absorbency and risk management. Basel III international regulatory framework was developed following the 2008 global financial crisis to enhance the banking sector's resilience against liquidity and capital shortfalls. The reforms aim to constrain excess leverage, improve risk management and governance, increase transparency, and reduce procyclicality and systemic interconnectedness. The framework comprises three pillars: minimum capital ratios, supervisory oversight and market discipline. Pillar 1 sets higher quality and quantity standards for regulatory capital and introduces macroprudential buffers. New liquidity metrics are also prescribed, including the LCR and NSFR. Pillar 2 focuses on enhancing risk management and supervision. Pillar 3 aims to bolster transparency through expanded disclosure requirements. These pillars are critical for the capital dimensions of an integrated approach to systemic risk mitigation.

¹³³² JP Thomas and others, 'Regulatory Reform and the Unforeseen? The Case of the Basel Guidelines and the 2007–08 Financial Crisis' (2017) 25 *Competition and Change* 86, 90.

¹³³³ Basel Committee on Banking Supervision, *Basel III: A Global Regulatory Framework for More Resilient Banks and Banking Systems* (Bank for International Settlements, December 2010) para 12.

¹³³⁴ Basel Committee on Banking Supervision, *Basel III: International Regulatory Framework for Banks* (Bank for International Settlements, December 2010) paras 4–5.

¹³³⁵ Ibid.

¹³³⁶ Basel Committee on Banking Supervision, *Basel III: Finalising Post-crisis Reforms* (Bank for International Settlements, December 2017) paras 15–16.

¹³³⁷ Basel Committee on Banking Supervision, *Basel III: A Global Regulatory Framework for More Resilient Banks and Banking Systems* (Bank for International Settlements, December 2010) para 122.

¹³³⁸ Basel Committee on Banking Supervision, *Basel III: Finalising Post-Crisis Reforms* (Bank for International Settlements, December 2017) paras 45–65.

¹³⁴⁰ Ibid paras 106–125.

Basel III strengthens micro-prudential regulation to enhance banks' resilience. ¹³⁴¹ It introduces higher quality capital ratios, redefines regulatory capital instruments, and adds macroprudential buffers. ¹³⁴² The framework also sets liquidity standards and intensifies supervision. ¹³⁴³ First, minimum common equity is raised while innovative and hybrid instruments with weaker loss absorbency are phased out. ¹³⁴⁴ Common equity boosts resilience as shareholders bear first losses. ¹³⁴⁵ Second, Basel III introduces capital conservation, countercyclical and systemic risk buffers to be drawn down in stress and prevent procyclicality. ¹³⁴⁶ Buffers create an additional equity layer to absorb losses without transmitting stress. ¹³⁴⁷ Thirdly, new liquidity metrics incentivize longer-term structural funding. ¹³⁴⁸ The Liquidity Coverage Ratio (LCR) and Net Stable Funding Ratio (NSFR) aim to reduce maturity mismatch and overreliance on volatile funds. ¹³⁴⁹ Overall, the reforms are meant to augment bank capital to withstand shocks.

5.5.1 Implementing international standards and best practices

Implementing international standards and best practices represents a key reform for the Libyan banking sector to strengthen capital requirements and mitigate systemic risk. ¹³⁵⁰ The Central

¹³⁴¹ Stijn Claessens and Geoffrey Underhill, 'The Basel Process and Outcome: So Far, So Good?' (2015) 30 Review of Financial Regulation 101, 104...

¹³⁴² Basel Committee on Banking Supervision, *Basel III: A Global Regulatory Framework for More Resilient Banks and Banking Systems* (Bank for International Settlements, December 2010).

¹³⁴³ Basel Committee on Banking Supervision, *Basel III: Finalising Post-Crisis Reforms* (Bank for International Settlements, December 2017).

¹³⁴⁴ Basel Committee on Banking Supervision, *Basel III: A Global Regulatory Framework for More Resilient Banks and Banking Systems* (Bank for International Settlements, December 2010) paras 122–139.

¹³⁴⁵ Stijn Claessens and Geoffrey Underhill, 'The Basel Process and Outcome: So Far, So Good?' (2015) 30 Review of Financial Regulation 101, 106.

¹³⁴⁶ Basel Committee on Banking Supervision, *Basel III: A Global Regulatory Framework for More Resilient Banks and Banking Systems* (Bank for International Settlements, December 2010) paras 122–139.

¹³⁴⁷ Dirk Schoenmaker and Rasmus Torna, 'Strengthening Banking Supervision in the European Union: The Role of Capital' (2020) 58 *Journal of Common Market Studies* 1142, 1145.

¹³⁴⁸ Basel Committee on Banking Supervision, *Basel III: A Global Regulatory Framework for More Resilient Banks and Banking Systems* (Bank for International Settlements, December 2010) paras 113–120.

¹³⁴⁹ Øyvind Andersen, 'The Basel III Liquidity Standards and Financial Stability' (2021) 30 *Economic Review – Federal Reserve Bank of Atlanta* 43, 46.

¹³⁵⁰ Nabil Bushlaibi, 'The Suitability of International Accounting and Auditing Standards to the Libyan Environment' (2015) 5 *Journal of Economic Cooperation and Development* 73, 76.

Bank of Libya (CBL) has therefore issued several circulars, over the past two years, aimed at aligning domestic regulations with Basel III standards on bank capital and liquidity. Most notably are the CBL Circular No. 2 of 2023 on calculating the Net Stable Funding Ratio (NSFR),¹³⁵¹ CBL Circular No. 11 of 2022 on calculating capital adequacy,¹³⁵² and CBL Circular No. 14 of 2022 on calculating the Liquidity Coverage Ratio (LCR).¹³⁵³

Adopting Basel III is imperative for Libya to constrain leverage, improve stability, and align with international norms. ¹³⁵⁴ However, effective implementation requires calibrating standards to the domestic context. ¹³⁵⁵ Libya should strategically adopt Basel III in a sequenced way focusing first on bolstering capital adequacy. Adopting Basel III is necessary for the Libyan banking sector to mitigate excessive risk-taking and build stability. Capital and liquidity buffers can act as shock absorbers against credit, market and liquidity shocks. ¹³⁵⁶ Enhanced regulation and supervision will improve risk management capabilities and transparency. ¹³⁵⁷ The Central Bank of Libya (CBL) has undertaken efforts to strengthen the capital adequacy and liquidity positions of Libyan banks by issuing circulars aligned with Basel standards. However, there remain opportunities to further enhance the regulatory framework and incorporate additional international best practices to bolster banking sector resilience against systemic threats. Fully realizing Basel III's benefits requires high-quality implementation tailored to the domestic

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¹³⁵¹ Central Bank of Libya, Circular No 2 of 2023 on Calculating the Net Stable Funding Ratio (CBL 2023) art 3.

¹³⁵² Central Bank of Libya, Circular No 11 of 2022 on Calculating Capital Adequacy (CBL 2022) art 2.

¹³⁵³ Central Bank of Libya, Circular No 14 of 2022 on Calculating the Liquidity Coverage Ratio (CBL 2022) art 4.

¹³⁵⁴ Nabil Bushlaibi, 'The Suitability of International Accounting and Auditing Standards to the Libyan Environment' (2015) 5 *Journal of Economic Cooperation and Development* 73, 79.

¹³⁵⁵ Dirk Schoenmaker and Rasmus Torna, 'Strengthening Banking Supervision in the European Union: The Role of Capital' (2020) 58 *Journal of Common Market Studies* 1142, 1148.

¹³⁵⁶ Øyvind Andersen, 'The Basel III Liquidity Standards and Financial Stability' (2021) 30 *Economic Review – Federal Reserve Bank of Atlanta* 43, 48.

¹³⁵⁷ Nicholas Mwenda and Cheng Yang, 'Basel III and Bank Stability' (2020) 40 *International Review of Financial Analysis* 101531, 101534.

context.¹³⁵⁸ The system's small size, lack of diversity, and regional interconnectedness can increase contagion risks.¹³⁵⁹ There are concerns regarding Libya's capacity constraints in supervision, data collection and compliance monitoring.¹³⁶⁰ Sequencing reforms is also important to minimize transitional costs.¹³⁶¹ The following analysis will critically evaluate the capital regulations contained in relevant CBL circulars and propose reforms to implement advanced international standards tailored to the Libyan context.

The CBL Circular No. 2 of 2023 on the Net Stable Funding Ratio (NSFR) aims to apply the Basel III liquidity framework. 1362 The NSFR requires banks to maintain a minimum level of stable funding relative to the assets and off-balance sheet activities. Academic research provides important insights into potential implications of binding NSFR constraints. A study by Duijm and Wierts analysing OECD countries found limited evidence that the NSFR substantially restricts bank lending or real economic activity. 1363 However, they noted that binding requirements could potentially constrain credit provision during times of systemic stress. An IMF paper also suggested that the NSFR may reduce loan growth, especially for banks reliant on wholesale funding. 1364 Moreover, an analysis of German banks concluded the NSFR decreases liquidity services supplied by banks. 1365

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¹³⁵⁸ Ulf Lewrick and others, *The Prudential Treatment of SME Loans in the Basel Framework* (Bank for International Settlements, June 2020) 2.

¹³⁵⁹ Mohamed Eljelban and others, 'Banking Sector Development and Economic Growth in Libya' (2021) 25 *Journal of Economic Cooperation and Development* 1, 3.

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¹³⁶¹ Basel Committee on Banking Supervision, *Basel III: The Liquidity Coverage Ratio and Liquidity Risk Monitoring Tools* (Bank for International Settlements, January 2013) para 46.

¹³⁶² Central Bank of Libya, Circular No 2 of 2023 on the Net Stable Funding Ratio (CBL 2023) art 2.

¹³⁶³ Patty Duijm and Peter Wierts, 'The Effects of Liquidity Regulation on Bank Assets and Liabilities' (2016) *International Journal of Central Banking* 385, 388.

¹³⁶⁴ Frédéric Lambert and others, 'International Banking After the Crisis: Increasingly Local and Safer' (2015) *International Monetary Fund Staff Discussion Note* 55, 59.

¹³⁶⁵ Matthias Schmitt and Christian Schmaltz, 'Potential Implications of a NSFR on German Banks' Credit Supply and Profitability' (2016) Bundesbank Discussion Paper No 37/2016, 8 https://ssrn.com/abstract=2849768 accessed 28 January 2024.

Given Libya's challenging macro-financial environment, binding NSFR limits can potentially hamper financial intermediation. The CBL may consider a gradual phase-in approach as permitted under Basel rules. ¹³⁶⁶ This safeguards stability while evaluating NSFR impacts on Libyan banks. Phase-in could involve an initial 80-90% minimum threshold, raised to 100% once funding resilience builds. The optimal level for Libya can be continually reassessed as financial markets develop. As Critchfield et al. discussed, appropriate NSFR levels maximizing stability differ across country contexts. ¹³⁶⁷ Tailoring phase-in enables balancing funding resilience with sustaining financial intermediation.

The CBL Circular No. 11 of 2022 on capital requirements implements Basel II and III standards on credit, market and operational risks. ¹³⁶⁸ However, certain aspects can potentially be enhanced. The circular assigns a 0% risk weight to Libyan sovereign exposures irrespective of maturity, whereas Basel II differentiated sovereign risk weights based on credit quality. ¹³⁶⁹ Given Libya's high public debt and political instability, ¹³⁷⁰ sovereign exposures arguably warrant higher risk weights reflecting credit fundamentals. Indeed, research shows preferential regulatory treatment of sovereign exposures contributed to instability during the European debt crisis. ¹³⁷¹ A study by Horváth and Wagner demonstrated that concentrated domestic sovereign exposures amplified the sovereign-bank nexus, exacerbating fragility. As Schmitz contends,

¹³⁶⁶ Basel Committee on Banking Supervision, *Basel III: The Net Stable Funding Ratio* (Bank for International Settlements 2014) para 45.

¹³⁶⁷ Joseph Gobat, Masaaki Yanase and Jahyun Maloney, *The Net Stable Funding Ratio: Impact and Issues for Consideration* (IMF Working Paper WP/14/106, 2014) 9 https://www.imf.org/external/pubs/ft/wp/2014/wp14106.pdf accessed 28 January 2024.

¹³⁶⁸ Central Bank of Libya, Circular No 11 of 2022 on Capital Adequacy Requirements (CBL 2022) art 5.

¹³⁶⁹ Basel Committee on Banking Supervision, *The Standardised Approach for Measuring Counterparty Credit Risk Exposures* (Bank for International Settlements 2014) paras 53–56.

¹³⁷⁰ International Monetary Fund, *Country Report No 23/201 Libya* (IMF 2023) https://www.imf.org/media/Files/Publications/CR/2023/English/1LBYEA2023001.ashx accessed 28 January 2024, 11.

¹³⁷¹ André Sterzel, 'Reforming the Regulatory Treatment of Sovereign Exposures in Banking Regulation' (2020) 53(1) *Credit and Capital Markets* 81, 83.

preferential risk weights should only apply to highly rated OECD sovereigns meeting stringent criteria. Removing the blanket 0% risk weighting would incentivize appropriate risk-calibration of sovereign asset holdings.

The circular also sets a relatively high 28.5% market risk capital requirement while Basel III requires a lower 10-15% minimum.¹³⁷³ A lower prudential threshold aligned with Basel may provide a sufficient risk coverage while minimizing procyclicality. Furthermore, the basic indicator approach for operational risk under the circular has recognized deficiencies in risk sensitivity and procyclical effects.¹³⁷⁴ Adopting the Basel standardized or advanced measurement approaches can enhance risk capture. The advanced approach additionally provides inherent through-the-cycle stabilization from using multi-year loss data.¹³⁷⁵ Implementing these methods would strengthen operational risk management and reduce procyclicality.

The CBL Circular No. 14 of 2022 introduces a Liquidity Coverage Ratio (LCR) aligned with Basel III. 1376 The LCR requires banks to hold ample high-quality liquid assets (HQLA) to withstand short-term liquidity shocks. Academic studies on the LCR's impact provide nuanced conclusions. Earlier UK research by Banerjee and Mio found limited effects on credit or economic activity, as banks substituted away from liquidity creation toward deposits. 1377

¹³⁷² Michaela Posch, Stefan W Schmitz and Peter Strobl, 'Strengthening the Euro Area by Addressing Flawed Incentives in the Financial System' (2018) Q2/18 *Monetary Policy and the Economy* 34, 37.

¹³⁷³ Basel Committee on Banking Supervision, *The Standardised Approach for Measuring Counterparty Credit Risk Exposures* (Bank for International Settlements 2014) paras 53–56.

¹³⁷⁴ Francesco Cannata and Mario Quagliariello, *Basel III and Beyond: A Guide to Banking Regulation After the Crisis* (Risk Books 2011) 21.

¹³⁷⁵ Basel Committee on Banking Supervision, *Operational Risk – Revisions to the Simpler Approaches* (Bank for International Settlements 2014) annexes 1–3.

¹³⁷⁶ Central Bank of Libya, Circular No 14 of 2022 on the Liquidity Coverage Ratio (CBL 2022) art 6.

¹³⁷⁷ Ryan N Banerjee and Hitoshi Mio, 'The Impact of Liquidity Regulation on Banks' (2018) 35 *Journal of Financial Intermediation* 30, 33.

However, more recent evidence suggests the LCR supported lending during the pandemic by bolstering banks' shock-absorption capacity. An IMF cross-country study found that higher pre-crisis LCRs increased lending during the pandemic, particularly for banks with pre-existing liquidity buffers. The pandemic experience demonstrated the LCR's potential countercyclical role, as the IMF paper states it enabled banks to maintain credit provision. Consequently, researchers argue that the LCR does not necessarily impair lending or monetary transmission after meeting minimum thresholds. Overall, research underscores appropriately calibrated LCRs can produce countercyclical buffers supporting intermediation during downturns. Therefore, as Libyan banks build HQLA buffers, potential LCR impacts warrant monitoring, with requirements adjustable based on evidence.

Beyond ongoing Basel III reforms, further improvements to the regulatory framework may be contemplated to mitigate systemic vulnerabilities based on Libya's financial development level and operating environment. First, research indicates that deploying the leverage ratio as a parallel backstop to risk-weighted capital requirements can help contain systemic risk and procyclicality.¹³⁷⁹ The 3% Basel III leverage ratio acts as a safeguard against potential risk underestimation by risk-weighted metrics. During upswings, rising asset values can result in lower risk weights and higher leverage.¹³⁸⁰ As the leverage ratio remains constant throughout the cycle, it provides countercyclical stabilization.¹³⁸¹

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¹³⁷⁸ International Monetary Fund, *Global Financial Stability Report, October 2021* (IMF, 6 October 2021) https://www.imf.org/en/Publications/GFSR/Issues/2021/10/12/global-financial-stability-report-october-2021 accessed 28 January 2024, 14.

¹³⁷⁹ Claudio Borio and Mathias Drehmann, 'Assessing the Risk of Banking Crises – Revisited' (2009) *BIS Quarterly Review* 29, 31.

¹³⁸⁰ Anton Korinek and Alp Simsek, 'Liquidity Trap and Excessive Leverage' (2016) 106(3) American Economic Review 699, 701.

¹³⁸¹ Claudio Borio, 'Towards a Macroprudential Framework for Financial Supervision and Regulation?' (2003) 49(2) CESifo Economic Studies 181, 184.

Empirical studies validate the leverage ratio's countercyclical effect. An IMF analysis found that higher leverage ratios reduced the probability of banking crises across 45 countries. 1382 Relatedly, a Bank of International Settlement (BIS) study concluded that supplementing risk-based requirements with a leverage ratio can have limited pre-crisis vulnerabilities. 1383 Formally incorporating the leverage ratio into Libya's capital framework alongside risk-weighted capital requirements may therefore enhance systemic stability. The CBL can also consider imposing higher leverage ratio requirements on domestic systemically important banks (D-SIBs) given their disproportionate contagion risk. 1384

Secondly, capital surcharges on D-SIBs can mitigate systemic spillover risks from large banks. Higher loss absorbency requirements for D-SIBs are a key Basel standard not yet implemented in Libya. Methodologies developed by the Basel Committee and the Financial Stability Board (FSB) offer guidance for establishing an appropriate D-SIB framework tailored to Libya's concentrated banking system. Criteria including size, interconnectedness, substitutability and complexity help gauge systemic importance. Surcharges from 1-3.5% based on systemic score are recommended for D-SIBs by Basel. This additional loss absorbency cushions contagion if a major bank fails.

¹³⁸² Mouna Belkhir and others, 'Macroprudential Policy and Bank Systemic Risk: Does Inflation Targeting Matter?' IMF Working Paper WP/23/119 (IMF, June 2023) 5 https://www.imf.org/-media/Files/Publications/WP/2023/English/wpiea2023119-print-pdf.ashx accessed 28 January 2024.

Basel Committee on Banking Supervision, *Basel III: A Global Regulatory Framework for More Resilient Banks and Banking Systems* (Bank for International Settlements, June 2010) https://www.bis.org/publ/bcbs189.pdf accessed 28 January 2024, para 12; Basel Committee on Banking Supervision, *Evaluation of the Impact and Efficacy of the Basel III Reforms* (BIS, 14 December 2022) https://www.bis.org/bcbs/publ/d544.htm accessed 28 January 2024, 3.

¹³⁸⁴ Basel Committee on Banking Supervision, *A Framework for Dealing with Domestic Systemically Important Banks* (Bank for International Settlements, October 2012) https://www.bis.org/publ/bcbs233.pdf accessed 28 January 2024, 2; Lukáš Pfeifer and others, 'The Leverage Ratio and its Impact on Capital Regulation' (Czech National Bank, Economic Research Department 2018) 7.

¹³⁸⁵ Basel Committee on Banking Supervision, 'A Framework for Dealing with Domestic Systemically Important Banks' (Bank for International Settlements, October 2012) https://www.bis.org/publ/bcbs233.pdf accessed 28 January 2024, 4. ¹³⁸⁶ Ibid 6.

D-SIB surcharges provide both micro-prudential and macroprudential benefits. At the institutional level, they account for risks related to large size and complexity. Systemically, surcharges reduce moral hazard incentives and inter-bank contagion. Empirical research confirms D-SIB regulation bolsters banking sector resilience. An IMF multi-country study found that systemic risk decreased while lending growth remained stable after D-SIB policy implementation. The targeted and flexible surcharge approach maximizes resilience while minimizing unintended impacts on financial intermediation. Establishing a transparent D-SIB framework tailored to the Libyan banking risk profile would constitute an essential micro-prudential and macroprudential upgrade.

Thirdly, countercyclical capital buffers (CCyB) that raise capital requirements during credit upswings can improve banking sector resilience. CCyBs aim to lean against the wind and moderate system-wide cyclical risk.¹³⁹⁰ Building defensive buffers during booms allows banks to maintain lending during downturns.¹³⁹¹ Empirical studies demonstrate that substantially higher bank capital ratios and loan loss provisions result from increases in CCyB rates.¹³⁹² Furthermore, research shows that timely activation of CCyBs can help stabilize credit cycles. An IMF study found that higher pre-crisis CCyB rates diminished credit contraction and GDP loss in a sample of 49 countries. A BIS analysis also concluded countercyclical buffers, when activated promptly, can lean against rapid credit growth and mitigate adverse feedback loops

¹³⁸⁷ International Monetary Fund, *Macroprudential Policy: An Organizing Framework* (IMF Policy Paper, March 2011) 4.

¹³⁸⁸ Aliona Cebotari, Contingent Liabilities: Issues and Practice (IMF Working Paper WP/08/245, 2008) 7.

¹³⁸⁹ Ibid 11

¹³⁹⁰ Stefan Gerlach, Alexander Schulz and Guntram B Wolff, 'Banking and Sovereign Risk in the Euro Area' (Centre for Economic Policy Research, 2010) 3.

¹³⁹¹ Anton Korinek and Alp Simsek, 'Liquidity Trap and Excessive Leverage' (2016) 106(3) *American Economic Review* 699, 702.

¹³⁹² Michael Brei and others, 'Bad Bank Resolutions and Bank Lending' (BIS Working Paper No 837, 2020) 2.

during periods of strain. As Repullo and Suarez summarize, the CCyB provides a "timely, targeted, and transparent" macroprudential tool.¹³⁹³

To operationalize CCyBs in Libya, the CBL could develop a methodology for setting buffer rates based on the credit-to-GDP gap as Basel suggests. ¹³⁹⁴ However, data constraints may limit this indicator's efficacy in Libya. The CBL could additionally utilize a broader set of variables for informing CCyB decisions, an approach permitted by Basel. ¹³⁹⁵ Leading indicators on systemic vulnerability such as credit growth, asset prices, debt service ratios, bank profitability and Banking Stability Index metrics can provide valuable signals. ¹³⁹⁶ An indicative buffer framework transparently linking pre-set CCyB rates to levels of specified variables can enable rules-based policy. ¹³⁹⁷ However, integrating both rules and discretion in decision-making allows factoring expert judgment alongside quantitative tools. This balanced approach can facilitate deploying CCyBs countercyclically to boost resilience during upswings and provide buffers supporting lending in downturns.

Finally, to promote overall banking sector stability, Pillar 2 of Basel ---- supervisory review powers should be formally clarified to enable assessments of risks not captured under Pillar 1 minimum requirements and impose extra capital as warranted. The Basel standards emphasize the Pillar 2's importance in the regulatory capital framework, stating that supervisors should

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¹³⁹³ Rafael Repullo and Javier Suarez, 'The Procyclical Effects of Bank Capital Regulation' (2013) 26(2) *Review of Financial Studies* 452, 455.

 ¹³⁹⁴ Basel Committee on Banking Supervision, *Guidance for National Authorities Operating the Countercyclical Capital Buffer* (Bank for International Settlements, December 2010) para 7.
 ¹³⁹⁵ Ibid para 15.

 ¹³⁹⁶ European Systemic Risk Board, Flagship Report on Macro-prudential Policy in the Banking Sector (March 2014) 21.
 1397 Basel Committee on Banking Supervision, Guidance for National Authorities Operating the Countercyclical Capital

¹⁵⁹⁷ Basel Committee on Banking Supervision, *Guidance for National Authorities Operating the Countercyclical Capital Buffer* (Bank for International Settlements, December 2010) para 22.

"expect banks to operate above the minimum regulatory capital ratios". 1398 Pillar 1 requirements address common risks, while Pillar 2 facilitates bespoke bank-specific regulation attuned to risk profiles and control environments. 1399 Explicit Pillar 2 powers enable microprudential interventions tailored to each bank's circumstances to mitigate systemic threats preemptively.

Enshrining Pillar 2 provisions in Libya's legislation would strengthen micro-prudential safeguards alongside the abovementioned macroprudential measures. This involves legislative powers for the CBL to require banks to hold supplementary capital through the Supervisory Review Process to address risks like concentration risk, interest rate risk, reputational risk and weak risk culture underestimated in Pillar 1.¹⁴⁰⁰

Public disclosure of key prudential information can significantly strengthen market discipline. Help Greater transparency allows investors and depositors to monitor bank risk-taking, reducing moral hazard. As a result, most MENA countries mandate quarterly Basel III disclosure on capital, liquidity, and asset quality. Pillar 3 market discipline is absent from the CBL circulars, even though Basel III emphasizes heightened disclosure. While the LCR circular rightly notes banks should have systems to disclose liquidity conditions across

¹³⁹⁸ Basel Committee on Banking Supervision, *Overview of Pillar 2 Supervisory Review Process* (Bank for International Settlements, June 2019) 3.

¹³⁹⁹ Ibid 6.

¹⁴⁰⁰ Ibid 8.

¹⁴⁰¹ George G Kaufman, 'Bank Contagion: A Review of the Theory and Evidence' (1994) 8(2) *Journal of Financial Services Research* 123, 126.

¹⁴⁰² Basel Committee on Banking Supervision, *Basel III: International Framework for Liquidity Risk Measurement, Standards and Monitoring* (Bank for International Settlements, December 2010) para 16.

currencies, 1403 binding disclosure requirements are necessary. Libya should require quarterly public reporting of capital ratios, liquidity ratios, leverage ratios, RWAs and NPLs.

In reforming bank capital regulations, institutional capacity building is critical for effective policy implementation. Technical assistance from the IMF and World Bank can help design suitable macroprudential frameworks and stress testing capabilities. Furthermore, secondments and training programmes facilitated through bilateral central bank partnerships can build supervisory expertise on advanced quantitative risk assessment. Targeted recruitment of qualified financial stability experts and actuaries can additionally bolster capabilities.

Moreover, public-private sector collaboration is important when introducing new standards to ensure a smooth banking industry adjustment. Draft regulations can undergo market consultations to solicit industry feedback on implementation issues. Industry working groups also enable substantive regulator-bank engagement for collaborative policy development. Combined technical and institutional capacity building enables the embedding international best practices within national regulatory architectures and business practices.

In summary, Libyan banking regulation reforms aligned with Basel standards are strengthening financial stability foundations. However, the full potential of international best practices is yet to be harnessed. Improvements to risk-weighting, liquidity buffers, macroprudential tools and supervisory oversight proposed in this section can promote banking sector resilience to systemwide shocks. Concurrently developing technical capabilities and supervisory expertise will maximize the benefits of implementing advanced capital adequacy frameworks. As Libya

¹⁴⁰³ Central Bank of Libya, Circular on Liquidity Coverage Ratio (C/2/2022) art 4.

charts its post-conflict economic rebuilding, establishing a robust prudential system is imperative for buttressing the banking sector's role in inclusive reconstruction.

5.5.2 Adoption of Risk-Based Capital Adequacy Ratio

The concept of the capital adequacy ratio (CAR) is central to the regulatory framework of banking systems globally. This prudential measure is designed to ensure the resilience of financial institutions and safeguard the stability of the financial system as a whole. It quantifies the proportion of a bank's capital, primarily Tier 1 and Tier 2 capital, as a percentage of its risk-weighted assets, reflecting the institution's ability to absorb losses and maintain solvency.

The importance of CAR in maintaining financial stability has been widely acknowledged in academic literature. It has been emphasized that a well-capitalized banking system can better absorb shocks, reducing the probability of bank failures and the potential for systemic crises. 1404 This sentiment is echoed by Claessens and Kodres, who highlight that capital adequacy requirements play a pivotal role in preventing bank insolvencies, as a well-capitalized bank has a higher capacity to endure economic downturns and adverse credit conditions. 1405 Empirical evidence corroborates the vital role of CAR in ensuring financial stability. It has been found that higher capitalization levels are associated with greater financial system stability, as they enhance banks' resilience against losses and reduce contagion risks. 1406 Additionally, studies such as those by Demirgüç-Kunt and Huizinga underscore the positive correlation between

¹⁴⁰⁴ Allen N Berger and Christa H Bouwman, 'Bank Liquidity Creation' (2009) 22(9) Review of Financial Studies 3779, 3782

¹⁴⁰⁵ Stijn Claessens and Laura E Kodres, 'The Regulatory Responses to the Global Financial Crisis: Some Uncomfortable Questions' (2014) 10 *Journal of Financial Stability* 7, 10.

¹⁴⁰⁶ Thorsten Beck, Olivier De Jonghe and Glenn Schepens, 'Bank Competition and Stability: Cross-country Heterogeneity' (2013) 22(2) *Journal of Financial Intermediation* 218, 221.

capital adequacy and a country's banking sector stability, advocating for the significance of

stringent capital regulations. 1407

In summary, the capital adequacy ratio is a cornerstone of prudential banking regulation, as

evidenced by academic literature and empirical studies. Its role in maintaining financial stability

by enhancing banks' capacity to withstand shocks and reducing the likelihood of systemic crises

underscores the significance of robust capital requirements in safeguarding the integrity of

financial institutions and the broader economy.

The adoption of a risk-based approach to capital adequacy in Libya's financial sector therefore

holds significant relevance in enhancing the stability and resilience of its banking system. The

traditional "one-size-fits-all" capital requirements may not adequately capture the varying risk

profiles of different assets and activities undertaken by financial institutions. A risk-based

approach tailors capital requirements to the inherent risks faced by banks, thereby promoting a

more effective and efficient allocation of capital resources.

Research has provided valuable insights into the importance of adopting a risk-based approach

to capital regulation. It highlights that such an approach aligns capital requirements with banks'

risk exposures, reducing the likelihood of systemic crises. 1408 In Libya, where political and

economic uncertainties have characterized its financial landscape, tailoring capital

requirements based on risk can contribute to mitigating potential vulnerabilities. Academic

literature supports the rationale for adopting a risk-based CAR. It emphasizes that risk-based

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¹⁴⁰⁷ Asli Demirgüç-Kunt and Harry Huizinga, 'Bank Activity and Funding Strategies: The Impact on Risk and Returns' (2010) 98(3) *Journal of Financial Economics* 626, 629.

¹⁴⁰⁸ Amós García, Fernando Gascón and Francisco González, *Model-Based Capital Regulation and Systemic Risk: Evidence from Covid-19* (SSRN, 2025) https://ssrn.com/abstract=5018603 accessed 20 August 2024.

capital regulations align regulatory requirements with banks' risk profiles, which can be especially relevant in economies facing uncertainty and volatility. Libya's economic landscape, shaped by political transitions and external influences, underscores the need for a flexible and responsive regulatory approach that considers the country's unique risks.

Further academic support comes from the argument that a risk-sensitive approach encourages banks to adopt more prudent risk management practices.¹⁴¹⁰ In an environment like Libya, where regulatory challenges may exist, a risk-based approach can incentivize banks to assess and mitigate risks effectively, thus improving their overall financial health.

Empirical studies also underline the importance of aligning capital requirements with risk profiles, suggesting that risk-based capital adequacy regulations can enhance banks' ability to withstand shocks, which is particularly pertinent in countries like Libya that are faced with geopolitical uncertainties. The relevance of adopting a risk-based approach in Libya's financial sector is underscored by the need for a dynamic regulatory framework that addresses the evolving risk landscape. By referencing best practices from international standards such as the Basel Accords, Libya can tailor risk-based capital regulations to its unique context, thus promoting financial stability and resilience.

Furthermore, it is suggested that banks' risk profiles can vary based on factors such as size, complexity, and exposure to external shocks. 1412 The World Bank's assessment of the financial

¹⁴⁰⁹ Jorge Maudos and Juan Fernández de Guevara, 'Factors Explaining the Interest Margin in the Banking Sectors of the European Union' (2007) 31(7) *Journal of Banking & Finance* 2043, 2046.

¹⁴¹⁰ Yakup Altunbas, Leonardo Gambacorta and David Marqués-Ibáñez, 'Does Monetary Policy Affect Bank Risk?' (2014) 10(1) *International Journal of Central Banking* 95, 97.

¹⁴¹¹ Lazlo Angbazo, 'Commercial Bank Net Interest Margins, Default Risk, Interest-Rate Risk, and Off-Balance Sheet Banking' (1997) 21(1) *Journal of Banking & Finance* 55, 58.

¹⁴¹² EP Davis and Haibin Zhu, 'Bank Lending and Commercial Property Cycles: Some Cross-Country Evidence' (2005) 29(9) *Journal of Banking & Finance* 2325, 2328.

sector's stability emphasizes the importance of risk-based approaches in mitigating potential vulnerabilities.¹⁴¹³ Thus, adopting a risk-sensitive CAR would enable Libyan authorities to tailor regulatory measures to address the specific challenges faced by its financial institutions, consequently promoting a safer and more robust banking system.

Risk-based CAR encourages banks to allocate capital in proportion to the risks they undertake. Hi incentivises banks to assess and manage their risk exposures more effectively. By accounting for the riskiness of assets and activities, banks are more likely to allocate resources prudently and engage in a more diversified portfolio to mitigate excessive risk concentration. Therefore, adopting a risk-based CAR enhances the transparency and accuracy of risk assessment, fostering greater trust among investors, depositors, and other stakeholders. Investors are more likely to view well-capitalised banks as reliable institutions that are better equipped to weather economic downturns.

5.5.3 Alignment with International Best Practices on Risk-Sensitivity:

The rationale for adopting a risk-based CAR in Libya is also aligned with international best practices. A risk-based CAR aligns Libya's banking regulations with international standards, such as the Basel Accords, enhancing the country's integration into the global financial system. The Basel Accords, as demonstrated by Basel Committee on Banking Supervision

¹⁴¹⁴ Y. Altunbas, O. Fazylov, and P. Molyneux, 'Evidence on the Bank Risk-Taking Channel of Monetary Policy' (2001) 69(6) Manchester School 643

¹⁴¹³ World Bank, Libya – Financial Sector Assessment Program: Technical Note on the Implementation of the Basel Core Principles for Effective Banking Supervision (World Bank 2018) 2.

¹⁴¹⁵ M. Cihák and K. Schaeck, 'How Well Do Aggregate Prudential Ratios Identify Banking System Problems?' (2010) 6(3) Journal of Financial Stability 130

¹⁴¹⁶ AN Berger and CH Bouwman, 'Bank Liquidity Creation' (2009) 22(9) Review of Financial Studies 3779, 3785.

¹⁴¹⁷ Olivier De Bandt and Philipp Hartmann, 'Systemic Risk: A Survey' (2000) 6(3) *European Journal of Finance* 213, 216.
¹⁴¹⁸ Harry Huizinga and Luc Laeven, 'Banking Risk and Regulation: Does One Size Fit All?' (2012) 21(3) *Journal of Financial Intermediation* 436, 439.

(BCBS) publications, emphasize the benefits of risk-sensitive capital requirements in enhancing the resilience of financial institutions. He aligning with these global standards, Libya can integrate itself into the broader international financial system and attract investor confidence. Such alignment reflects a commitment to following established regulatory frameworks, which can foster cooperation with international financial institutions and promote cross-border business relationships. He alignment reflects are cooperation with international financial institutions.

Risk-sensitive capital requirements promote the efficient allocation of capital by ensuring that banks hold more capital against riskier assets.¹⁴²¹ Therefore, this optimization reduces the likelihood of banks engaging in excessive risk-taking, leading to a more stable financial sector.¹⁴²² To this extent, a risk-based CAR contributes to systemic stability by reducing the interconnectedness and contagion risks associated with concentrated exposures.¹⁴²³ This benefit is particularly relevant in Libya, where economic vulnerabilities may amplify the impact of bank failures on the broader financial system.¹⁴²⁴

The adoption of a risk-based capital adequacy ratio (CAR) with its key components — Tier 1 and Tier 2 capital, risk weights and the minimum capital requirement - emerges as a potent reform to mitigate systemic risk within Libya's financial sector. Tier 1 capital, primarily consisting of common equity and retained earnings, serves as the fundamental core of a bank's capital structure. It represents a crucial cushion against potential losses and forms the bedrock

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¹⁴¹⁹ Basel Committee on Banking Supervision, *Basel III: International Framework for Liquidity Risk Measurement, Standards and Monitoring* (Bank for International Settlements, 2016) para 20.

¹⁴²⁰ Jean Dermine, European Banking: Past, Present, and Future (OUP 2002) 55.

¹⁴²¹ T Ahnert, 'Should Bank Capital Regulation Be Risk Sensitive'?' (2021) 27(1) Review of Finance 1.

 ¹⁴²² Reint Gropp and Florian Heider, 'The Determinants of Bank Capital Structure' (2010) 14(4) Review of Finance 587, 590.
 1423 Y Altunbas, L Gambacorta and D Marqués-Ibañez, Bank Risk and Monetary Policy (European Central Bank, Working Paper Series No 1075, July 2009).

¹⁴²⁴ Laura E Kodres and Matthew Pritsker, 'A Rational Expectations Model of Financial Contagion' (2002) 57(2) *Journal of Finance* 769, 771.

for financial institutions' resilience during periods of economic downturns. 1425 This core capital

provides an essential buffer that enables banks to absorb unexpected losses without

jeopardizing their solvency.

Complementing Tier 1 capital, Tier 2 capital encompasses subordinated debts and other forms

of capital that offer an additional layer of loss-absorption capacity. These instruments contribute

to a bank's ability to withstand financial stress by absorbing losses that Tier 1 capital might not

fully cover. By incorporating Tier 2 capital into the CAR framework, regulators reinforce the

stability of financial institutions, ensuring that they are adequately equipped to weather severe

economic shocks. 1426

Moreover, risk weights, a pivotal component of a risk-based CAR, play a central role in

calibrating capital requirements based on the underlying risk of a bank's assets. Assets are

assigned varying risk weights in proportion to their perceived riskiness. This approach tailors

capital allocation to different types of assets, thus encouraging banks to allocate more capital

to riskier assets and less capital to safer ones. The differentiation of risk weights captures the

intricacies of each asset's risk profile, aligning capital adequacy more closely with the

institution's overall risk exposure. This dynamic calibration mitigates the potential for excessive

risk-taking and bolsters the banking sector's resilience to systemic shocks. 1427

Furthermore, the minimum capital requirement sets a baseline threshold for the total capital that

banks must maintain relative to their risk-weighted assets. This requirement establishes a

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¹⁴²⁵ A. N. Berger and C. H. Bouwman, 'Bank Liquidity Creation' (2009) 22(9) Review of Financial Studies 3779, 3791.

1426 Yakup Altunbas, Leonardo Gambacorta and David Marqués-Ibáñez, 'Does Monetary Policy Affect Bank Risk?' (2014)

10(1) International Journal of Central Banking 95, 99.

¹⁴²⁷ Íbid 99.

foundational safety net, ensuring that even under normal operating conditions, banks possess a minimum level of capital that can absorb losses. This foundational requirement serves as a preemptive measure, precluding banks from operating with inadequate capital buffers, thereby strengthening the financial system's overall robustness. This mechanism becomes especially pertinent in an environment like Libya, marked by geopolitical and economic uncertainties, where the financial sector's vulnerabilities necessitate a robust safety mechanism.

The proposed reform to implement a risk-based CAR to mitigate systemic risk in Libya's financial sector holds substantial promise. Libya's unique challenges, including political volatility and economic unpredictability, accentuate the importance of prudent risk management. A risk-based CAR encourages financial institutions to comprehensively assess their risk exposure and allocate capital accordingly, ensuring that potential vulnerabilities are addressed. This approach aligns with the observations of Beck and others, who highlight the positive correlation between risk-based capital regulations and enhanced financial system stability. It offers a flexible yet structured mechanism that enhances the sector's resilience in the face of uncertainty.

The adoption of a risk-based capital adequacy ratio, encompassing Tier 1 and Tier 2 capital, risk weights, and the minimum capital requirement, presents a powerful reform avenue to mitigate systemic risk within Libya's financial sector. Academic literature underscores the effectiveness of these components in bolstering financial stability and aligning regulatory

¹⁴²⁸ Jorge Maudos and Juan Fernández de Guevara, 'Factors Explaining the Interest Margin in the Banking Sectors of the European Union' (2007) 31(7) *Journal of Banking & Finance* 2043, 2050.

¹⁴²⁹ T. Beck, O. De Jonghe, and G. Schepens, 'Bank Competition and Stability: Cross-Country Heterogeneity' (2013) 22(2) *Journal of Financial Intermediation* 218, 224.
¹⁴³⁰ Ibid.

frameworks with institutions' risk profiles.¹⁴³¹ By considering these components, Libya can establish a robust regulatory framework that not only safeguards the financial system against potential shocks but also promotes prudent risk management practices tailored to its unique challenges.

The adoption of a risk-based approach to financial regulation in Libya presents a complex set of challenges, many of which are common to emerging economies but are exacerbated by the nation's unique political and economic circumstances. These challenges encompass limited data availability, a shortage of technical expertise, and constraints in regulatory capacity, all of which can hinder the effective implementation of risk-based capital adequacy ratios (CAR) and other risk-sensitive regulations.

5.6. Data Availability, Infrastructure and Technical Capacity

Inadequate technological capabilities can hinder the implementation of sophisticated risk-based models and surveillance systems. The technological infrastructure needed to support advanced risk assessment and monitoring systems may be underdeveloped. Moreover, building the expertise needed for risk-based regulation requires substantial investments in training and education. Developing a cadre of skilled professionals, including risk analysts, economists, and regulatory specialists, is a resource and time-consuming endeavour.

¹⁴³¹Jin-Chuan Duan, 'Risk Weighting, Risk-Based Capital Regulation, and Deposit Insurance Pricing Under Endogenous Bank Moral Hazard' (2018) 92 *Journal of Economic Dynamics and Control* 1, 4.

¹⁴³² World Bank, Libya – Financial Sector Assessment Program: Technical Note on the Implementation of the Basel Core Principles for Effective Banking Supervision (World Bank 2018) 5.

¹⁴³³ Asli Demirgüç-Kunt and Harry Huizinga, 'Bank Activity and Funding Strategies: The Impact on Risk and Returns' (2010) 98(3) *Journal of Financial Economics* 626, 633.

A fundamental challenge in Libya is the limited availability of comprehensive and reliable financial data. This scarcity extends to data related to credit risk, market risk and operational risk. In many emerging economies, including Libya, data can be fragmented, outdated, or of poor quality, impeding the development of robust risk models and risk assessments. 1434 Accurate risk assessments are essential for the success of a risk-based approach, making data availability a critical challenge.

The capacity of regulatory institutions in Libya may be insufficient to implement and enforce a risk-based regulatory framework.¹⁴³⁵ Effective supervision and enforcement require skilled personnel, adequate resources and an independent regulatory authority, which may be lacking. Consequently, Libya's political instability and governance challenges can disrupt financial sector reforms.¹⁴³⁶ Political instability can result in policy uncertainty and divert resources away from regulatory development.¹⁴³⁷ Ensuring political stability and strengthening governance structures are therefore paramount for effective regulation.¹⁴³⁸

Developing a robust legal framework for financial regulation and ensuring its effective enforcement is essential. Weak legal institutions and ineffective enforcement can undermine regulatory efforts. Additionally, cultural factors, including resistance to change and

¹⁴³⁴ Luc Laeven and Fabian Valencia, 'Systemic Banking Crises: A New Database' (IMF Working Paper WP/08/224, 2008) 2.

¹⁴³⁵ Stijn Claessens and Laura E Kodres, 'The Regulatory Responses to the Global Financial Crisis: Some Uncomfortable Questions' (2014) 10 *Journal of Financial Stability* 7, 12.

¹⁴³⁶ Luis González, Mario Guzmán and Thomas Quast, 'Oil and Political Instability: A New Framework' (2013) 25 *International Review of Economics & Finance* 316, 318.

¹⁴³⁷ Stephan Haggard and Robert R Kaufman, 'The Political Economy of Financial Internationalization in the Developing World' (1995) 49(1) *International Organization* 35, 37.

¹⁴³⁸ James R Barth, Gerard Caprio Jr and Ross Levine, 'Bank Regulation and Supervision: What Works Best?' (2004) 13(2) *Journal of Financial Intermediation* 205, 208.

¹⁴³⁹ Rafael La Porta and others, 'The Economic Consequences of Legal Origins' (2008) 46(2) *Journal of Economic Literature* 285, 288.

¹⁴⁴⁰ Stijn Claessens and Laura E Kodres, 'The Regulatory Responses to the Global Financial Crisis: Some Uncomfortable Questions' (2014) 10 *Journal of Financial Stability* 7, 10.

entrenched institutional practices, can impede the adoption of new risk-based approaches.¹⁴⁴¹ Overcoming cultural resistance and fostering a culture of risk awareness may require considerable effort. Privacy is an example. Ensuring data privacy and security is crucial, particularly in a digital age where financial data is increasingly vulnerable to cyber threats.¹⁴⁴² Establishing robust data protection measures is essential to maintaining the integrity of risk assessments.

Economic challenges, including the nation's reliance on oil revenues, can affect the stability and diversity of the financial sector. 1443 Economic volatility and dependence on a single revenue source can increase financial sector vulnerabilities. Libya's financial sector is also vulnerable to external shocks and global economic trends. 1444 Developing risk management frameworks capable of mitigating the impact of external economic fluctuations is a significant challenge. Addressing these challenges requires a multifaceted and adaptive approach. Collaboration with international organizations, investing in data infrastructure, strengthening regulatory institutions, fostering political stability, promoting risk awareness, and developing a supportive legal framework are key strategies that Libya can pursue to successfully implement a risk-based approach to financial regulation.

Implementing a risk-based approach to financial regulation in Libya is indeed a complex undertaking, but overcoming the associated challenges can be facilitated through a multifaceted

¹⁴⁴¹ Asli Demirgüç-Kunt and Harry Huizinga, 'Bank Activity and Funding Strategies: The Impact on Risk and Returns' (2010) 98(3) *Journal of Financial Economics* 626, 629-631.

¹⁴⁴² Martin Čihák and others, 'Financial Development in 205 Economies, 1960 to 2010' (2013) 1(2) *Journal of Financial Perspectives* 17, 19.

¹⁴⁴³ Luis González, Mario Guzmán and Thomas Quast, 'Oil and Political Instability: A New Framework' (2013) 25 *International Review of Economics & Finance* 316, 321.

¹⁴⁴⁴ James R Barth, Gerard Caprio Jr and Ross Levine, 'Bank Regulation and Supervision: What Works Best?' (2004) 13(2) *Journal of Financial Intermediation* 205, 211.

strategy. Drawing from the experiences of emerging economies and supported by academic literature, Libya can address the shortage of technical expertise by establishing comprehensive training programmes. The programmes should focus on developing skills related to risk assessment, econometrics and regulatory compliance. Collaborations with universities, training institutions and international organizations can enhance the effectiveness of the initiatives. Collaboration with international organizations such as the World Bank, the International Monetary Fund (IMF), and the Bank for International Settlements (BIS) can provide Libya with access to technical expertise, best practices and financial support. These organizations can offer guidance on regulatory framework development, data collection and analysis, and capacity building. Such partnerships have been instrumental in strengthening regulatory systems in various countries. 1446

Enhancing regulatory capacity is crucial. Libya should prioritize the development of a robust regulatory framework capable of accommodating risk-based approaches. This includes recruiting and training regulatory personnel, establishing independent supervisory bodies, and fostering an environment conducive to effective oversight. Regulatory capacity building should be an ongoing process, adapting to the evolving financial landscape. Furthermore, addressing data limitations is vital for successful implementation. Libya can invest in improving data collection, storage, and analysis capabilities. Developing a centralized database for

¹⁴⁴⁵ World Bank, Libya – Financial Sector Assessment Program: Technical Note on the Implementation of the Basel Core Principles for Effective Banking Supervision (World Bank 2018) 2.

¹⁴⁴⁶ JR Barth, G Caprio and R Levine, 'Bank Regulation and Supervision: What Works Best?' (2004) 13(2) *Journal of Financial Intermediation* 205, 212.

¹⁴⁴⁷ Rafael La Porta and others, 'The Economic Consequences of Legal Origins' (2008) 46(2) *Journal of Economic Literature* 285, 288.

¹⁴⁴⁸ S. Claessens and L. E. Kodres, 'The Regulatory Responses to the Global Financial Crisis: Some Uncomfortable Questions' (2014) 10 *Journal of Financial Stability* 7, 14.

financial information can facilitate risk assessment and surveillance.¹⁴⁴⁹ Collaboration with international organizations can provide technical assistance in this regard.¹⁴⁵⁰

To mitigate the impact of political instability on regulatory efforts, Libya should work towards establishing a stable political environment that prioritizes financial sector reform.¹⁴⁵¹ Political commitment to financial stability and regulatory reform is essential for the success of risk-based approaches. Engaging policymakers and demonstrating the economic benefits of a robust financial sector can garner political support.¹⁴⁵²

Encouraging collaboration between the public and private sectors can help to foster a culture of risk awareness and cooperation. Regulatory authorities can engage with financial institutions to build consensus on risk assessment methodologies and compliance standards. Open dialogue and partnership can enhance regulatory effectiveness and promote a shared responsibility for financial stability. These strategies, informed by academic research and the experiences of other nations, provide a comprehensive roadmap for Libya to address the challenges associated with implementing a risk-based approach to financial regulation. By investing in human capital, collaborating with international partners, building regulatory capacity, enhancing data infrastructure, ensuring political stability, and fostering public-private

¹⁴⁴⁹ Andrew Berg, Nathaniel Eshun and Catherine Pattillo, 'Bank Soundness and Macroeconomic Policy' (2003) 27(4) *Journal of Banking & Finance* 673, 676.

¹⁴⁵⁰ Martin Čihák and others, 'Financial Development in 205 Economies, 1960 to 2010' (2013) 1(2) *Journal of Financial Perspectives* 17, 22.

¹⁴⁵¹ Luis González, Mario Guzmán and Thomas Quast, 'Oil and Political Instability: A New Framework' (2013) 25 *International Review of Economics & Finance* 316, 322.

¹⁴⁵² Stephan Haggard and Robert R Kaufman, 'The Political Economy of Financial Internationalization in the Developing World' (1995) 49(1) *International Organization* 35, 37.

¹⁴⁵³ Rafael La Porta and others, 'The Economic Consequences of Legal Origins' (2008) 46(2) *Journal of Economic Literature* 285, 292.

¹⁴⁵⁴ Ross Levine and David Renelt, 'A Sensitivity Analysis of Cross-Country Growth Regressions' (1992) 82(4) *American Economic Review* 942, 945.

¹⁴⁵⁵ Asli Demirgüç-Kunt and Harry Huizinga, 'Bank Activity and Funding Strategies: The Impact on Risk and Returns' (2010) 98(3) *Journal of Financial Economics* 626, 634.

cooperation, Libya can lay the foundation for a resilient and effective financial regulatory framework.

5.7 Financial Supervision Dimensions of Integrated Approach to Systemic Risk Mitigation in Libya

Financial stability signifies the enduring robustness of the financial system, its capacity to absorb shocks, and its competence in perpetuating pivotal economic functions without substantial disruptions.¹⁴⁵⁶ It is within the purview of central banks to assume a pivotal role in safeguarding such stability, vigilantly monitoring the risk that the failure of a single financial institution or market segment could precipitate widespread adverse effects on the broader economic system.¹⁴⁵⁷ The reinforcement of statutory mandates and governance structures pertaining to financial stability is recognized globally as a best practice, underscoring the international dimension of economic security.¹⁴⁵⁸ Systemic risk mitigation necessitates an integrated approach that combines capital regulation, corporate governance, and robust financial supervision. Research has shown that financial interconnectivity and globalization have heightened systemic vulnerabilities, requiring a harmonized regulatory response. Libya's financial system, characterized by institutional fragility and regulatory fragmentation, would benefit from adopting international best practices while tailoring them to domestic market conditions¹⁴⁵⁹

¹⁴⁵⁶ Rosa María Lastra, 'Systemic Risk, SIFIs and Financial Stability' (2011) 6(2) Capital Markets Law Journal 197, 200.

¹⁴⁵⁷ Martin Čihák and Erlend Nier, 'The Need for Special Resolution Regimes for Financial Institutions – The Case of the European Union' (2012) 2 Harvard Business Law Review 395, 398.

¹⁴⁵⁸ Sylvester CW Eijffinger and Donato Masciandaro, Handbook of Central Banking, Financial Regulation and Supervision: After the Financial Crisis (Edward Elgar 2011) 5.

1459 Onyeka Osuji, Corporate Governance and Financial Regulation (Edward Elgar 2013) 21.

The augmentation of the financial stability mandate and the improvement of the governance architecture of Libya's banking law is imperative to effectively counteract systemic risk. ¹⁴⁶⁰ The extant banking legislation fails to distinctly delineate objectives that anchor financial stability, nor does it forge a governance structure designed to synchronize regulatory endeavours aimed at maintaining economic equilibrium.

It is incumbent upon Libya to undertake legislative reforms to enshrine a formal financial stability objective within the mandate of the Central Bank of Libya, thereby empowering it with macroprudential oversight and coordination mechanisms. Such a reform is expected to significantly enhance the management of systemic risks and align Libyan banking practices with international norms. A financial system bolstered in this manner is better positioned to contribute to equitable and sustainable economic growth.

However, the mere strengthening of legal frameworks, while necessary, is not a panacea. It must be complemented by the development of institutional capacity within the CBL, necessitating substantive investments in technical acumen related to financial stability analysis, stress testing, data collection, macroprudential policy formulation, and crisis management. Additionally, the principles of independence, accountability, effective communication, and robust coordination mechanisms must be refined in congruence with international best practices governing central bank operations. Finally, the overarching architecture of banking sector oversight and resolution should undergo comprehensive reforms. The culmination of these

¹⁴⁶⁰ Robert Hockett, 'The Macroprudential Turn: From Institutional Safety and Soundness to Systematic Financial Stability in Financial Supervision' (2014) 9 *Virginia Law & Business Review* 201, 205.

¹⁴⁶¹ Andrew D Schmulow, 'The Four Methods of Financial System Regulation: An International Comparative Survey' (2015) 26 *Journal of Banking and Finance Law and Practice* 151.

¹⁴⁶² Axel A Weber, 'Securing Stability and Growth in a Post-Crisis World' (2011) 15 Financial Stability Review 151, 153.

¹⁴⁶³ Luc Laeven and Fabian Valencia, 'Systemic Banking Crises Revisited' (IMF Working Paper WP/18/206, 2018) 2.

efforts should be the installation of adept technocratic stewardship, buttressed by formidable legal authorities, to steer the policies effectively.

5.7.1 Legal and Institutional Structure for Financial Supervision

The Libyan banking law should be reformed to unambiguously entrust the Central Bank of Libya (CBL) with the responsibility of ensuring financial stability. 1464 The 2012 banking law, while outlining the CBL's roles in monetary policy execution and banking supervision, conspicuously omits an explicit financial stability function. 1465 A definitive legal mandate enhances the accountability of the CBL and confers the necessary legitimacy for employing regulatory instruments to confront systemic challenges. 1466 Such a mandate aligns with the International Monetary Fund's Core Principles for Effective Banking Supervision, which highlight the promotion of the safety and soundness of banks and the overall banking system as a supervisory priority. 1467

The mandate for financial stability should empower the CBL to diligently monitor systemic risks, enact macroprudential regulations, offer emergency liquidity support, fulfil the role of lender of last resort, and ensure harmonized coordination with domestic regulatory authorities. Macroprudential policies should be targeted to include countercyclical capital buffers, sector-specific capital requirements, leverage ratio ceilings, and dynamic provisioning, among others. The capability to extend emergency liquidity and to act as a lender of last resort

¹⁴⁶⁴ Banking Law No 1 of 2005 (Libya), as amended by Law No 46 of 2012, art 11.

¹⁴⁶⁵ Banking Law No 1 of 2005 (Libya), as amended by Law No 46 of 2012, art 32.

¹⁴⁶⁶ Charles Goodhart and Rosa Lastra, 'Populism and Central Bank Independence' (2018) 29 *Open Economies Review* 49, 52

¹⁴⁶⁷ Basel Committee on Banking Supervision, *Core Principles for Effective Banking Supervision* (Bank for International Settlements, September 2012) Principle 1.

¹⁴⁶⁸ Gabriele Galati and Richhild Moessner, 'Macroprudential Policy – A Literature Review' (2013) 27(5) *Journal of Economic Surveys* 846, 848-854.

during periods of financial stress is essential, enabling central banks to provide a lifeline to solvent institutions. Moreover, formalized coordination frameworks involving the Ministry of Finance, market regulatory bodies, and other stakeholders would enhance the oversight capabilities and policy coherence. 1470

To address financial stability issues more effectively, the banking law should introduce a governance structure, ideally in the form of a Financial Stability Committee. Such a committee will institutionalize the collaborative efforts between financial authorities, bolster information sharing, and streamline joint policy initiatives. A proposed interagency council, potentially led by the CBL and inclusive of the Ministry of Finance, Ministry of Economy, market regulators, and deposit insurance entities, should possess a clearly defined mandate to oversee systemic risks, provide collaborative guidance, and coordinate crisis interventions. These governance arrangements should be custom-fitted to the national context, reflecting the unique roles of financial stability regulators within Libya. 1473

5.7.2 Anticipating Peculiar Systemic Risks

Indicators point to Libya's substantial exposure to systemic risks, exacerbated by sustained political instability that has undermined the operational backdrop and fiscal solidity of the banking sector, a predominant component of the national financial landscape.¹⁴⁷⁴ The

¹⁴⁶⁹ Xavier Freixas, Luc Laeven and José-Luis Peydró, *Systemic Risk, Crises, and Macroprudential Regulation* (MIT Press 2015) 17.

¹⁴⁷⁰ María Nieto and Garry J Schinasi, 'EU Framework for Safeguarding Financial Stability: Towards an Analytical Benchmark for Assessing its Effectiveness' (IMF Working Paper WP/07/260, 2007) 3.

¹⁴⁷¹ Martin Čihák and Erlend Nier, 'The Need for Special Resolution Regimes for Financial Institutions – The Case of the European Union' (2012) 2 *Harvard Business Law Review* 395, 410.

¹⁴⁷² Daniel K Tarullo, 'Macroprudential Regulation' (2014) 31 Yale Journal on Regulation 505, 510.

¹⁴⁷³ Erlend W Nier, 'Financial Stability Frameworks and the Role of Central Banks: Lessons from the Crisis' (IMF Working Paper WP/09/70, April 2009) 7.

¹⁴⁷⁴ Aerdt CFJ Houben, Jan Kakes and Garry J Schinasi, *Toward a Framework for Safeguarding Financial Stability* vol 4 (International Monetary Fund 2004) 12.

prevalence of non-performing loans, constituting approximately 20-30% of total lending, signifies a dire risk landscape. Regulatory oversight and risk management practices currently fall short of aligning with international benchmarks. The Furthermore, the economy's reliance on oil exports engenders procyclical credit dynamics, compounding the financial sector's vulnerabilities. Such inherent fragilities, compounded by the unpredictable global economic climate, accentuate the imperative for the modernization of the CBL's analytical acumen and regulatory apparatus. The sector of the modernization of the CBL's analytical acumen and regulatory apparatus.

The consolidation of legal mandates and governance frameworks is instrumental in supporting macroprudential policies aimed at attenuating the vectors through which systemic risk is transmitted. Enhanced capital and liquidity reserves fortify banks against a variety of financial perturbations, including those pertaining to credit, market and liquidity. Imposing limits on financial concentrations acts as a bulwark against the spread of financial distress through interconnected institutions. The application of margin and collateral stipulations serves to temper the procyclical effects of market volatility. Moreover, the establishment of foreign currency reserves provides a defence mechanism against the vicissitudes of exchange

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¹⁴⁷⁵ Peterson K Ozili, 'Non-Performing Loans and Financial Development: New Evidence' (2019) 20(1) *Journal of Risk Finance* 59, 62.

 ¹⁴⁷⁶ Ismail Elshahoubi and others, 'Challenges to Compliance with Corporate Governance Mechanisms and Accountability in Emerging Markets: Evidence from Libyan Listed Companies' (2019) 8(3) *Journal of Governance and Regulation* 24, 26.
 ¹⁴⁷⁷ Charles Godfred Ackah and Ellen Bortei-Dorku, *Global Financial Crisis Discussion Series* (Overseas Development Institute 2009) 4.

¹⁴⁷⁸ Gabriele Galati and Richhild Moessner, 'Macroprudential Policy – A Literature Review' (2013) 27(5) *Journal of Economic Surveys* 846, 855.

¹⁴⁷⁹ William A Allen and Geoffrey Wood, 'Defining and Achieving Financial Stability' (2006) 2(2) *Journal of Financial Stability* 152, 155.

¹⁴⁸⁰ Céline Gauthier, Alfred Lehar and Moez Souissi, 'Macroprudential Capital Requirements and Systemic Risk' (2012) 21(4) *Journal of Financial Intermediation* 594, 598.

¹⁴⁸¹ Markus K Brunnermeier and Lasse Heje Pedersen, 'Market Liquidity and Funding Liquidity' (2009) 22(6) *Review of Financial Studies* 2201, 2205.

rates. 1482 A fortified legal and institutional edifice is thus foundational for the efficacious enactment of such policies.

Macroprudential regulations are designed to mitigate systemic vulnerabilities that transcend the remit of micro-prudential rules, which traditionally concentrate on the solvency and liquidity of individual institutions. 1483 Central banks, in concert with regulatory entities, deploy an array of macroprudential instruments designed to provide counter-cyclical resistance during credit expansions, thereby forestalling the accrual of systemic risk. 1484 Such instruments include countercyclical capital buffers, which compel banks to fortify their capital reserves in prosperous times to create a financial bulwark for leaner periods. 1485 Sectoral capital directives are tailored to temper lending to sectors such as real estate, in recognition of their potential to precipitate economic imbalances. 1486 Regulations capping large exposures are critical to prevent excessive concentration risk among financial counterparts. 1487 Liquidity mandates are instituted to ensure that banks maintain a resilient funding profile. 1488 The practice of dynamic loan loss provisioning is adopted to moderate the impact of economic cycles on bank balance sheets. 1489 Borrower-centric constraints are applied to modulate credit standards and demand. 1490

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¹⁴⁸² Luis Felipe Céspedes, Roberto Chang and Andrés Velasco, 'Financial Intermediation, Exchange Rates, and Unconventional Policy in an Open Economy' (NBER Working Paper No 18431, 2012) 2.

¹⁴⁸³ Samuel G Hanson, Anil K Kashyap and Jeremy C Stein, 'A Macroprudential Approach to Financial Regulation' (2011) 25(1) *Journal of Economic Perspectives* 3, 5.

¹⁴⁸⁴ Stijn Claessens, 'An Overview of Macroprudential Policy Tools' (2015) 7 Annual Review of Financial Economics 397, 400-403.

¹⁴⁸⁵ Rafael Repullo and Jesús Saurina, 'The Countercyclical Capital Buffer of Basel III: A Critical Assessment' (CEMFI Working Paper No 1102, 2011) 3.

¹⁴⁸⁶ Cheng Hoon Lim and others, 'Macroprudential Policy: What Instruments and How to Use Them? Lessons from Country Experiences' (IMF Working Paper WP/11/238, 2011) 5.

¹⁴⁸⁷ Kristin J Forbes, 'Macroprudential Policy: What We've Learned, Don't Know, and Need to Do' (2019) 109 AEA Papers and Proceedings 470, 472.

¹⁴⁸⁸ Markus Brunnermeier and others, *The Fundamental Principles of Financial Regulation* (Geneva Reports on the World Economy 11, 2009) 8.

¹⁴⁸⁹ Jesús Saurina, 'Loan Loss Provisions in Spain: A Working Macroprudential Tool' (2009) 17(1) Revista de Estabilidad Financiera 11, 17.

¹⁴⁹⁰ Deniz Igan and Heedon Kang, *Do Loan-to-Value and Debt-to-Income Limits Work? Evidence from Korea* (IMF Working Paper WP/11/297, 2011) 4.

Interventions in the foreign exchange markets are employed to stabilize the currency and manage the risks associated with exchange rate volatility.¹⁴⁹¹

5.7.3 Emergency liquidity, lender of last resort and crisis management

The provision of emergency liquidity assistance is paramount in safeguarding financial stability, as it mitigates the potential for insolvency during periods of bank runs and significant deposit withdrawals. He lender of last resort facility enables central banks to extend credit to liquidity-constrained but fundamentally solvent institutions, contingent on the provision of adequate collateral. This mechanism acts as a critical backstop, instilling confidence in the financial markets and averting the risk of contagion. Nonetheless, it is essential to articulate clear frameworks around the terms of this support, including eligibility criteria, pricing, and structured exit strategies, to mitigate moral hazard risks. A deliberate policy of constructive ambiguity concerning the conditions of access may serve to discourage undue reliance on central bank assistance while preserving its standing as a credible guarantor.

For liquidity assistance and lender-of-last-resort operations to function optimally, they must be underpinned by robust legal authorities and operational readiness. Financial stability mandates conferred upon central banks should unambiguously encompass the authority to provide credit under extraordinary circumstances. The logistical infrastructure supporting such operations, encompassing collateral management, legal documentation, and procedural

¹⁴⁹¹ Jonathan Ostry and others, *Managing Capital Inflows: What Tools to Use?* (IMF Staff Discussion Note SDN 11/06, 2011) 7.

 ¹⁴⁹² Jean-Charles Rochet, 'Liquidity Regulation and the Lender of Last Resort' (2008) 11 Financial Stability Review 45, 46.
 1493 Kristin J Forbes, 'Macroprudential Policy: What We've Learned, Don't Know, and Need to Do' (2019) 109 AEA Papers and Proceedings 470, 471.

¹⁴⁹⁴ Martin Čihák and Richard Podpiera, 'Integrated Financial Supervision: Which Model?' (2008) 19(2) *North American Journal of Economics and Finance* 135, 136-139.

¹⁴⁹⁵ Axel A Weber, 'Securing Stability and Growth in a Post-Crisis World' (2011) 15 Financial Stability Review 151, 153.

rigour, must be meticulously maintained.¹⁴⁹⁶ Furthermore, coordination with frameworks for bank resolution and deposit insurance schemes is indispensable to ensure the orderly management of financial institutions that are no longer viable.¹⁴⁹⁷ The provision of fiscal support to cover potential losses further reinforces the credibility of these financial safety nets.

Crisis management entities are essential for embedding structured collaboration between regulatory authorities, thereby enabling rapid and unified responses to financial disturbances. The composition of these entities typically spans central banks, finance ministries, regulatory bodies, resolution authorities, and deposit insurers, although their structure may vary. ¹⁴⁹⁸Their principal functions include the vigilant monitoring of systemic risks, preparedness planning for potential crises, the facilitation of information exchange, policy formulation, and the orchestration of crisis interventions. ¹⁴⁹⁹ Allocating certain decision-making responsibilities to specialized sub-committees can optimize the equilibrium between broad-based participation and decision-making efficacy. ¹⁵⁰⁰

The corpus of empirical evidence is mounting in favour of the efficacy of macroprudential policies in the maintenance of financial stability. ¹⁵⁰¹ Investigations into the deployment of countercyclical buffers indicate a substantive enhancement in the resilience of banking institutions to shocks in credit markets and a resultant tempering of the amplitude of lending

¹⁴⁹⁶ Daniela Gabor, 'A Step Too Far? The European Financial Transactions Tax on Shadow Banking' (2016) 23(6) *Journal of European Public Policy* 925, 928.

¹⁴⁹⁷ Émilios Avgouleas, *Bank Leverage Ratios and Financial Stability: A Micro- and Macroprudential Perspective* (Levy Economics Institute Working Paper No 849, 2015) 2.

¹⁴⁹⁸ Jan Frait and Zlatuše Komárková, 'Financial Stability, Systemic Risk and Macroprudential Policy' in *Financial Stability Report 2011* (2010) 96, 98.

¹⁴⁹⁹ María Nieto and Garry J Schinasi, 'EU Framework for Safeguarding Financial Stability: Towards an Analytical Benchmark for Assessing its Effectiveness' (IMF Working Paper WP/07/260, 2007) 5.

¹⁵⁰⁰ Martin Čihák and Richard Podpiera, 'Integrated Financial Supervision: Which Model?' (2008) 19(2) North American Journal of Economics and Finance 135, 140.

¹⁵⁰¹ Cheng Hoon Lim and others, 'Macroprudential Policy: What Instruments and How to Use Them? Lessons from Country Experiences' (IMF Working Paper WP/11/238, 2011) 3.

cycles.¹⁵⁰² While sectoral capital measures have demonstrated variable effectiveness, often delimited by the phenomenon of regulatory arbitrage,¹⁵⁰³ more stringent funding norms have been instrumental in buttressing banks against the vicissitudes of market liquidity.¹⁵⁰⁴ The adoption of dynamic provisioning is credited with reducing the procyclicality of lending practices and the variability of loan losses.¹⁵⁰⁵ Additionally, margin requirements have been pivotal in curbing speculative trading practices that typically escalate during economic upturns.¹⁵⁰⁶ Notwithstanding these positive developments, the predominance of analyses centred on advanced economies underscores a significant gap in data pertaining to emerging markets.¹⁵⁰⁷

Critics of financial stability mandates contend that such policies may necessitate compromises vis-à-vis other macroeconomic objectives, particularly price stability. Contrarily, contemporary scholarship increasingly subscribes to the notion that price stability and financial stability are not mutually exclusive but are, in fact, complementary objectives. Moreover, meticulously crafted macroprudential frameworks are observed to levy only modest costs, especially when juxtaposed with the potential consequences of a financial crisis. Challenges

¹⁵⁰² Gabriel Jiménez and others, 'Macroprudential Policy, Countercyclical Bank Capital Buffers, and Credit Supply: Evidence from the Spanish Dynamic Provisioning Experiments' (2017) 125(6) *Journal of Political Economy* 2126, 2130. ¹⁵⁰³ Kenneth N Kuttner and Ilhyock Shim, 'Can Non-Interest Rate Policies Stabilize Housing Markets? Evidence from a Panel of 57 Economies' (2016) 26 *Journal of Financial Stability* 31, 36.

¹⁵⁰⁴ Clemens Bonner and Sylvester CW Eijffinger, 'The Impact of Liquidity Regulation on Bank Intermediation' (2016) 20(5) *Review of Finance* 1945, 1948.

¹⁵⁰⁵ Jesús Saurina, 'Loan Loss Provisions in Spain: A Working Macroprudential Tool' (2009) 17(1) Revista de Estabilidad Financiera 11, 13.

¹⁵⁰⁶ Markus K Brunnermeier and Lasse Heje Pedersen, 'Market Liquidity and Funding Liquidity' (2009) 22(6) *Review of Financial Studies* 2201, 2204.

¹⁵⁰⁷ Cheng Hoon Lim and others, 'Macroprudential Policy: What Instruments and How to Use Them? Lessons from Country Experiences' (IMF Working Paper WP/11/238, 2011) 7.

¹⁵⁰⁸ Frank Smets, 'Financial Stability and Monetary Policy: How Closely Interlinked?' (2018) 35 *International Journal of Central Banking* 263, 266.

¹⁵⁰⁹ Tobias Adrian and Nellie Liang, 'Monetary Policy, Financial Conditions, and Financial Stability' (2018) 90(6) *International Journal of Central Banking* 73, 75.

¹⁵¹⁰ Stephen G Cecchetti and Marion Kohler, 'When Capital Adequacy and Interest Rate Policy Are Substitutes (And When They Are Not)' (2014) 50(3) *International Journal of Central Banking* 205, 208-209.

in coordination within governance committees persist, yet these could be ameliorated through cogent policy frameworks.¹⁵¹¹ The implementation of macroprudential policies necessitates a judicious equilibrium between the agility of response, consistency in application, and the imperative of accountability.¹⁵¹² Regulatory authorities frequently confront political pressure to dilute regulatory standards during economic expansions and to counteract lobbying efforts by the financial sector.¹⁵¹³ The establishment of formal mandates and governance structures serves to undergird a commitment to regulatory objectives and ensures transparency.

5.7.4 Triggers for Supervisory Inspections

Supervisory inspections and external audits constitute crucial oversight mechanisms for ensuring adequate governance and risk management by banks. ¹⁵¹⁴ At the same time, unfettered inspection powers without appropriate checks and balances can undermine the bank boards' responsibilities. ¹⁵¹⁵ Hence, banking laws need to authorize inspections for assessing safety and soundness along with system-wide risks. However, triggers and procedures for supervisory visits may be better set under regulations to maintain oversight effectiveness and avoidance of regulatory arbitrage while respecting the bank boards' roles. ¹⁵¹⁶

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¹⁵¹¹ José Viñals and others, *The Making of Good Supervision: Learning to Say "No"* (IMF Staff Position Note SPN/10/08, 2010) 2.

¹⁵¹² Rochelle Edge and Nellie Liang, *New Financial Stability Governance Structures and Central Banks* (HKIMR Working Paper No 06/2017, 2017) 4.

¹⁵¹³ Andrew Baker, 'Macroprudential Regimes and the Politics of Social Purpose' (2018) 25(3) *Review of International Political Economy* 293, 296.

¹⁵¹⁴ IL van Jaarsveld, 'Domestic and International Banking Regulation and Supervision – Defying the Challenges' (2002) 119 *South African Law Journal* 71, 74; James R Barth, Daniel E Nolle and Apanard (Penny) Prabha, 'Banking Structure, Regulation, and Supervision in 1993 and 2013: Comparisons across Countries and over Time' (2014) 13 *Journal of International Business and Law* 231, 233.

¹⁵¹⁵ Luc Laeven and Ross Levine, 'Bank Governance, Regulation and Risk Taking' (2009) 93(2) *Journal of Financial Economics* 259, 261.

¹⁵¹⁶ World Bank, *Good Practices for Financial Consumer Protection* (World Bank 2020) 6; Basel Committee on Banking Supervision, *Guidelines for Identifying and Dealing with Weak Banks* (BIS, 16 July 2015) https://www.bis.org/bcbs/publ/d330.htm accessed 8 January 2024; IMF, *Evaluating Financial Sector Supervision: Banking, Insurance and Securities Markets* (IMF, 2005) ch 5.

For example, South Africa's Banking Act provides wide powers for on-site inspections by the Prudential Authority but emphasizes risk-focused and consultative processes under regulations for initiating inspections. This balances effective supervision with keeping bank boards responsible for governance and internal controls. Therefore, inspection triggers and procedures may be optimally set under regulations connected to the risk profile rather than hard-coded under legislation to maintain both oversight effectiveness and bank board accountability. 1519

5.7.5 Harmonization with Listing and Disclosure Rules

In several jurisdictions, banking laws mandate oversight of listed banks to conform with applicable listing rules and securities law disclosures considering their wider public shareholding. However, major gaps between prudential norms and capital market expectations can undermine governance and transparency objectives. For instance, lapses in enforcing risk disclosure standards under listing rules could limit market discipline mechanisms for banks despite adequate regulations on governance and risk management systems. 1522

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https://www.elibrary.imf.org/view/journals/002/2022/184/002.2022.issue-184-en.xml accessed 9 January 2024.

¹⁵¹⁷ Nico de Lange and Michael Petros, 'Prudential Supervision of Banks in the South African Context – the Supervisory Review and Evaluation' (Bank for International Settlements, 2 August 2010) https://www.bis.org/ifc/publ/ifcb33o.pdf accessed 25 December 2023.

¹⁵¹⁸ International Monetary Fund, 'South Africa: Financial Sector Assessment Program – Technical Note on Banking Regulation and Supervision' (IMF Staff Country Report 22/184, June 2022)

¹⁵¹⁹ Sarah Blinco and others, *Bank Boards – A Review of Post-Crisis Regulatory Approaches* (FSI Insights No 25, BIS March 2022) https://www.bis.org/fsi/publ/insights25.pdf accessed 9 January 2024.

¹⁵²⁰ MT Moore, 'Redressing Risk Oversight Failure in UK and US Listed Companies: Lessons from the RBS and Citigroup Litigation' (2017) 18 *European Business Organization Law Review* 733, 735.

¹⁵²¹ Chen-Yun Tsang, 'Balancing the Governance of the Modern Financial Ecosystem: A New Governance Perspective and Implications for Market Discipline' (2018) 40 *Houston Journal of International Law* 531, 533.

¹⁵²² Barth JR, Caprio G and Levine R, 'Bank Regulation and Supervision: What Works Best?' (2004) 13 *Journal of Financial Intermediation* 215; Kristin N Johnson, 'Governing Financial Markets: Regulating Conflicts' (2013) 88 *Washington Law Review* 185, 188.

Similarly, consolidated supervision principles warrant group-wide disclosures, but these remain constrained by fragmented reporting rules across sectors and jurisdictions.¹⁵²³

Therefore, while disclosure requirements may be avoided under banking law due to overlaps with listing rules, supervisory attention is vital for harmonization between prudential regulations and market-facing reporting. Joint Working Groups between banking, capital market and insurance regulators could address such gaps rather than relying solely on banking laws and regulations. 1524

5.8 Barriers to Adopting an Integrated Approach in Libya

The implementation of an integrated approach to systemic risk mitigation in Libya faces substantial structural and institutional barriers that must be acknowledged in any reform strategy. These obstacles are multifaceted, encompassing Libya's limited integration into global financial systems, ongoing political instability, institutional fragility, and fundamental tensions between mainstream global financial practices and the Islamic finance principles that dominate Libya's financial landscape. 1525

5.8.1 Limited Integration into Global Financial Systems and Capacity Constraints

Libya's exclusion from key international financial regulatory bodies represents a fundamental barrier to implementing integrated systemic risk mitigation approaches. Unlike countries that benefit from membership in the Basel Committee on Banking Supervision or direct engagement with the International Organization of Securities Commissions (IOSCO), Libya operates

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¹⁵²³ Howard Davies and David Green, Global Financial Regulation: The Essential Guide (Polity 2008) 10.

¹⁵²⁴ H Kent Baker and Leigh A Riddick, *International Finance: A Survey* (Oxford University Press 2013) 12.

¹⁵²⁵ World Bank, 'Libya Financial Sector Review' (World Bank Group 2020) 15-18.

outside the primary global regulatory coordination mechanisms that facilitate implementation of international standards. The absence of Basel Committee membership significantly constrains Libya's ability to participate in the ongoing development and refinement of global banking standards. Active participation in international standard-setting bodies provides critical benefits beyond mere rule adoption, including access to peer learning networks, technical assistance programs, and early warning systems for emerging regulatory challenges. Libya's exclusion from these networks leaves its regulatory authorities operating with incomplete information about international best practices and limits opportunities for capacity building through direct engagement with experienced regulators from other jurisdictions.

The absence of IOSCO membership creates additional challenges for implementing integrated approaches that require coordination between banking and securities market regulation. ¹⁵³⁰ IOSCO's frameworks for regulatory cooperation facilitate integrated supervision of complex financial institutions operating across multiple market segments. ¹⁵³¹ Without access to these cooperation mechanisms, Libya's ability to implement comprehensive oversight of systemically important financial institutions remains constrained. ¹⁵³² Furthermore, Libya's limited participation in international financial surveillance programs conducted by the International Monetary Fund and World Bank constrains access to technical assistance and peer review

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Basel Committee on Banking Supervision, 'History of the Basel Committee' (Bank for International Settlements 2022).
 Charles Goodhart, The Basel Committee on Banking Supervision: A History of the Early Years 1974-1997 (Cambridge

University Press 2011) 234.

¹⁵²⁸ Ibid 245.

¹⁵²⁹ Pierre-Hugues Verdier, 'The Political Economy of International Financial Regulation' (2013) 88 Indiana Law Journal 1405, 1418.

¹⁵³⁰ International Organization of Securities Commissions, 'Objectives and Principles of Securities Regulation' (IOSCO 2017)15.

¹⁵³¹ Ibid 18.

¹⁵³² Kern Alexander, Rahul Dhumale and John Eatwell, *Global Governance of Financial Systems: The International Regulation of Systemic Risk* (Oxford University Press 2006) 178.

mechanisms that support regulatory development.¹⁵³³ The Financial Sector Assessment Program (FSAP) and related initiatives provide valuable benchmarking opportunities and technical support for implementing international standards, but Libya's political situation has limited its engagement with these programs. 1534

The implementation of integrated approaches to systemic risk mitigation requires substantial investments in human capital, technological infrastructure, and data systems that exceed Libya's current institutional capacity.¹⁵³⁵ International experience demonstrates that effective implementation of Basel III standards and related frameworks requires sophisticated risk measurement and monitoring systems, extensive data collection capabilities, and highly trained supervisory staff. 1536 Libya's regulatory institutions face significant capacity constraints in all these areas. 1537 The Central Bank of Libya's supervisory functions have historically relied on relatively simple prudential ratios and basic reporting requirements that fall well short of the comprehensive risk assessment frameworks required for integrated approaches. 1538 Implementing advanced frameworks such as the Internal Capital Adequacy Assessment Process (ICAAP) under Pillar 2 of Basel II would require substantial capacity building in risk management, stress testing, and model validation that currently exceed institutional capabilities. 1539

¹⁵³³ International Monetary Fund, 'Financial Sector Assessment Program' https://www.imf.org/en/what-we-do/financialsector-policies accessed 16 January 2024.

1534 World Bank, 'Libya Financial Sector Review' (World Bank Group 2020) 25.

¹⁵³⁵ Financial Stability Institute, 'FSI Survey on the Implementation of the New Capital Adequacy Framework in Non-Basel Committee Member Countries' (Bank for International Settlements 2008) 45. 1536 Ibid 52.

¹⁵³⁷ World Bank, 'Libya Financial Sector Review' (World Bank Group 2020) 31.

¹⁵³⁸ Central Bank of Libya, 'Banking Supervision Annual Report 2019' (CBL 2020) 12.

¹⁵³⁹ Basel Committee on Banking Supervision, 'Sound Practices for the Management and Supervision of Operational Risk' (Bank for International Settlements 2011) 23.

5.8.2 Political Instability and Islamic Finance Compatibility Challenges

Libya's ongoing political instability poses severe challenges to implementing coherent, long-term regulatory reforms required for effective integrated approaches. The country's institutional fragmentation, with competing governing authorities and frequent changes in political leadership, creates an environment where consistent policy implementation becomes extremely difficult. The division of the Central Bank of Libya between competing factions from 2014 to 2023 exemplifies how political instability undermines institutional capacity for integrated regulation. During this period, the existence of parallel central banking authorities created fundamental contradictions in monetary policy and financial supervision, making coordinated implementation of comprehensive regulatory reforms impossible. Even following formal reunification in 2023, the legacy effects of institutional division continue to complicate efforts to implement integrated approaches requiring centralized coordination.

Research on governance in post-conflict states demonstrates that regulatory effectiveness requires stable institutional foundations and consistent policy implementation over extended periods. The integrated approaches to systemic risk mitigation outlined in international best practices typically require multi-year implementation timelines, with phases of preparation, pilot testing, full implementation, and ongoing refinement. Libya's political volatility disrupts these extended implementation processes, leading to incomplete reforms and

¹⁵⁴⁰ Derick W Brinkerhoff, 'Rebuilding Governance in Failed States and Post-Conflict Societies: Core Concepts and Cross-Cutting Themes' (2005) 25 Public Administration and Development 3, 8.

¹⁵⁴¹ World Bank, 'Libya Financial Sector Review' (World Bank Group 2020) 23.

¹⁵⁴² Ibid 27.

¹⁵⁴³ Ibid 29.

¹⁵⁴⁴ Derick W Brinkerhoff, 'Rebuilding Governance in Failed States and Post-Conflict Societies: Core Concepts and Cross-Cutting Themes' (2005) 25 Public Administration and Development 3, 15.

¹⁵⁴⁵ Basel Committee on Banking Supervision, 'Implementation of Basel Standards: A Report to G20 Leaders' (Bank for International Settlements 2021) 12.

regulatory gaps.¹⁵⁴⁶ Political instability also affects the recruitment and retention of qualified regulatory personnel essential for implementing sophisticated risk management frameworks.¹⁵⁴⁷ Libya's political turbulence has led to significant brain drain, with many qualified financial professionals emigrating or moving to private sector positions, leaving regulatory institutions with insufficient technical capacity to implement complex integrated regulatory frameworks.¹⁵⁴⁸

Libya's financial landscape is dominated – for over a decade - by Islamic finance principles that create fundamental tensions with mainstream global financial practices, complicating the adoption of internationally standardized integrated approaches. ¹⁵⁴⁹ Unlike conventional financial systems for which international standards are primarily designed, Islamic finance operates under distinctive principles that prohibit interest-based transactions (riba), excessive uncertainty (gharar), and speculative activities (maysir). ¹⁵⁵⁰ These principles create specific challenges for implementing standard risk management frameworks designed for interest-based financial systems. ¹⁵⁵¹ The Basel Committee's treatment of credit risk assumes interest-based lending relationships that differ fundamentally from Islamic finance structures such as murabaha (cost-plus financing), ijara (leasing), and musharaka (partnership) arrangements. ¹⁵⁵² Research demonstrates that these structural differences require substantial modifications to

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¹⁵⁴⁶ World Bank, 'Libya Financial Sector Review' (World Bank Group 2020) 33.

¹⁵⁴⁷ Donato Masciandaro and Marc Quintyn, 'The Governance of Financial Supervision: Recent Developments' (2016) 11 Journal of Economic Surveys 470, 475.

¹⁵⁴⁸ World Bank, 'Libya Financial Sector Review' (World Bank Group 2020) 34.

¹⁵⁴⁹ Mahmoud A El-Gamal, *Islamic Finance: Law, Economics, and Practice* (Cambridge University Press 2006) 45.

 ¹⁵⁵¹ Islamic Financial Services Board, 'Capital Adequacy Standard for Institutions Offering Only Islamic Financial Services' (IFSB-2, 2005) 15.
 ¹⁵⁵² Ibid 23.

standard regulatory approaches to ensure compatibility with Islamic finance principles while maintaining prudential effectiveness.¹⁵⁵³

The prohibition of interest in Islamic finance creates particular challenges for implementing liquidity management frameworks under Basel III. 1554 The Liquidity Coverage Ratio (LCR) and Net Stable Funding Ratio (NSFR) assume access to interbank money markets and central bank facilities that operate through interest-based mechanisms. 1555 Islamic banks cannot participate in conventional interbank markets or access interest-based central bank liquidity facilities, requiring alternative arrangements that may not provide equivalent liquidity buffers. 1556 Furthermore, the governance requirements for Islamic financial institutions include additional layers of oversight through Shariah supervisory boards that must certify compliance with religious principles. 1557 These religious oversight requirements create parallel governance structures that may conflict with standard corporate governance frameworks designed for conventional financial institutions. 1558

5.8.3 Market Structure and Legal Framework Deficiencies

Libya's highly concentrated banking sector structure creates additional barriers to implementing integrated approaches designed for more competitive and diversified financial systems. ¹⁵⁵⁹ The dominance of a small number of large, state-owned banks limits the competitive dynamics that

¹⁵⁵³ V Sundararajan and Luca Errico, 'Islamic Financial Institutions and Products in the Global Financial System' (IMF Working Paper WP/02/192, 2002) 12.

 ¹⁵⁵⁴ Basel Committee on Banking Supervision, 'Basel III: The Liquidity Coverage Ratio and Liquidity Risk Monitoring Tools'
 (Bank for International Settlements 2013) 8.
 ¹⁵⁵⁵ Ibid 12.

¹⁵⁵⁶ Zamir Iqbal and Abbas Mirakhor, *An Introduction to Islamic Finance: Theory and Practice* (2nd edn, John Wiley & Sons 2011) 234.

¹⁵⁵⁷ Ibid 245

¹⁵⁵⁸ Volker Nienhaus, 'Governance of Islamic Banks' in M Kabir Hassan and Mervyn K Lewis (eds), Handbook of Islamic Banking (Edward Elgar 2007) 128.

¹⁵⁵⁹ World Bank, 'Libya Financial Sector Review' (World Bank Group 2020).

international frameworks assume will drive effective risk management and governance improvements. Research on banking sector concentration demonstrates that highly concentrated systems may experience different risk dynamics than the more competitive markets for which international standards are designed. In concentrated systems, the failure of a single large institution can have disproportionate systemic effects, but the standard regulatory frameworks may not adequately address the specific risks created by this concentration. The predominance of state ownership in Libya's banking sector creates additional governance challenges that complicate implementation of integrated approaches. State-owned banks often operate under different incentive structures than privately-owned institutions, with political considerations potentially overriding commercial risk management objectives.

The limited development of capital markets in Libya creates further constraints on implementing market-based elements of integrated regulatory frameworks. ¹⁵⁶⁵ Pillar 3 of the Basel framework relies heavily on market discipline through disclosure and transparency requirements, but this approach assumes the existence of sophisticated market participants capable of processing and acting on disclosed information. ¹⁵⁶⁶ Libya's underdeveloped capital markets limit the effectiveness of market-based discipline mechanisms, requiring greater reliance on supervisory oversight that may strain regulatory capacity. ¹⁵⁶⁷ Technological

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¹⁵⁶⁰ World Bank, 'Libya Financial Sector Review' (World Bank Group 2020).

¹⁵⁶¹ Thorsten Beck, Asli Demirgüç-Kunt and Ross Levine, 'Bank Concentration, Competition, and Crises: First Results' (2006) 30 Journal of Banking & Finance 1581, 1587.

¹⁵⁶² Thorsten Beck, Asli Demirgüç-Kunt and Ross Levine, 'Bank Concentration, Competition, and Crises: First Results' (2006) 30 Journal of Banking & Finance 1581, 1592.

¹⁵⁶³ OECD, 'OECD Guidelines on Corporate Governance of State-Owned Enterprises' (OECD Publishing 2015) 34. ¹⁵⁶⁴ Ibid 47.

¹⁵⁶⁵ Basel Committee on Banking Supervision, 'Pillar 3 Disclosure Requirements – Consolidated and Enhanced Framework' (Bank for International Settlements 2015) 12.

¹⁵⁶⁷ World Bank, 'Libya Financial Sector Review' (World Bank Group 2020).

infrastructure represents another significant barrier to implementation. Modern integrated risk management frameworks rely heavily on sophisticated information systems capable of processing large volumes of granular data in real-time. Libya's banking sector technology infrastructure remains underdeveloped, with many institutions relying on legacy systems that lack the capacity for comprehensive risk data aggregation and reporting required by international standards. 1570

Significant gaps exist in Libya's legal and regulatory frameworks that complicate implementation of comprehensive integrated approaches to systemic risk mitigation. ¹⁵⁷¹ The existing Banking Law No. 1 of 2005 and related regulations were developed before the emergence of modern integrated regulatory frameworks and lack many of the legal foundations required for effective implementation. ¹⁵⁷² The absence of comprehensive bank resolution and deposit insurance frameworks creates particular challenges for implementing integrated approaches that assume the existence of effective safety net mechanisms. ¹⁵⁷³ Research on banking crises demonstrates that effective resolution frameworks are essential components of comprehensive financial stability arrangements, providing orderly mechanisms for dealing with failing institutions while minimizing systemic disruption. ¹⁵⁷⁴ Libya's limited resolution framework constrains the effectiveness of preventive measures implemented through integrated approaches. ¹⁵⁷⁵ Legal uncertainty regarding the enforcement powers of regulatory authorities

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¹⁵⁶⁸ Martin Čihák and Erlend W Nier, 'The Need for Special Resolution Regimes for Financial Institutions' (2012) 2 Harvard Business Law Review 395, 401.

¹⁵⁶⁹ Ibid 405.

¹⁵⁷⁰ World Bank, 'Libya Financial Sector Review' (World Bank Group 2020) 67.

¹⁵⁷¹ Banking Law No 1 of 2005 (Libya), as amended by Law No 46 of 2012.

¹⁵⁷² World Bank, 'Libya Financial Sector Review' (World Bank Group 2020) 105.

¹⁵⁷³ Luc Laeven and Fabian Valencia, 'Systemic Banking Crises Revisited' (IMF Working Paper WP/18/206, 2018) 8.

¹⁵⁷⁵ World Bank, 'Libya Financial Sector Review' (World Bank Group 2020).

creates additional implementation barriers.¹⁵⁷⁶ Many integrated regulatory frameworks require supervisory authorities to have extensive powers to require corrective actions, impose sanctions, and restrict activities of institutions that fail to meet regulatory requirements.¹⁵⁷⁷

5.8.4 Strategies for Overcoming Implementation Barriers

Despite these substantial barriers, Libya can pursue several strategies to gradually overcome obstacles to implementing integrated approaches to systemic risk mitigation. A phased implementation approach can help address capacity and resource constraints by prioritizing the most critical elements of integrated frameworks while building institutional capability over time. International technical assistance and capacity building programs can help address expertise gaps and provide access to best practices from other jurisdictions. Libya should actively seek engagement with international organizations and bilateral partners to access technical assistance for regulatory development. Regional cooperation mechanisms through organizations such as the Arab Monetary Fund may provide alternative approaches to accessing international regulatory networks despite limited participation in global bodies. Leveraging Islamic finance expertise could help address conflicts between religious requirements and international standards. Organizations such as the Islamic Financial Services Board have

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¹⁵⁷⁶ Basel Committee on Banking Supervision, 'Core Principles for Effective Banking Supervision' (Bank for International Settlements 2012) Principle 11.

¹⁵⁷⁷ Basel Committee on Banking Supervision, 'Core Principles for Effective Banking Supervision' (Bank for International Settlements 2012) Principle 12.

¹⁵⁷⁸ Financial Stability Institute, 'Proportionality in Banking Regulation: A Survey on Current Practices' (Bank for International Settlements 2021) 34.

¹⁵⁷⁹ Marc Quintyn and Michael W Taylor, 'Regulatory and Supervisory Independence and Financial Stability' (2003) 40 CESifo Economic Studies 259, 267.

¹⁵⁸⁰ Marc Quintyn and Michael W Taylor, 'Regulatory and Supervisory Independence and Financial Stability' (2003) 40 CESifo Economic Studies 259, 272.

¹⁵⁸¹ Arab Monetary Fund, 'Banking Supervision in Arab Countries' (AMF 2020) 23.

¹⁵⁸² Islamic Financial Services Board, 'Core Principles for Islamic Finance Regulation (Banking Segment)' (IFSB-17, 2015) 45.

developed regulatory frameworks specifically designed for Islamic finance that provide alternative approaches to achieving prudential objectives while maintaining religious compliance. Libra could build on these frameworks to develop integrated approaches that accommodate both Islamic finance principles and international regulatory objectives. Gradual development of legal and institutional frameworks can help address regulatory gaps while building domestic support for reform. Sather than attempting comprehensive transformation simultaneously, Libra could pursue incremental reforms that build regulatory capability and demonstrate effectiveness over time, allowing for learning and adjustment while reducing implementation risks associated with comprehensive change.

5.9 Conclusion

In the dynamic realm of global finance, systemic risk presents a formidable challenge to the stability of financial systems, transcending borders and impacting economies at large. The examination of systemic risk and its mitigation strategies through the lens of proposed reforms, as elucidated in the context of Libya's evolving financial architecture, offers a comprehensive narrative of the efforts to bolster economic resilience and safeguard against financial crises.

The inception of the global financial crisis illuminated the intricate web of systemic vulnerabilities, underscoring the imperative for robust regulatory frameworks that can prevent and mitigate systemic risk. In response, the international community, spearheaded by bodies such as the Basel Committee on Banking Supervision and the Financial Stability Board, has

¹⁵⁸³ Ibid 67.

¹⁵⁸⁴ Ibid 71.

¹⁵⁸⁵ Jeroen Klomp and Jakob de Haan, 'Banking Risk and Regulation: Does One Size Fit All?' (2012) 36 Journal of Banking & Finance 3197, 3203.

¹⁵⁸⁶ Ibid 3207.

embarked on a rigorous quest to redefine the standards of financial stability and prudence. This global endeavour has led to the formulation of the Basel III framework, a cornerstone in the edifice of financial regulation aimed at enhancing the resilience of banks and financial institutions.

At the heart of the proposed reforms for Libya is a paradigm shift towards a corporate governance framework that intricately balances the dual objectives of stringent oversight and the promotion of sound risk-taking activities. This recalibration is rooted in the adoption of best practices recognized internationally for their pivotal role in cementing financial stability and fostering investor confidence. The augmentation of capital reserves, as guided by the Basel III standards, emerges as a fundamental strategy to ensure that Libyan banks are well-equipped with a resilient capital framework, poised to withstand economic shocks and maintain solvency amidst financial turbulence.

The narrative further unfolds to reveal the strategic importance of refining the governance architecture of Libya's banking law. This effort is not merely an exercise in legislative revision but a concerted effort to imbue the Central Bank of Libya with a clear and unequivocal mandate for financial stability. Such a mandate is envisioned to empower the Central Bank to wield a comprehensive toolkit comprising macroprudential regulations, the provision of emergency liquidity, and the execution of lender-of-last-resort functions, thereby fortifying the financial system against systemic threats.

Amidst this discourse on regulatory reforms and governance improvements, the critical role of financial supervision cannot be overstated. The envisioned enhancement of Libya's financial supervisory regime seeks to establish a robust and adaptive structure capable of pre-emptively identifying and addressing systemic risks. This holistic approach to financial supervision is

pivotal in ensuring that the Libyan financial system operates within the confines of prudence and foresight, thus safeguarding against the potential escalation of systemic vulnerabilities.

Chapter Six: Conclusion

6.1 Overview of the Thesis

The global financial crisis of 2007-2008 starkly illuminated the systemic vulnerabilities inherent in the intricate web of relationships that characterize modern financial markets. This tumultuous period catalysed a fundamental re-evaluation of the regulatory architectures both nationally and internationally, aimed at buttressing the global financial system against the destructive forces of financial contagion. At the epicentre of this attempt lies the phenomenon of systemic risk, the potential for financial shocks to proliferate through channels of interconnectedness, crippling financial systems and inflicting harm on the real economy. The absence of a universally endorsed definition of systemic risk is conspicuous. However, common threads run through the multitude of interpretations offered, coalescing around the notion of risks that transcend individual institutions or market segments to endanger the broader financial framework through contagion effects.

The analysis carried out in this thesis elucidates systemic risk as a complex, multifaceted phenomenon, that emerged as a pivotal theme, warranting detailed examination given its ramifications for economic systems. The thesis has underscored the intricate nature of systemic risk, encompassing widespread financial disturbances triggered by the failure of institutions or markets that propagate through contagion effects. While remaining an elusive concept without a universally endorsed definition, systemic risk was portrayed as the risk of financial instability with the potential for significant adverse impacts on the real economy. The global financial crisis starkly revealed systemic risk channels, transmitting localized shocks globally through interconnected markets and magnifying vulnerabilities. Contagion, on the other hand, emerges as the conduit through which localized risks cascade into system-wide crises. Transmission

channels include exposure linkages between institutions, asset liquidations and fire sale dynamics, and confidence effects. Amplifiers of systemic risk range from financial innovation and opaque securitization to excessive risk concentrations and leverage. The costs of systemic crises are formidable, evidenced by constrained credit supply, widespread insolvencies, and economic stagnation.

This understanding framed systemic risk mitigation as a complex but critical undertaking for policymakers, regulators and the financial industry. The thesis emphasized fortifying the financial system's resilience through robust capital buffers, governance frameworks and supervision. Capital requirements emerged as a necessity in bolstering banks' shock-absorption capacities. Corporate governance was highlighted as pivotal in promoting prudent institutional behaviours and risk cultures. Stringent financial oversight was depicted as essential for preemptively identifying systemic vulnerabilities. The thesis synthesized perspectives arguing that regulatory frameworks must be continuously refined to address the evolving complexities of global finance.

However, while definitional ambiguities persist, the necessity of mitigating systemic risk is beyond contention, particularly in light of the calamitous global financial crisis. This imperative is sharply crystallized by the extensive analysis conducted on capital adequacy, corporate governance and financial supervision as critical tools for systemic risk mitigation.

The doctrine of capital adequacy is firmly established in financial regulatory architectures as a bulwark against the erosion of financial integrity. Capital requirements aim to ensure that financial institutions have sufficient high-quality loss-absorbing buffers to maintain solvency and continue operations during periods of stress. From the Basel Accords to Basel III improvements, capital adequacy regulations have progressively evolved to align capital with

the underlying risk profiles of financial institutions. The countercyclical and macroprudential innovations of Basel III signify a paradigm shift from static to dynamic capital requirements capable of being bolstered during economic upswings and drawn down during downturns. This new generation of capital regulations is designed to foster resilience against financial shocks.

Beyond the quantitative calibration of capital reserves, the qualitative attributes of capital have decisive implications for loss absorbency. The progression in the Basel frameworks towards higher quality Common Equity Tier 1 capital reflects the recognition that ordinary shareholders, as the residual claimants of a failed institution, have the strongest incentives to avoid excessive risk-taking. The enhanced capital standards under Basel III reinforce the capacity of financial institutions to maintain critical economic functions under stressed conditions without necessitating taxpayer-funded bailouts. Capital adequacy regulation is thus acknowledged as fundamental to the stability and resilience of financial systems.

In a parallel vein, corporate governance framed around accountability and integrity acts as a bulwark against hazardous conduct in the financial sector. The analysis reveals how sound governance principles and ethical leadership can foster organizational cultures that promote responsibility, transparency and prudent risk management. The adoption of international best practices on board oversight, risk monitoring, compensation structures and stakeholder protection provides a good foundation for financial institutions to pursue objectives beyond myopic profit maximization and for strengthening governance and internal controls. The role of corporate governance in obviating risks is thrown into sharp relief in contexts where poor oversight and unbridled self-interest precipitate severe crises of confidence. Hence governance reforms emerge as a vital pillar of systemic risk mitigation strategies.

Additionally, the extensive appraisal of financial supervision practices underscores their importance in maintaining financial stability. Stringent licensing protocols, vigilant oversight mechanisms, robust regulatory architecture and prompt corrective interventions are essential tools in the supervisory toolkit. Macroprudential supervision enables the detection of systemic vulnerabilities early through holistic assessments spanning institutions, markets and infrastructures. Reflexive governance models that synthesize granular prudential supervision with system-wide monitoring provide safeguards against both institutional failures and macrofinancial systemic risks. Crisis management groups and resolution frameworks facilitate coordinated intervention to contain systemic contagion. Financial supervision thus constitutes a critical line of defence against threats to financial stability.

Woven together, the doctrinal threads of capital regulation, corporate governance and supervision constitute a fabric of systemic risk mitigation mechanisms. The efficacy of these mechanisms, however, is contingent on their thoughtful implementation within enabling regulatory environments. Legal frameworks should provide clear yet flexible mandates. Regulatory perimeters require periodic recalibration as markets evolve. Meaningful consultation with stakeholders is indispensable in policy design. Institutional capacity building and supervisory resourcing warrant ongoing investment. Inter-agency coordination is vital for coherent oversight. Ultimately, financial regulators should remain strategically adaptive in their approach, responsive to emerging vulnerabilities and steadfastly oriented towards the public interest.

6.2 Findings and Arguments

The extensive analysis contained in this thesis offers several key findings regarding capital, governance and supervision in the context of systemic risk mitigation. First, capital regulation

emerges as a foundational requirement, with higher, high-quality capital requirements necessary for banks and systemically important institutions to bolster their financial resilience. The countercyclical and macroprudential superstructure of Basel III and its risk-calibration tools provide a sophisticated framework for dynamically aligning capital with underlying risks. Leverage ratios should complement risk-weighted approaches to curb excessive balance sheet growth. Sectoral capital requirements warrant consideration for targeting real estate and other concentrations. And capital surcharges on systemically important banks can mitigate contagion risks. Overall, the analysis underscores that capital adequacy should remain at the forefront of prudential regulation, fundamentally oriented towards shock absorption and maintaining solvency.

Additionally, substantive reforms are imperative around corporate governance and conduct within financial institutions. Board oversight needs enhancement through greater independence, financial expertise and conscientious risk monitoring. Remuneration structures should incorporate extended deferrals and clawbacks to temper short-termism and excessive risk-taking. Robust reporting and strong internal controls provide transparency around risks. Codes of ethics and integrity training buttress compliance. Legal protections for internal whistleblowers facilitate speaking up against misconduct. The findings highlight that good governance fundamentally entails aligning institutional cultures with the values of responsibility, ethics and prudence. This requires comprehensive initiatives spanning rules, incentives, controls and leadership. Effective governance systems curb tendencies toward hazardous behaviours and thus contribute meaningfully to systemic risk reduction.

Furthermore, the research demonstrates the pivotal role of financial supervision in safeguarding systemic stability. Macroprudential oversight and tools for holistic risk surveillance are essential complements to institutional supervision. The perimeter, intensity and adaptability of

regulation warrant ongoing assessment as markets evolve. Formalizing the financial stability function of central banks clarifies their prevention and response roles regarding systemic threats. Inter-agency coordination mechanisms should be leveraged for coherent policy and prompt intervention. The central bank liquidity assistance should be underpinned by robust operational frameworks as an emergency backstop. Thus, multi-pronged refinements to supervisory architecture and infrastructure can significantly enhance systemic risk oversight.

In reforming regulations and governance frameworks, the findings emphasize balancing prescriptiveness with agility given complex, evolving financial systems. Hardwiring transient aspects into laws risks stagnating development, yet unfettered discretion concentrates power excessively. Stakeholder consultations, regulatory impact assessments and oversight coordination provide essential checks and balances. The interconnections between financial sector rules and underlying corporate governance statutes merit consideration. Consistent implementation, periodic refinement and emphasis on substantive compliance provide important reinforcement to rulemaking. Hence, achieving an equilibrium between comprehensive legislation and adaptable regulation emerges as pivotal.

The arguments for keeping banking laws high-level supported by detailed regulations that can evolve flexibly are well grounded in international standards like Basel Core Principles. Prescriptive norms around appointments, fit and proper assessments, inspection triggers and general governance expectations may be better housed under subsidiary regulations overseen by the banking supervisor compared to hard-coding transient rules under the legislation. At

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¹⁵⁸⁷ IMF and World Bank, *Implementation of the Basel Core Principles for Effective Banking Supervision: Experiences, Influences and Perspectives* (IMF 2002) 3.

¹⁵⁸⁸ Klaus J Hopt, 'Corporate Governance of Banks and Other Financial Institutions after the Financial Crisis' (2013) 13(2) *Journal of Corporate Law Studies* 219, 222.

the same time, holistic enhancement for bank regulation effectiveness warrants assessing gaps in underlying corporate laws, as well as harmonization across broader listing rules and disclosure standards. As jurisdictions undertake reforms of banking legal frameworks, central banks and regulators need to spearhead such wider engagement across the bank and non-bank oversight agencies to mitigate systemic governance risks better. 1590

Therefore, there is a strong case for setting subsidiarity boundaries right between banking laws and regulations in line with international standards. However realizing bigger benefits requires complementary reforms for corporate, listing and disclosure rules applicable to banks based on consolidated gaps analysis and with oversight coordination across relevant agencies.

The thesis argues that effectively mitigating systemic risk requires policymakers to account for political economy factors alongside technocratic solutions. Financial crises invariably unfold within broader socio-political contexts, with reforms shaped by ideologies, interests and incentives. Regulations entail negotiating trade-offs between competing macroeconomic objectives. And populism around reining in financial elites can overshadow evidence-based policymaking. Therefore, astute financial governance demands acknowledging these complex dynamics, building stakeholder coalitions, and framing systemic risk within integrated economic policy narratives. Technical acumen must be paired with political insight.

Moreover, the findings highlight that effectively governed financial globalization remains fundamental for systemic risk management and economic prosperity. Financial

1590 Rosa María Lastra and Christina Parajon Skinner, 'Sustainable Central Banking' (2023) 63 Virginia Journal of International Law 397, 400.

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¹⁵⁸⁹ Mariana Pargendler, 'The Rise of International Corporate Law' (2021) 98 Washington University Law Review 1765,

interconnectedness enables efficiency but also channels contagion, necessitating robust cross-border regulation. Appropriately coordinated international standards buttress national policies. However, divergence in adoption tempers efficacy, underscoring implementation challenges with non-binding norms. Treaty-based reforms can strengthen formalization but face ratification hurdles. Thus, enhancing cooperation around oversight, crisis response and tackling arbitrage persist as priorities, with informal governance remaining predominant.

The empirical component of the thesis further enriches perspectives on systemic risk mitigation, providing instructive insights into the current governance frameworks and reform imperatives within Libya. The analysis reveals major capacity constraints around data, expertise, infrastructure, and political realities that complicate reforms. However, high financial dollarization, oil dependence, regional unrest, and weak transparency exacerbate Libya's economic vulnerabilities and system-wide risks. The large presence of undercapitalized state-owned banks intensifies contagion channels. This precariousness underscores the necessity of governance enhancements under the Basel III principles to buttress stability and resilience.

The empirical findings highlight priorities around implementing risk-based capital norms, stringent fit and proper assessments for bank leadership, strong internal controls and supervisory enforcement. Modernizing outdated legal statutes to enable reforms is imperative. And investments in technical skills and digital infrastructure remain indispensable for long-term oversight capabilities. Furthermore, the analysis advocates strategic sequencing of reforms tailored to local realities, balancing short-term stabilization needs with aspirations for alignment with international best practices.

In charting pathways forward, Libya requires a multi-pronged financial reform strategy backed by political resolve. Near-term priorities include recapitalizing vulnerable banks, consolidating fractured oversight agencies, enhancing transparency through accounting and disclosure upgrades, and targeting capacity building at regulatory institutions. The medium-term agenda should encompass legislative reforms, adoption of risk-based capital and governance regulations, investments in skills and technology, and operational enhancements to supervision. The long-term vision should hinge on inclusive financial development, integration with regional and global markets, and establishing robust, adaptable systemic risk governance frameworks. Pursuing such a staged yet comprehensive roadmap can place Libya's financial system on a trajectory of stability and sustainable growth.

6.3 Original Contributions and Opportunities for Future Research

This thesis makes several contributions to the academic discourse on capital regulations, governance practices, and financial supervision within the domain of systemic risk mitigation. It elucidates the anatomy of systemic risk, surveying its sources, transmission channels, impacts and amplifiers to elucidate a complex phenomenon at the heart of financial crises. The research provides a doctrinal analysis of international standards around capital adequacy under the Basel Accords, highlighting the progressive evolution towards the macroprudential, risk-calibrated and countercyclical policy structures of Basel III.

The thesis examines corporate governance challenges in curbing excessive risk-taking behaviours within financial institutions, providing best practice recommendations centred on accountability, integrity and ethics. It assesses innovations in financial supervision, emphasizing the significance of macroprudential oversight, regulatory perimeter design, and central bank financial stability mandates. The empirical component offers original insights into financial governance capacities, vulnerabilities and reforms within Libya, identifying priorities and sequencing strategies to enhance systemic resilience.

This thesis synthesizes multiple theoretical perspectives to forge an integrated analytical framework. Institutional, behavioural and political economy lenses provide distinct yet complementary vantage points into capital, governance and supervisory dynamics. The research draws on extensive literature spanning law, regulation, economics, finance, and the interdisciplinary domains of socio-legal studies. The empirical analysis deploys qualitative and quantitative data for an in-depth mixed methods investigation of Libya's financial sector.

Methodologically, the thesis adopts a rigorously doctrinal approach, entailing a comprehensive analysis of relevant statutes, regulations, policies, and academic literature to extract substantive findings. This doctrinal methodology facilitates a detailed yet contextualized interrogation of financial governance issues at the intersection of practical regulations and scholarly discourse. And it enables drawing carefully considered conclusions and recommendations of both academic and policy relevance.

By elucidating the significance of capital, governance and supervision as tools for systemic risk mitigation through multiple theoretical and jurisdictional perspectives, this thesis contributes to advancing conceptual and practical understanding of the regulatory imperatives for preventing financial crises and protecting economies from systemic threats. It forges an analytical synthesis that links financial regulation scholarship with the applied challenges of governance reform during periods of systemic vulnerability. And the thesis offers important insights to illuminate potential pathways toward enhanced systemic risk governance regimes.

The extensive analysis provides policymakers, regulators and international financial institutions with research insights to inform systemic risk mitigation and financial reform initiatives, particularly within developing countries like Libya. It identifies priorities and sequencing strategies for capital, governance and supervisory enhancements attuned to local contexts. The

emphasis on balancing regulatory prescriptiveness with flexibility and agility holds relevance across diverse financial systems. The findings highlight the need to tailor international best practices to fit institutional realities, addressing binding constraints through targeted capacity building.

Academically, this thesis contributes a significant addition to legal and socio-legal scholarship in the domain of financial regulation and governance. Its elucidation of systemic risk anatomy provides a conceptual foundation for future research. The doctrinal methodology serves as a model for rigorously analysing technical topics at the confluence of practical regulations and theories. The blended institutional, behavioural and political economy perspectives offer an analytical template for investigating multidimensional governance problems. Furthermore, the thesis's exploration of the synergies between formal rules and informal norms highlights important dynamics for understanding regulation in practice.

The extensive assessment of capital adequacy and Basel standards provides a reference for scholars examining the evolution of prudential policy and its real-world impacts. The analysis contributes both conceptual perspectives and empirical data to the literature on bank capital's role in crisis prevention and its relationship with lending and financial stability. Likewise, the research adds to the knowledge of corporate governance within banks and financial institutions, emphasizing reforms around accountability, ethics and risk culture as potential levers for systemic risk mitigation. It elucidates important but understudied linkages between bank governance norms and underlying corporate legal systems. The findings on supervision contribute data-driven insights into oversight frameworks and central bank financial stability mandates, elucidating international trends and standards.

This thesis also offers a significant empirical contribution through its investigation of Libya's financial governance challenges, vulnerabilities and options for reforms. This analysis helps address gaps in academic knowledge regarding developing country contexts. The mixed methods approach combining primary qualitative data and secondary quantitative data provides a model for enriching such analyses. The identification of capacity deficits around skills, technology, infrastructure, data and political economy factors offers insights transferrable to other developing country contexts. And the multi-pronged yet sequenced reform roadmap can serve as an exemplar of evidence-based policy prescription.

Overall, this thesis lays extensive theoretical, empirical and methodological foundations for future scholarly inquiries at the intersection of financial regulation, systemic risk and economic governance. The theoretical foundations of this thesis are anchored in several interrelated frameworks. Agency theory, as articulated by Jensen and Meckling, is employed to explain the governance challenges of aligning managers' incentives with shareholder and stakeholder interests in the banking sector. Institutional theory, following North's insights into formal and informal constraints, is applied to analyse the structural impediments to regulatory effectiveness in Libya's transitional environment. Financial intermediation theory, as developed by Diamond and Dybvig and extended by Gorton, provides the basis for understanding the systemic vulnerabilities inherent in liquidity transformation. In addition, network theory and systemic risk models, particularly the contributions of Allen and Gale on contagion and Acemoglu et al. on network stability, support the argument that risk must be mitigated at the system-wide level rather than only at the level of individual institutions. The thesis also engages regulatory theory, drawing on Stiglitz's work on information asymmetry and Baldwin and Cave's regulatory strategies, to justify integrated supervisory frameworks. Finally, Islamic finance theory, drawing from El-Gamal and Iqbal & Mirakhor, provides crucial insights into the distinct challenges of applying global prudential standards in Libya's predominantly Shariah-compliant banking sector.

The empirical foundations of the thesis derive from a systematic analysis of multiple evidence sources. These include Libyan statutory texts (e.g. Law No. 23 of 2010 on Commercial Activity, Law No. 1 of 2005 on Banking), Central Bank of Libya circulars (notably Circular No. 11/2022 on liquidity and Circular No. 2/2023 on corporate governance), and regulatory guidance documents. Comparative empirical insights are drawn from IMF Financial System Stability Assessments, World Bank technical reports, and Financial Stability Board peer reviews, which provide evidence of supervisory gaps and benchmarks against international standards. Supplementing these are case-based empirical analyses of financial crises—including the 2007–2008 global financial crisis and post-crisis reforms in the UK, Singapore, and South Africa—that offer comparative lessons for Libya.

The methodological foundations are built on a mixed-methods qualitative approach. Doctrinal legal research constitutes the backbone of the thesis, providing systematic interpretation of legal rules, regulatory instruments, and judicial decisions. This is complemented by qualitative empirical methods, including documentary review, thematic content analysis, and comparative case study analysis, enabling triangulation across multiple sources. The use of cross-country comparative institutional analysis situates Libya within wider global frameworks, while sensitivity analysis and triangulation enhance the robustness of findings. This integration of methodological strategies ensures that the thesis's conclusions are both normatively rigorous and empirically validated, thus reinforcing the reliability of its policy recommendations.

Its elucidation of systemic risk anatomy provides a conceptual basis for follow-on research to further decode specific transmission mechanisms or risk amplifiers. The analytical precedent set through the blended institutional, behavioural and political economy perspectives enables the expansive potential for multi-lens scholarship investigating interconnected dimensions of financial governance matters.

The doctrinal methodology and integration of scholarly theory with practical regulatory analysis provide a methodological framework for researchers examining the intersection of legal frameworks and policy implementation within complex, technical domains. The systematic multi-source qualitative approach demonstrates how comprehensive analysis of diverse documentary sources—spanning legislative texts, regulatory guidance, and comparative policy assessments—can deepen understanding of institutional governance challenges. This methodological contribution establishes a foundation for future research to expand knowledge on capital adequacy, financial supervision, corporate governance, and systemic risk mitigation policies, thereby advancing both academic scholarship and evidence-based policymaking in financial regulation.

6.4 Final Remarks

The turmoil of the global financial crisis underscored profound deficiencies in the regulatory frameworks charged with maintaining the stability and integrity of financial systems. In the aftermath, the reform of these frameworks has assumed great urgency, amplified by the recognition that financial instability inflicts damage far beyond abstract market indicators. Financial crises profoundly impact human welfare, economic potential and societal progress. The considerable costs of systemic risk have become starkly apparent.

Financial systems possess an innate tendency towards crises. Periods of exuberance incubate vulnerabilities as asset values become disconnected from underlying economic fundamentals. Risk assessments grow increasingly optimistic during upswings. Leverage proliferates in a self-

reinforcing spiral. Concentration and interdependence effects accumulate unseen until system fault lines are exposed. Scholar's prescient financial instability hypothesis continues to ring true. Stability begets instability; prosperity seduces towards perilous excess.

This endemic financial fragility demands vigilance and adaptation in devising oversight architectures. Regulations must look beyond reacting to past crises, striving to be countercyclical and proactive by design. Supervision requires both structural resilience and institutional preparedness. Paradigms of reflexive, risk-based governance offer promise in balancing dynamism with prudence. And crisis response capabilities warrant ongoing enhancement. Ensuring a fail-safe financial system is impracticable, but mitigating systemic risk remains an imperative.

The global financial crisis of 2007-2008 was not an anomalous event. Recurrent crises are woven into the historical record, etched as financial panics, manias, crashes and contagions. And the complex, interconnected financial system of today harbours latent risks that could trigger the next crisis. While the precise sequence of events never repeats, fundamentals like leveraged risk-taking, credit expansion, asset mispricing, maturity mismatch and opacity recur in each cycle, interacting in unpredictable ways. There are always unknown unknowns. Hence maintaining vigilance remains imperative, as does rejecting complacency or amnesia about rare tail events. Stress-testing reforms for resilience across potential scenarios is prudent. The prelude of the next crisis is being scripted even as defences are bolstered against the last one.

Systemic risk mitigation is thus an endeavour without end. There is no perfect, timeless regulatory solution that permanently stabilizes the financial system. Risk morphs and finds new fissures. Ambiguities and uncertainties are inherent. Sudden phase transitions lie in wait to derail existing equilibriums and expose unquestioned assumptions. Finance remains a complex

adaptive system susceptible to emergent crises never seen before. The dynamics between innovation, regulation, natural human instincts and changing structural realities will continually generate new configurations of systemic risk. Hence financial authorities must retain a disposition of intellectual humility in recognizing that today's stability architectures could prove inadequate tomorrow. Forward-looking humility must balance backwards-looking hubris.

Fundamentally, the risks that underpin financial crises reflect our human vulnerabilities - tendencies towards greed, risky behaviour, complacency and panic. Technocratic solutions cannot fully temper these psychological dispositions that precipitate booms and busts. A sense of purpose beyond profits, anchoring finance as a means rather than an end, may represent the most potent remedy. However, admitting humility in facing intrinsic uncertainties can at least foster cautious policies. A degree of Knightian risk underlies all human systems. Absolutes inevitably fail. Hence financial authorities should view reform as an iterative process, not a final destination. Reflexive learning provides the compass. Failure is progress yet to be made.

The ever-changing complexity of global finance underscores why systemic risk is inescapable. Shocks and contagion lie latent, ready to manifest as endogenous threats or through exogenous triggers. Interconnected networks reveal their fragility under stress, as risks transmit rapidly across opaque linkages. Supposedly diversified portfolios suddenly suffer pervasive losses. Liquidity disappears when most needed. Safety migrates to danger in a flash of contagion. And deleveraging swiftly becomes disorderly under margin calls and fire sales. The financial system's essential functions halt as complexity breeds contagion breeds crisis. Systemic risk may subside, but it never disappears. Permanent stability is fictive; financial change endures.

This inherent, ineradicable uncertainty underscores why systemic risk mitigation requires reenvisioning financial systems themselves, not just introducing new regulatory scaffolds.

Finance must be recognized as a means rather than an end; the allocation of capital should serve
inclusive, sustainable prosperity. If finance becomes unmoored from broader socio-economic
objectives, systemic threats accumulate. Realigning incentives, structures and cultures to curb
socially unproductive financial churn necessitates a holistic rethink beyond isolated reforms.

The purpose must be rediscovered.

More concretely, in looking ahead, policy priorities for enhancing systemic risk governance span several pivotal frontiers. On the regulatory architecture side, the perimeter, intensity and propensity for macroprudential regulations warrant ongoing appraisal and recalibration. Knotty issues around financial complexity, boundless innovation, conflicts of interest, institutional scale and opacity demand bold yet judicious interventions. Governance norms around culture, ethics and risk management require further embedding across financial sectors. Monitoring and modelling systemic vulnerabilities, interconnections and behavioural dynamics remains a vast interdisciplinary research frontier for shaping real-time oversight. And playbooks for crisis prevention, management and resolution deserve continual enrichment in preparation.

Vigilantly deepening this reform agenda requires acknowledging political realities amidst polarized societies and populism, forging coalitions on evidence and the public good. It demands cooperation between nations through a new spirit of ethical internationalism oriented towards financial stability as a global public good; fragmented regulation exposes all. Technical expertise must unify with moral courage to envision financial systems aligned to human values, not unchecked market whims. Facing systemic risk demands both idealism and pragmatism.

In navigating systemic risk's myriad uncertainties, policymakers deserve empathy; deceptive stability obscures gathering threats. But humility regarding crisis prophesying should not inhibit acting upon what can be known and managed today. Preventing the last crisis is implausible, yet bolstering resilience against foreseeable failures remains imperative. While tailored reforms targeting discrete risks are constructive, only transforming problematic financial system structures and behaviours can mitigate endogenous sources of crises. The work of wise, courageous, and ethical financial governance remains ceaseless. No perfect rules or oversight regimes exist. But diligent vigilance and care offer the best defences against the recurring peril of systemic risk. Perfectionism cannot be the enemy of guarding against avoidable harm.

This thesis has carefully charted capital, governance and supervisory landscapes, aiming to extract insights for enhancing systemic risk preparedness. The analysis reveals remedies albeit no panaceas, increments of progress though not outright solutions. With intrinsic limits acknowledged, risk mitigation efforts must continue in earnest, adapting as financial ecosystems evolve. Emphasizing ethical culture and purpose must complement designing oversight architectures. Finance exists within society, not beyond it.

With concerted, responsible efforts on these multifaceted fronts, the global financial system can become better attuned to stability and societal well-being over myopic profits. But progress demands recognizing how we reached the crises of today to forge smarter pathways beyond them. Memory must inform imagination. And wisdom requires marrying idealism with pragmatism, ambition with humility. The accelerating complexity of finance necessitates integrity, accountability and cooperation in safeguarding our shared futures. Systemic risk represents dangers but also opportunities for progress through adversities overcome collectively. With care and conscience, financial systems can be re-anchored to serve enduring

human values and the common good. A long path lies ahead, yet the destination is within reach if the pursuit is ceaseless.

As the financial landscape continues to evolve, characterized by rapid technological advancements and increasing interconnectedness, the necessity for adaptable and forward-looking regulatory responses becomes ever more pronounced. The proposed reforms in Libya's financial regulatory framework, inspired by international standards and best practices, represent a proactive and strategic endeavour to align with the global paradigm of financial stability. By bolstering the tripartite pillars of capital adequacy, corporate governance, and financial supervision, Libya aims to foster a financial environment that is resilient in the face of economic challenges, conducive to sustainable growth, and aligned with the overarching goal of maintaining the stability and integrity of the global financial architecture.

The discourse on systemic risk mitigation, as encapsulated in the proposed reforms to Libya's financial regulatory framework, illuminates the multifaceted strategies required to safeguard the global financial system. These reforms, underscored by the imperative for a resilient financial ecosystem, herald a new era of regulatory prudence and governance excellence. As Libya attempts to recalibrate its financial regulatory landscape in accordance with international norms, the collective commitment to enhancing financial stability, governance, and supervision is envisaged to fortify the global economic system against systemic threats, ensuring a legacy of resilience and stability for future generations.

The concluding contention is that constructing robust systemic risk mitigation frameworks remains an ongoing endeavour intricately intertwined with broader societal choices about balancing efficiency with stability, rules against discretion and shareholder supremacy versus stakeholder equilibrium. These difficult deliberations demand recognition of the complex trade-

offs involved rather than absolutist positions. A diversity of perspectives can illuminate blind spots and nurture resilience if channelled constructively. But good faith engagement should not insulate critical parts from necessary scrutiny. International regulatory accords of the post-crisis era promoted stability yet left many dissatisfied, triggering revisionist reactions now gaining momentum. However, care is warranted that disillusionment with financial globalization's distributional outcomes does not spur knee-jerk regulatory dismantling enabling hazardous instability to take root once more. The objectives for reform processes must remain firmly anchored in outcomes supporting sustainable, ethical and inclusive prosperity. If priorities drift from this mooring or custodianship falters, the wisdom gleaned from tumultuous crises of the recent past may fade from memory only to be bloodily relearned by future generations again. It is sincerely hoped that the insights from this thesis can meaningfully contribute towards averting this regrettable eventuality.

Bibliography

1. Primary Resources

(A) Legislations

Council Regulation (EU) 1093/2010 of the European Parliament and of the Council of 24 November 2010 establishing a European Supervisory Authority (European Banking Authority) [2010] OJ L331/12.

Council Regulation (EU) 1024/2013 of 15 October 2013 conferring specific tasks on the European Central Bank concerning policies relating to the prudential supervision of credit institutions [2013] OJ L287/63.

Regulation (EU) No 575/2013 of the European Parliament and of the Council of 26 June 2013 on prudential requirements for credit institutions and investment firms (Capital Requirements Regulation).

Directive (EU) 2015/2366 of the European Parliament and of the Council of 25 November 2015 on Payment Services in the Internal Market [2015] OJ L337/35.

Accounting and Auditing Professions Law No 116 (1973)

Banking Law No 1 of 2005 (Libya), as amended by Law No 46 of 2012.

Delaware General Corporation Law.

Law No 23 of 2010 Concerning Commercial Activity.

German Stock Corporation Act (Aktiengesetz).

UK Companies Act 2006.

(B) Banking Regulations

Central Bank of Libya, Circular No 2 of 2023 on Calculating the Net Stable Funding Ratio
Central Bank of Libya, Circular No 3 of 2022: Establishes Requirements for Membership on
the Boards of Directors of Banks

Central Bank of Libya, Circular No 6 of 2022: Sets Controls for Appointing Directors of Key Departments (Internal Audit, Risk Management, and Sharia Audit) and Their Deputies Central Bank of Libya, Circular No 8 of 2023: Pertains to the Evaluation of the Performance of General Managers in Banks

Central Bank of Libya, Circular No 11 of 2022 on Calculating Capital Adequacy

Central Bank of Libya, Circular No 14 of 2022 on Calculating the Liquidity Coverage Ratio

Central Bank of Libya, Circular No 15 of 2023: Introduces a Framework for Evaluating the

Chairperson and Members of the Boards of Directors of Banks Operating in Libya

2. Secondary Resources

(A) Books

Abdelal R, Capital Rules: The Construction of Global Finance (Harvard University Press 2007)

Admati AR and Hellwig MF, *The Bankers' New Clothes: What's Wrong with Banking and What to Do About It* (Princeton University Press 2013)

Admati AR and Hellwig MF, *The Bankers' New Clothes: What's Wrong with Banking and What to Do About It* (Princeton University Press 2014)

Alexander K, *Principles of Banking Regulation* (Cambridge University Press 2018)

Alexander K and Dhumale R, *Research Handbook on International Financial Regulation* (Edward Elgar 2012)

Alexander K, Dhumale R and Eatwell J, Global Governance of Financial Systems: The International Regulation of Systemic Risk (Oxford University Press 2006)

Alshaleel MK, Regulation and Governance of Mutual Funds: United Kingdom and United States of America Perspectives on Investor Protection (Routledge 2021)

Armour J and others, *Principles of Financial Regulation* (Oxford University Press 2016)

Arnett GW, *Global Securities Markets* (John Wiley & Sons 2011)

Avgouleas E, Governance of Global Financial Markets: The Law, the Economics, the Politics (Cambridge University Press 2012)

Baker HK and Riddick LA, *International Finance: A Survey* (Oxford University Press 2013)

Baldwin R, Lodge M and McCrudden M, Regulation and Public Law (Hart Publishing 2019)

Banakar R and Travers M (eds), Theory and Method in Socio-Legal Research (Hart

Barth JR, Caprio G Jr and Levine R, *Guardians of Finance: Making Regulators Work for Us* (MIT Press 2012)

Bentham J, Of Laws in General (Hafner Publishing 1970)

Braithwaite J, Regulatory Capitalism: How It Works, Ideas for Making It Work Better (Edward Elgar 2008)

Braithwaite J and Drahos P, *Global Business Regulation* (Cambridge University Press 2000)

Brummer C, *Soft Law and the Global Financial System: Rule Making in the 21st Century*

(Cambridge University Press 2012)

Publishing 2005)

Calvo G and others, *Emerging Capital Markets in Turmoil: Bad Luck or Bad Policy?* (MIT Press 2005)

Cane P and Kritzer HM (eds), *The Oxford Handbook of Empirical Legal Research* (Oxford University Press 2010)

Cannata F and Quagliariello M, Basel III and Beyond: A Guide to Banking Regulation After the Crisis (Risk Books 2011)

Cecchetti S and Schoenholtz KL, *Money, Banking and Financial Markets* (McGraw-Hill 2020)

Cikaliuk M, Eraković L and Jackson B, Responsible Leadership in Corporate Governance:

An Integrative Approach (Routledge 2023)

Clark RC, Corporate Law (Little, Brown 1986)

Cownie F and Cocks R, *A Concise Guide to Legal Research* (3rd edn, Bloomsbury Professional 2019)

Creswell JW and Plano Clark VL, *Designing and Conducting Mixed Methods Research* (3rd edn, SAGE Publications 2017)

Crouhy M, Galai D and Mark R, *The Essentials of Risk Management* (2nd edn, McGraw-Hill 2014)

Davies H and Green D, Global Financial Regulation: The Essential Guide (Polity Press 2008)

Davies H and Green D, Global Financial Regulation: The Essential Guide (Polity 2008)

de Haan J and Amtenbrink F (eds), The European Union's Shaping of the International Legal

Order (Cambridge University Press 2013)

Demirgüç-Kunt A, Kane E and Laeven L (eds), *Deposit Insurance around the World: Issues of Design and Implementation* (MIT Press 2008)

Dermine J, European Banking: Past, Present, and Future (Oxford University Press 2002)

Dewatripont M and Tirole J, *The Prudential Regulation of Banks* (MIT Press 1994)

Dine J and Koutsias M, *The Nature of Corporate Governance: The Significance of National Cultural Identity* (Edward Elgar 2013)

Drach A and Cassis Y (eds), Financial Deregulation: A Historical Perspective (Oxford University Press 2021)

Eichengreen B, *The Gold Standard and the Great Depression, 1919–1939* (Oxford University Press 1992)

Eijffinger SCW and Masciandaro D, *Handbook of Central Banking, Financial Regulation and Supervision: After the Financial Crisis* (Edward Elgar 2011)

El-Gamal MA, *Islamic Finance: Law, Economics, and Practice* (Cambridge University Press 2006)

El-Katiri M, *State-Building Challenges in a Post-Revolution Libya* (Strategic Studies Institute, US Army War College 2012)

Elfadli A, Corporate Governance of Banks in Libya (De Gruyter Oldenbourg 2019)

Epstein BJ, Nach R and Bragg SM, Wiley GAAP 2010: Interpretation and Application of Generally Accepted Accounting Principles (John Wiley & Sons 2009)

Faia E and others (eds), Financial Regulation: A Transatlantic Perspective (Cambridge University Press 2015)

Ford C, *Innovation and the State: Finance, Regulation, and Justice* (Cambridge University Press 2017)

Fouque JP and Langsam JA (eds), *Handbook on Systemic Risk* (Cambridge University Press 2013)

Freixas X, Laeven L and Peydró J-L, *Systemic Risk, Crises, and Macroprudential Regulation* (MIT Press 2015)

Friedman M and Schwartz AJ, A Monetary History of the United States, 1867–1960 (Princeton University Press 1993)

Gabilondo J, Bank Funding, Liquidity, and Capital Adequacy: A Law and Finance Approach (Edward Elgar Publishing 2016)

Goodhart C, The Regulatory Response to the Financial Crisis (Edward Elgar 2009)

Goodhart C, *The Basel Committee on Banking Supervision* (Cambridge University Press 2011)

Goodhart C, *The Basel Committee on Banking Supervision: A History of the Early Years* 1974–1997 (Cambridge University Press 2011)

Goodhart C and others, Financial Regulation: Why, How and Where Now? (Routledge 1998)
Gorton G, Slapped by the Invisible Hand: The Panic of 2007 (Oxford University Press 2010)
Gup BE, The New Basel Capital Accord (Thomson 2004)

Helleiner E, States and the Reemergence of Global Finance: From Bretton Woods to the 1990s (Cornell University Press 1994)

Huang F, Financial Regulation and Supervision in Global Markets (Cambridge University Press 2019)

Huang RH and Schoenmaker D (eds), Institutional Structure of Financial Regulation:

Theories and International Experiences (Routledge 2015)

Huertas T, Crisis: Cause, Containment and Cure (2nd edn, Palgrave Macmillan 2011)

Iqbal Z and Mirakhor A, *An Introduction to Islamic Finance: Theory and Practice* (2nd edn, John Wiley & Sons 2011)

Kempthorne D, Governing International Securities Markets (Waterloo 2013)

Kindleberger CP, The World in Depression, 1929–1939 (Allen Lane 1975)

Kokkinis A, Corporate Law and Financial Instability (Routledge 2017)

Levi-Faur D, 'Regulatory Governance' in David Levi-Faur (ed), *Handbook on the Politics of Regulation* (Edward Elgar 2011)

Levy B, Working with the Grain: Integrating Governance and Growth in Development Strategies (Oxford University Press 2014)

Lubbe I, Modack G and Watson A, Financial Accounting GAAP Principles (Oxford University Press 2014)

Mallin C, Corporate Governance (6th edn, Oxford University Press 2019)

Markose SM, Systemic Risk from Global Financial Derivatives: A Network Analysis of Contagion and Its Mitigation with Super-Spreader Tax (IMF 2012)

Masciandaro D and Quintyn M, Designing Financial Supervision Institutions: Independence, Accountability and Governance (Edward Elgar 2007)

McConville M and Chui WH, *Research Methods for Law* (2nd edn, Edinburgh University Press 2017)

Meddeb H, *Precarious Resilience: Tunisia's Libyan Predicament* (Istituto Affari Internazionali 2017)

Moloney N, EU Securities and Financial Markets Regulation (Oxford University Press 2023)

Nienhaus V, 'Governance of Islamic Banks' in M Kabir Hassan and Mervyn K Lewis (eds),

Handbook of Islamic Banking (Edward Elgar 2007)

Osuji O, Corporate Governance and Financial Regulation (Edward Elgar 2013)

Otman W and Karlberg E, *The Libyan Economy: Economic Diversification and International Repositioning* (Springer 2007)

Pedersen N, Financial Technology: Case Studies in Fintech Innovation (Kogan Page 2021)

Peihani M, Basel Committee on Banking Supervision (Brill 2016)

Philippon T, *The Great Reversal: How America Gave Up on Free Markets* (Belknap Press 2019)

Porter T, *Globalization and Finance* (Polity Press 2005)

Porter T, Transnational Financial Regulation after the Crisis (Routledge 2014)

Ramirez J, Handbook of Basel III Capital: Enhancing Bank Capital in Practice (John Wiley & Sons 2017)

Schooner HM and Taylor M, Global Bank Regulation: Principles and Policies (Academic Press 2009)

Scott HS, International Finance: Law and Regulation (2nd edn, Sweet & Maxwell 2008)

Shleifer A, *Inefficient Markets: An Introduction to Behavioural Finance* (Oxford University Press 2000)

Siems MM, Comparative Law (2nd edn, Cambridge University Press 2018)

Singh M, Collateral, Netting and Systemic Risk in the OTC Derivatives Market (International Monetary Fund 2010)

Tarullo DK, Banking on Basel: The Future of International Financial Regulation (Peterson Institute 2008)

Tooze A, Crashed: *How a Decade of Financial Crises Changed the World* (Viking 2018)

Van Hoecke M (ed), *Methodologies of Legal Research: Which Kind of Method for What Kind of Discipline?* (Hart Publishing 2011)

Vasudev and Watson S, *Global Capital Markets: A Survey of Legal and Regulatory Trends* (Edward Elgar 2017)

Walter A, Governing Finance: East Asia's Adoption of International Standards (Cornell University Press 2008)

Watkins D and Burton M, Research Methods in Law (2nd edn, Routledge 2018)

Zeevaert M, *The (Un)Intended Effects of the United Nations on the Libyan Civil War Oil Economy* (unpublished manuscript, 2018)

(B) Book Chapters

Alfaro L, Kalemli-Ozcan S and Volosovych V, 'Capital Flows in a Globalized World: The Role of Policies and Institutions' in Sebastian Edwards (ed), *Capital Controls and Capital Flows in Emerging Economies: Policies, Practices, and Consequences* (University of Chicago Press 2007)

Allen F, Carletti E and Gu X, 'The Roles of Banks in Financial Systems' in Allen N Berger, Philip Molyneux and John OS Wilson (eds), *The Oxford Handbook of Banking* (Oxford University Press 2009)

Andrae S, 'FinTech Regulation: A Macro-Structural Approach' in Daisy Chou, Conall O'Sullivan and Vassilios G Papavassiliou (eds), *FinTech Research and Applications:*Challenges and Opportunities (World Scientific Publishing 2023)

Anginer D and others, 'Corporate Governance and Bank Risk Taking' in Asli Demirgüç-Kunt, Douglas D Evanoff and George G Kaufman (eds), *The Future of Large, Internationally Active Banks* (World Scientific Publishing 2017)

Armour J, Hansmann H and Kraakman R, 'Agency Problems and Legal Strategies' in Reinier Kraakman and others (eds), *The Anatomy of Corporate Law: A Comparative and Functional Approach* (3rd edn, Oxford University Press 2017)

Armour J and others, 'Making Bank Resolution Credible' in Niamh Moloney, Eilís Ferran and Jennifer Payne (eds), *The Oxford Handbook of Financial Regulation* (Oxford University Press 2015)

Baej Y, Worthington A and Worthington A, 'Prospects, Barriers and Impediments to Islamic Banking in Libya' in M Kabir Hassan and others (eds), *Contemporary Issues in Islamic Finance: Principles, Progress and Prospects* (Nova Science Publishers 2014)

Baums T, 'Corporate Governance in Germany: System and Recent Developments' in Klaus J Hopt and others (eds), *Comparative Corporate Governance: The State of the Art and Emerging Research* (Oxford University Press 1998)

Becht M, Bolton P and Roell A, 'Corporate Governance and Control' in George M Constantinides, Milton Harris and Rene M Stulz (eds), *Handbook of the Economics of Finance* (Elsevier 2003)

Bernanke BS, 'Some Reflections on the Crisis and the Policy Response' in Alan S Blinder, Andrew W Lo and Robert M Solow (eds), *Rethinking the Financial Crisis* (Russell Sage Foundation 2012)

Bhattacharya S and Gale D, 'Preference Shocks, Liquidity and Central Bank Policy' in W Barnett and K Singleton (eds), *New Approaches to Monetary Economics* (Cambridge University Press 1987)

Black J, The Development of Risk-Based Regulation in Financial Services: Just "Modelling Through"? in Julia Black, Martin Lodge and Mark Thatcher (eds), *Regulatory Innovation* (Edward Elgar 2005)

Black J, 'The Role of Risk in Regulatory Processes' in Robert Baldwin, Martin Cave and Martin Lodge (eds), *The Oxford Handbook of Regulation* (Oxford University Press 2010)

Black J, 'Restructuring Global and EU Financial Regulation: Character, Capacities, and Learning' in Eddy Wymeersch, Klaus J Hopt and Guido Ferrarini (eds), *Financial Regulation and Supervision: A Post-Crisis Analysis* (Oxford University Press 2012)

Black J, 'Restructuring Global and EU Financial Regulation: Character, Capacities, and Learning' in Eilís Ferran and others (eds), *The Regulatory Aftermath of the Global Financial Crisis* (Cambridge University Press 2012)

Chayes A and others, 'Active Compliance Management in Environmental Treaties' in W Lang (ed), Sustainability in International Environmental Policy (Peter Lang 1999)

Chynoweth P, 'Legal Research' in Andrew Knight and Les Ruddock (eds), Advanced Research

Methods in the Built Environment (Wiley-Blackwell 2008)

De Bandt O and Hartmann P, 'Systemic Risk in Banking: A Survey' in Charles Goodhart and Gerhard Illing (eds), *Financial Crises, Contagion, and the Lender of Last Resort* (Oxford University Press 2002)

Dobinson I and Johns F, 'Qualitative Legal Research' in Mike McConville and Wing Hong Chui (eds), *Research Methods for Law* (2nd edn, Edinburgh University Press 2017)

Faia E and Weder di Mauro B, 'Cross-Border Resolution of Global Banks' in Xavier Freixas, Luc Laeven and José-Luis Peydró (eds), *Systemic Risk in Europe* (MIT Press 2020)

Ferran E, 'Institutional Design: The Choices for National Systems' in Niamh Moloney, Eilís Ferran and Jennifer Payne (eds), *The Oxford Handbook of Financial Regulation* (Oxford University Press 2015)

Godwin A and Schmulow A, 'Introduction: The Genealogy and Topography of Twin Peaks' in Andrew Godwin and Andrew Schmulow (eds), *The Cambridge Handbook of Twin Peaks*Financial Regulation (Cambridge University Press 2021)

Grzegorzewski P and Śpiewak M, 'The Mann-Whitney Test for Interval-Valued Data' in *Advances in Fuzzy Logic and Technology 2017* (Springer, Berlin 2017)

Helleiner E, 'Regulating the Regulators: The Emergence and Limits of the Transnational Financial Legal Order' in Tony Porter (ed), *Transnational Financial Regulation after the Crisis* (Routledge 2014)

Helleiner E and Pagliari S, 'The End of Self-Regulation? Hedge Funds and Derivatives in Global Financial Governance' in Eric Helleiner, Stefano Pagliari and Hubert Zimmermann (eds), Global Finance in Crisis: The Politics of International Regulatory Change (1st edn, Routledge 2009)

Huang FD and Liu J-H, 'Enforcement Strategies in Chinese Capital Market' in Robert Goddard and Daniel Cash (eds), *Regulation and the Global Financial Crisis: Impact, Regulatory Responses, and Beyond* (Routledge 2020)

Jarrow RA, 'The Role of ABS, CDS and CDOs in the Credit Crisis and the Economy' in Alan S Blinder, Andrew W Lo and Robert M Solow (eds), *Rethinking the Financial Crisis* (Russell Sage Foundation 2011)

Keefe J, 'The Return of Idealism and the Rejection of Common Sense' in G Graham (ed), Scottish Philosophy in the Nineteenth and Twentieth Centuries (Oxford University Press, Oxford 2015)

Kingsford Smith D and Dixon O, 'The Consumer Interest and the Financial Markets' in Eilís Ferran and others (eds), *The Oxford Handbook of Financial Regulation* (Oxford University Press 2015)

Lastra RM, 'The Role of the IMF as a Global Financial Authority' in Christoph Herrmann and Jörg Philipp Terhechte (eds), *European Yearbook of International Economic Law 2011* (Springer 2011)

Merton RC and Bodie Z, 'A Conceptual Framework for Analysing the Financial Environment' in Dwight B Crane and others (eds), *The Global Financial System: A Functional Perspective* (Harvard Business School Press 1995)

Otman WA and Karlberg E, 'The Libyan Legal System and Key Recent Legislation' in *The Libyan Economy: Economic Diversification and International Repositioning* (Springer, Berlin 2007)

Schoenmaker D, 'Financial Supervision in the EU' in Xavier Freixas, Philipp Hartmann and Colin Mayer (eds), *Handbook of European Financial Markets and Institutions* (Oxford University Press 2008)

Schwarcz SL, 'Banking and Financial Regulation' in Francesco Parisi (ed), *The Oxford Handbook of Law and Economics: Volume 2 – Private and Commercial Law* (Oxford University Press 2017)

Schwarcz SL and Alexander K, 'The Macroprudential Quandary: Unsystematic Efforts to Reform Financial Regulation' in Ross P Buckley, Emilios Avgouleas and Douglas W Arner (eds), *Reconceptualising Global Finance and Its Regulation* (Cambridge University Press 2016)

Slobodianyk A and others, 'Stock Trading Indices: A Mechanism for Attracting Speculative Capital' in XIV International Scientific Conference INTERAGROMASH 2021 (Springer, Cham 2022)

St John RB, 'Libya: Reforming the Economy, Not the Polity' in Yahia H Zoubir and Haizam Amirah-Fernández (eds), *North Africa: Politics, Region, and the Limits of Transformation* (Routledge 2008)

Webley L, 'Qualitative Approaches to Empirical Legal Research' in Peter Cane and Herbert M Kritzer (eds), *The Oxford Handbook of Empirical Legal Research* (Oxford University Press 2010)

Zetzsche DA, 'Investment Law as Financial Law: From Fund Governance over Market Governance to Stakeholder Governance?' in *The European Financial Market in Transition* (Kluwer Law International 2011)

(C) Journal Articles

Abbott A, 'Varieties of Ignorance' (2016) 9(2) The American Sociologist 174

Abdulsaleh AM, 'Corporate Governance Role of Audit Committees in the Banking Sector:

Evidence from Libya' (2014) 8 World Academy of Science, Engineering and Technology,

International Journal of Social, Behavioral, Educational, Economic, Business and Industrial

Engineering 592

Abdulsaleh AM, 'The Introduction of Islamic Finance in Libya: Capturing the Opportunities for SMEs Development' (2017) 5(1) Journal of Emerging Economies and Islamic Research 39 Abbott LJ, Daugherty B, Parker S and Peters GF, 'Internal Audit Quality and Financial Reporting Quality: The Joint Importance of Independence and Competence' (2016) 54(1) Journal of Accounting Research 3

Abukhzam M and Lee A, 'Factors Affecting Bank Staff Attitude Towards E-Banking Adoption in Libya' (2010) 42(1) The Electronic Journal of Information Systems in Developing Countries 1

Acharya VV, 'A Theory of Systemic Risk and Design of Prudential Bank Regulation' (2009) 5(3) Journal of Financial Stability 224

Acharya VV, Mehran H and Thakor A, 'Caught Between Scylla and Charybdis? Regulating Bank Leverage When There is Rent Seeking and Risk Shifting' (2016) 27 Review of Corporate Finance Studies 36

Acharya VV, Pedersen LH, Philippon T and Richardson M, 'Measuring Systemic Risk' (2017) 30(1) Review of Financial Studies 2

Acharya VV and Richardson M, 'Causes of the Financial Crisis' (2009) 21(2–3) Journal of Politics and Society 195

Acharya VV and Richardson M, 'Causes of the Financial Crisis' (2009) 21 Critical Review 195

Acemoglu D, Ozdaglar A and Tahbaz-Salehi A, 'Systemic Risk and Stability in Financial Networks' (2015) 105 American Economic Review 564

Admati AR, 'The Compelling Case for Stronger and More Effective Leverage Regulation in Banking' (2014) 43 Journal of Legal Studies S35

Admati AR, 'The Missed Opportunity and Challenge of Capital Regulation' (2016) 235

National Institute Economic Review R4

Admati AR, 'The Missed Opportunity and Challenge of Capital Regulation' (2019) 35(2) Yale Journal on Regulation 618

Adeoye AA, 'Impact of Institutional Characteristics of Corporate Governance on Corporate Governance System in Sub-Saharan Africa Anglophone Countries (SSAA)' (2015) 3(2) European Journal of Accounting, Auditing and Finance Research 30

Adrian T and Ashcraft AB, 'Shadow Banking Regulation' (2012) 4 Annual Review of Financial Economics 99

Adrian T and Brunnermeier MK, 'CoVaR' (2016) 106(7) American Economic Review 1705

Adrian T and Liang N, 'Monetary Policy, Financial Conditions, and Financial Stability' (2018)

90(6) International Journal of Central Banking 73

Ahmed H, 'Islamic Banking and Shari'ah Compliance: A Product Development Perspective' (2014) 3(2) Journal of Islamic Finance 15

Ahmed S and others, 'The Impact of Islamic Shariah Compliance on Customer Satisfaction in Islamic Banking Services: Mediating Role of Service Quality' (2021) Journal of Islamic Marketing 53

Ahnert T, 'Should Bank Capital Regulation Be Risk Sensitive?' (2021) 27(1) Review of Finance 1

Ahmad NSM and Gao SS, 'Corporate Environmental Disclosure in Libya' (2004) 24(1) Social and Environmental Accounting Journal 20

Ahmad NSM and Mousa FR, 'Corporate Environmental Disclosure in Libya: A Little Improvement' (2011) 6(1–2) World Journal of Entrepreneurship, Management and Sustainable Development 149

Aimer NMMA, 'The Effects of Fluctuations of Oil Price on Economic Growth of Libya' (2016) 3(2) Energy Economics Letters 17

Aikman D and others, 'Would Macroprudential Regulation Have Prevented the Last Crisis?' (2019) 33(1) Journal of Economic Perspectives 107

Aiyar S, Calomiris C and Wieladek T, 'Does Macro-Prudential Regulation Leak? Evidence from a UK Policy Experiment' (2014) 46(1) Journal of Money, Credit and Banking 181

Aiyar S, Calomiris CW and Wieladek T, 'Does Macro-Prudential Regulation Leak? Evidence from a UK Policy Experiment' (2014) 100 Journal of Money, Credit and Banking 181

Alabi NAM and others, 'Risk Management in Africa's Financial Landscape: A Review' (2023) 5(8) International Journal of Advanced Economics 239

Alade I and Eroglu ZGK, 'Disruptive Innovations or Enhancing Financial Inclusion: What Does Fintech Mean for Africa?' (2023) 56 Vanderbilt Journal of Transnational Law 673 Aldredge M, Cooley G and Mallett T, 'The Development of Theory in Accounting Research' (2017) 19(1) IOSR Journal of Business and Management 27

Alhaj AA and Awn AM, 'Financial Instruments and Their Impact on the Growth of Investment – A Study on the Libyan Market' (2020) 4(3) European Journal of Economic and Financial Research 17

Alhaj AA and Awn AM, 'Financial Instruments and Their Impact on the Growth of Investment – A Study on the Libyan Market' (2020) 4(3) European Journal of Economic and Financial Research 213

AlHares A and Ntim C, 'A Cross-Country Study of the Effects of Institutional Ownership on Credit Ratings' (2017) 12(8) International Journal of Business and Management 80
Aljbiri A, 'The Performance of Libyan Stock Market' (2013) 60(7) Acta Universitatis
Agriculturae et Silviculturae Mendelianae Brunensis 27

Allen F and others, 'Moral Hazard and Government Guarantees in the Banking Industry' (2015) 30(1) Journal of Financial Regulation and Compliance 89

Allen F and Gale D, 'Financial Contagion' (2000) 108(1) Journal of Political Economy 1

Allen F and Gale D, 'Financial Fragility, Liquidity, and Asset Prices' (2004) 2 Journal of the

European Economic Association 1015

Allen F and Qian J, 'China's Financial System and the Law' (2014) 47 Cornell International Law Journal 511

Allen H, Driverless Finance: Fintech's Impact on Financial Stability (Oxford University Press 2022)

Allen B and others, 'Basel III: Is the Cure Worse than the Disease?' (2012) 25 International Review of Financial Analysis 159

Allen WA and Wood G, 'Defining and Achieving Financial Stability' (2006) 2(2) Journal of Financial Stability 152

Alnaas H, 'The Barriers of Adoption: The E-Banking in the Libyan Banks—A Case Study of Commercial Banks in Tobruk City' (2022) 10(1) Open Journal of Business and Management 501

Alrafadi KM, 'The Effect of Intellectual Capital on the Financial Performance of Libyan Banks' (2020) 5(4) European Journal of Business and Management Research 22

Alrafadi KM, Kamaruddin BH and Yusuf M, 'Efficiency and Determinants in Libyan Banking' (2014) 5(5) International Journal of Business and Social Science 180

'Efficiency and Determinants in Libyan Banking' (2014) 5(5) International Journal of Business and Social Science 112

Alshaleel MK, 'The Governance and Regulation of Mutual Funds in the UK and the US: A Comparative Analysis' (2021) 32 Journal of International Banking Law and Regulation 120 Altunbas Y, Fazylov O and Molyneux P, 'Evidence on the Bank Risk-Taking Channel of Monetary Policy' (2001) 69(6) Manchester School 643

Altunbas Y, Gambacorta L and Marqués-Ibáñez D, 'Does Monetary Policy Affect Bank Risk?' (2014) 10(1) International Journal of Central Banking 95

Alvarez JE, 'International Organizations: Then and Now' (2006) 100 American Journal of International Law 324

Anagnostopoulos I, 'FinTech and RegTech: Impact on Regulators and Banks' (2018) 100 Journal of Economics and Business 7

Andersen Ø, 'The Basel III Liquidity Standards and Financial Stability' (2021) 30 Economic Review – Federal Reserve Bank of Atlanta 43

Andreadakis S, 'Enhancing Whistleblower Protection: It's All About the Culture' (2019) 30(6) European Business Law Review 859

Andreadakis S, De Pascalis F and Reisberg A, 'Editorial: Reforming Corporate Governance: New Rules or New Culture?' (2019) 30(6) European Business Law Review 853

Angeloni I and Faia E, 'Capital Regulation and Monetary Policy with Fragile Banks' (2013) 60(3) Journal of Monetary Economics 27

Angbazo L, 'Commercial Bank Net Interest Margins, Default Risk, Interest-Rate Risk, and Off-Balance Sheet Banking' (1997) 21(1) Journal of Banking & Finance 55

Anginer D, Demirguc-Kunt A and Zhu M, 'How Does Competition Affect Bank Systemic Risk?' (2014) 23(1) Journal of Financial Intermediation 1

Aras G and others, 'Corporate Sustainability Measurement Based on Entropy Weight and TOPSIS: A Turkish Banking Case Study' (2017) 25(3) Meditari Accountancy Research 391 Ariff M and Rosly SA, 'Islamic Banking in Malaysia: Unchartered Waters' (2011) 6(2) Asian Economic Policy Review 301

Arlen J and Kahan M, 'Corporate Governance Regulation through Nonprosecution' (2017) 84 University of Chicago Law Review 323

Armour J, Gordon J and Min G, 'Taking Compliance Seriously' (2020) 37 Yale Journal on Regulation 1

Arner DW, 'The Global Credit Crisis of 2008: Causes and Consequences' (2009) 43 The International Lawyer 91

Arner DW, Barberis J and Buckley RP, 'FinTech, RegTech, and the Reconceptualization of Financial Regulation' (2017) 37 Northwestern Journal of International Law and Business 371 Arner DW, Buckley RP, Zetzsche DA and Veidt R, 'Sustainability, FinTech and Financial Inclusion' (2020) 21(1) European Business Organization Law Review 7 Arner DW and Taylor MW, 'The Global Credit Crisis and the Financial Stability Board:

Hardening the Soft Law of International Financial Regulation?' (2009) 32 UNSW Law Journal 488

Arnold B and others, 'Systemic Risk, Macroprudential Policy Frameworks, Monitoring Financial Systems and the Evolution of Capital Adequacy' (2012) 36(12) Journal of Banking & Finance 3125

Asarkaya Y and Özcan S, 'Determinants of Capital Structure in Financial Institutions: The Case of Turkey' (2007) 1 Journal of BRSA Banking and Financial Markets (Banking Regulation and Supervision Agency) 91

Auboin M and Blengini I, 'The Impact of Basel III on Trade Finance: The Potential Unintended Consequences of the Leverage Ratio' (2019) 20 Journal of Banking Regulation 115

Avgouleas E, 'Banking Supervision and the Special Resolution Regime of the Banking Act 2009: The Unfinished Reform' (2009) 4 Capital Markets Law Journal 201

Avgouleas E, 'The Global Financial Crisis, Behavioural Finance and Financial Regulation: In Search of a New Orthodoxy' (2009) 9(1) Journal of Corporate Law Studies 23

Avgouleas E, 'New Governance, the Reform Paradox, and the Financial Crisis' (2009) 17(2) Columbia Journal of European Law 215

Avgouleas E, 'Rationales and Designs to Implement an Institutional Big Bang in the Governance of Global Finance' (2013) 36 Seattle University Law Review 321

Awn AM and Azam SF, 'The Role of Awareness and Shari'ah Compliance as Moderator on the Intention to Invest in Islamic Sukuk – A Study of Libyan Investors: Theory of Reasoned Action Approach' (2020) European Journal of Economic and Financial Research 134

Awn AM and Azam SF, 'Libyan Investors' Intention to Invest in Islamic Sukuk: Theory of Planned Behaviour Approach' (2020) European Journal of Economic and Financial Research 234

Awrey D, 'Complexity, Innovation, and the Regulation of Modern Financial Markets' (2012) 2 Harvard Business Law Review 235 Awrey D, 'Complexity, Innovation, and the Regulation of Modern Financial Markets' (2013) 2 Harvard Business Law Review 235

Baker A, 'Restraining Regulatory Capture? Anglo-America, Crisis Politics and Trajectories of Change in Global Financial Governance' (2010) 86(3) International Affairs 647

Baker A, 'Deliberative Equality and the Transgovernmental Politics of the Global Financial Architecture' (2009) 3(10) International Theory 94

Baker A, 'The New Political Economy of the Macroprudential Ideational Shift' (2013) 18(1) New Political Economy 112

Baker A, 'Macroprudential Regimes and the Politics of Social Purpose' (2018) 25(3) Review of International Political Economy 293

Baldwin R and Black J, 'Really Responsive Regulation' (2008) 71(1) Modern Law Review 59 Banerjee RN and Mio H, 'The Impact of Liquidity Regulation on Banks' (2018) 35 Journal of Financial Intermediation 30

Bardhan I, Lin S and Wu S, 'The Quality of Internal Control over Financial Reporting in Family Firms' (2015) 29(1) Accounting Horizons 41

Barghathi Y, Collison D and Crawford L, 'Earnings Management in Libyan Commercial Banks: Perceptions of Stakeholders' (2017) 13(2) International Journal of Accounting, Auditing and Performance Evaluation 123

Bartie S, 'The Lingering Core of Legal Scholarship' (2010) 30(3) Legal Studies 345
Barth JR, Caprio G and Levine R, 'Bank Regulation and Supervision: What Works Best?'
(2004) 13(2) Journal of Financial Intermediation 205

Barth JR, Caprio G and Levine R, 'Bank Regulation and Supervision: What Works Best?' (2004) 13 Journal of Financial Intermediation 215

Barth JR, Caprio G Jr and Levine R, 'Bank Regulation in 180 Countries' (2013) 5(2) Journal of Financial Economic Policy 111

Barth JR, Caprio G Jr and Levine R, 'Bank Regulation and Supervision in 180 Countries from 1999 to 2011' (2013) 5 Journal of Financial Economic Policy 111

Barth JR, Nolle DE and Prabha A, 'Banking Structure, Regulation, and Supervision in 1993 and 2013: Comparisons across Countries and over Time' (2014) 13 Journal of International Business and Law 231

Battiston S and others, 'Complexity Theory and Financial Regulation' (2016) 351 Science 818

Battiston S and others, 'Complexity Theory and Financial Regulation' (2016) 351(6275)

Science 818

Baums T and Cahn A, 'Taking Shareholder Protection Seriously? Corporate Governance in the United States and Germany' (2003) 53 American Journal of Comparative Law 31 Bayoud NS and Kavanagh M, 'Corporate Social Responsibility Disclosure: Evidence from Libyan Managers' (2012) 6(5) Global Journal of Business Research 73

Bayoud NS, Kavanagh M and Slaughter G, 'Factors Influencing Levels of Corporate Social Responsibility Disclosure in Libyan Firms: A Mixed Study' (2012) 4(4) International Journal of Economics and Finance 13

Beck T, De Jonghe O and Schepens G, 'Bank Competition and Stability: Cross-country Heterogeneity' (2013) 22(2) Journal of Financial Intermediation 218

Beck T, Demirgüç-Kunt A and Levine R, 'Bank Concentration, Competition, and Crises: First Results' (2006) 30 Journal of Banking & Finance 1581

Becht M, Bolton P and Röell A, 'Why Bank Governance is Different' (2011) 27(3) Oxford Review of Economic Policy 437

Beltratti A and Stulz RM, 'The Credit Crisis Around the Globe: Why Did Some Banks Perform Better?' (2012) 105 Journal of Financial Economics 1

Beltratti A and Stulz RM, 'The Credit Crisis Around the Globe: Why Did Some Banks Perform Better?' (2012) 105(1) Journal of Financial Economics 1 Ben-Naser A, Bhattarai K and Elheddad MM, 'Estimating Equilibrium Real Exchange Rate and Misalignment in an Oil Exporting Country: Libya's Experience' (2018) 52(4) Journal of Developing Areas 249

Benoit S and others, 'Where the Risks Lie: A Survey on Systemic Risk' (2016) Review of Finance 1

Berg A, Eshun N and Pattillo C, 'Bank Soundness and Macroeconomic Policy' (2003) 27(4) Journal of Banking & Finance 673

Berger AN and Bouwman CH, 'How Does Capital Affect Bank Performance During Financial Crises?' (2013) 109 Journal of Financial Economics 146

Berger AN and Bouwman CH, 'Bank Liquidity Creation' (2009) 22(9) Review of Financial Studies 3779

Berger AN, Cai J, Roman RA and Sedunov J, 'Supervisory Enforcement Actions Against Banks and Systemic Risk' (2021) 140 Journal of Banking and Finance 106222

Berger AN, Kick T and Schaeck K, 'Executive Board Composition and Bank Risk Taking' (2014) 28 Journal of Corporate Finance 48

Bhagat S and Black B, 'The Non-Correlation between Board Independence and Long-Term Firm Performance' (2002) 27 Journal of Corporation Law 231

Bhatnagar VK and Srivastava M, 'Doctrinal and Socio-Legal Methods of Research: Merits and Demerits' (2012) 2(7) Educational Research Journal 252

Bickerton C, 'Capitalism after the Crisis' (2015) 20(5) New Political Economy 783

Bierstaker JL and others, 'Audit Committee Compensation, Fairness, and the Resolution of Accounting Disagreements' (2012) 31(2) Auditing: A Journal of Practice & Theory 131

Billio M and others, 'Econometric Measures of Connectedness and Systemic Risk in the Finance and Insurance Sectors' (2012) 104 Journal of Financial Economics 535

Bindra SP and Ezziany IM, 'Towards Enhancing the National Competitiveness of the Libyan Economy with Special Reference to Role of Yoga' (2016) 2(1) International Journal of Health and Economic Development 1

Black J, 'Mapping the Contours of Contemporary Financial Services Regulation' (2002) 2 Journal of Corporate Law Studies 253

Black J, 'Managing Regulatory Risks and Defining the Parameters of Blame: A Focus on the Australian Prudential Regulation Authority' (2006) 28 Law & Policy 1

Black J, 'Making a Success of Principles-Based Regulation' (2007) 1 Law & Financial Markets Review 191

Black J, 'Constructing and Contesting Legitimacy and Accountability in Polycentric Regulatory Regimes' (2008) 2 Regulation & Governance 137

Black J, 'Paradoxes and Failures: "New Governance" Techniques and the Financial Crisis' (2012) 75 Modern Law Review 1037

Black J, 'Learning from Regulatory Disasters' (2014) 10(3) Policy Quarterly 3

Blades D, 'A Short-Cut Method of Estimating Capital Stocks: When Can It Be Used and How Well Does It Work?' (2015) 61 Review of Income and Wealth 373

Bliss RR and Kaufman GG, 'Derivatives and Systemic Risk: Netting, Collateral, and Closeout' (2006) 2(1) Journal of Financial Stability 55

Bluhm M and Krahnen JP, 'Systemic Risk in an Interconnected Banking System with Endogenous Asset Markets' (2014) 13 Journal of Financial Stability 75

Bodellini M, 'From Systemic Risk to Financial Scandals: The Shortcomings of US Hedge Fund Regulation' (2017) 11 Brooklyn Journal of Corporate, Financial & Commercial Law 417

Böhme R and others, 'Bitcoin: Economics, Technology, and Governance' (2015) 29 Journal of Economic Perspectives 213

Bonner C and Eijffinger SCW,'The Impact of Liquidity Regulation on Bank Intermediation' (2016) 20(5) Review of Finance 1945

Borio C, 'Towards a Macroprudential Framework for Financial Supervision and Regulation?' (2003) 49 CESifo Economic Studies 181

Bonner C and Eijffinger SCW, 'Towards a Macroprudential Framework for Financial Supervision and Regulation?' (2003) 49(2) CESifo Economic Studies 181

Bonner C and Eijffinger SCW,'Implementing a Macroprudential Framework: Blending Boldness and Realism' (2011) 7(1) Capital Markets Law Journal 203

Borio C and Drehmann M, 'Assessing the Risk of Banking Crises – Revisited' (2009) BIS Quarterly Review 29

Borio C, Farag M and Tarashev NA, 'Post-Crisis International Financial Regulatory Reforms: A Primer' (2020) BIS Quarterly Review 75

Borio C and Zhu H, 'Capital Regulation, Risk-Taking and Monetary Policy: A Missing Link in the Transmission Mechanism?' (2012) 8 Journal of Financial Stability 236

Bostandzic D and Weiß G, 'Why Do Some Banks Contribute More to Global Systemic Risk?' (2018) 35 Journal of Financial Intermediation 17

Botha E and Makina D, 'Financial Regulation and Supervision: Theory and Practice in South Africa' (2011) 10 International Business & Economics Research Journal 27

Bourdieu P, 'The Force of Law: Toward a Sociology of the Juridical Field' (1987) 38 Hastings Law Journal 814

Brealey R, 'Basel II: The Route Ahead or Cul-de-Sac?' (2006) 18(4) Journal of Applied Corporate Finance 34

Brinkerhoff DW, 'Rebuilding Governance in Failed States and Post-Conflict Societies: Core Concepts and Cross-Cutting Themes' (2005) 25(1) Public Administration and Development: The International Journal of Management Research and Practice 3

Brinkerhoff DW, 'Rebuilding Governance in Failed States and Post-Conflict Societies: Core Concepts and Cross-Cutting Themes' (2005) 25 Public Administration and Development 3

Brissette RK, 'The Volcker Rule's Unintended Consequences' (2011) 15 North Carolina

Banking Institute 231

Broome A and Quirk J, 'Governing the World at a Distance: The Practice of Global Benchmarking' (2015) 41(5) Review of International Studies 819

Brown I, Steen A and Foreman J, 'Risk Management in Corporate Governance: A Review and Proposal' (2009) 17 Corporate Governance: An International Review 546

Brown P, 'International Financial Reporting Standards: What Are the Benefits?' (2011) 41(3) Accounting and Business Research 269

Brühl V, 'How to Define a Systemically Important Financial Institution – A New Perspective' (2017) 52(2) Intereconomics 107

Brummer C, 'How International Financial Law Works (and How It Doesn't)' (2011) 99 Georgetown Law Journal 257

Brummer C, 'Why Soft Law Dominates International Finance – And Not Trade' (2010) 13(3)

Journal of International Economic Law 623

Brummer C, 'Disruptive Technology and Securities Regulation' (2015) 84(4) Fordham Law Review 977

Brummer C and Yadav Y, 'Fintech and the Innovation Trilemma' (2018) 107 Georgetown Law Journal 235

Brummer C and Yadav Y, 'Fintech and the Innovation Trilemma' (2019) 107 Georgetown Law Journal 235

Bruner CM, 'Corporate Governance Reform in a Time of Crisis' (2011) 36 Journal of Corporation Law 309

Brunnermeier MK, 'Deciphering the Liquidity and Credit Crunch 2007–2008' (2009) 23(1) Journal of Economic Perspectives 77

Brunnermeier MK and Oehmke M, 'The Maturity Rat Race' (2013) 68 Journal of Finance 483
Brunnermeier MK and Pedersen LH, 'Market Liquidity and Funding Liquidity' (2009) 22(6)
Review of Financial Studies 2201

Brunnermeier MK and Sannikov Y, 'A Macroeconomic Model with a Financial Sector' (2014) 104 American Economic Review 379

Buell SW, 'Is the White Collar Offender Privileged?' (2014) 63 Duke Law Journal 823
Bullard J, Neely CJ and Wheelock DC, 'Systemic Risk and the Financial Crisis: A Primer'
(2009) 91 Federal Reserve Bank of St Louis Review 403

Bushlaibi N, 'The Suitability of International Accounting and Auditing Standards to the Libyan Environment' (2015) 5 Journal of Economic Cooperation and Development 73 Caballero RJ and Simsek A, 'Pecuniary Externalities in Economies with Financial Frictions' (2018) 85 Review of Economic Studies 352

Capponi A and Chen P-C, 'Systemic Risk Mitigation in Financial Networks' (2015) 58 Journal of Economic Dynamics and Control 152

Carpenter VL and Feroz EH, 'GAAP as a Symbol of Legitimacy: New York State's Decision to Adopt Generally Accepted Accounting Principles' (1992) 17(7) Accounting, Organizations and Society 613

Cecchetti SG and Kohler M, 'When Capital Adequacy and Interest Rate Policy Are Substitutes (And When They Are Not)' (2014) 50(3) International Journal of Central Banking 205

Centeno MA and others, 'The Emergence of Global Systemic Risk' (2015) 41 Annual Review of Sociology 65

Chaykovskiy I, 'Deregulating the Inadequate Basel Accords: Future-Proofing Financial Regulations in an Age of Global Crises' (2016) 25 Cardozo Journal of International and Comparative Law 77

Chernykh L, Davydov D and Sihvonen J, 'Financial Stability and Public Confidence in Banks' (2023) 69 Journal of Financial Stability 101187

Cho S and Kelly CR, 'Promises and Perils of New Global Governance: A Case of the G20' (2011) 12(2) Chicago Journal of International Law 491

Cho S and Kelly CR, 'Promises and Perils of New Global Governance: A Case of the G20' (2012) 12 Chicago Journal of International Law 491

Chouinard É and Paulin G, 'Making Banks Safer: Implementing Basel III' (2014) Financial System Review 53

Cihák M and Podpiera R, 'Integrated Financial Supervision: Which Model?' (2008) 19(2) North American Journal of Economics and Finance 135

Cihák M and Schaeck K, 'How Well Do Aggregate Prudential Ratios Identify Banking System Problems?' (2010) 6(3) Journal of Financial Stability 130

Čihák M and others, 'Financial Development in 205 Economies, 1960 to 2010' (2013) 1(2) Journal of Financial Perspectives 17

Čihák M and Nier E, 'The Need for Special Resolution Regimes for Financial Institutions – The Case of the European Union' (2012) 2 Harvard Business Law Review 395

Čihák M and Nier EW, 'The Need for Special Resolution Regimes for Financial Institutions' (2012) 2 Harvard Business Law Review 395

Claessens S, 'An Overview of Macroprudential Policy Tools' (2015) 7(1) Annual Review of Financial Economics 397

Claessens S,'An Overview of Macroprudential Policy Tools' (2015) 7 Annual Review of Financial Economics 397

Claessens S and Kodres LE, 'The Regulatory Responses to the Global Financial Crisis: Some Uncomfortable Questions' (2014) 10 Journal of Financial Stability 7

Claessens S and Laeven L, 'Financial Crises: Causes, Consequences, and Policy Responses' (2014) 17 Journal of International Money and Finance 3

Claessens S and Laeven L, 'Financial Dependence, Banking Sector Competition, and Economic Growth' (2005) 3(1) Journal of the European Economic Association 179

Claessens S and Underhill G, 'The Basel Process and Outcome: So Far, So Good?' (2015) 30

Review of Financial Regulation 101

Claessens S and Yurtoglu B, 'Corporate Governance in Emerging Markets: A Survey' (2013)
15 Emerging Markets Review 1

Claessens S and Yurtoglu BB, 'Corporate Governance in Emerging Markets: A Survey' (2013) 15 Emerging Markets Review 1

Claessens S and others, 'Disentangling the Incentive and Entrenchment Effects of Large Shareholdings' (2002) 57 Journal of Finance 2741

Coffee JC Jr, 'Market Failure and the Economic Case for a Mandatory Disclosure System' (1984) 70 Virginia Law Review 717

Coffee JC, 'Systemic Risk after Dodd-Frank: Contingent Capital and the Need for Regulatory Strategies beyond Oversight' (2011) 111 Columbia Law Review 795

Coffee JC, 'Systemic Risk after Dodd–Frank: Contingent Capital and the Need for Regulatory Strategies beyond Oversight' (2011) 111(4) Columbia Law Review 795

Coffee JC, Extraterritorial Financial Regulation: Why E.T. Can't Come Home' (2014) 99 Cornell Law Review 1259

Coglianese C, Finkel AM and Zaring D, 'The Role of Government in Corporate Governance' (2008) 1 New York University Journal of Law and Business 219

Correa R and Goldberg LS, 'Bank Complexity, Governance, and Risk' (2022) 134 Journal of Banking & Finance 106013

Cotterrell R, 'Why Must Legal Ideas Be Interpreted Sociologically?' (1998) 25(2) Journal of Law and Society 171

Crockett A, 'Why is Financial Stability a Goal of Public Policy?' (1997) 82(4) Economic Review 5

Cucinelli D and Soana MG, 'Systemic Risk in Non-Financial Companies: Does Governance Matter?' (2023) 87 International Review of Financial Analysis 102601

Daske H and Gebhardt G, 'International Financial Reporting Standards and Experts' Perceptions of Disclosure Quality' (2006) 42(3–4) Abacus 461

Davis EP and Zhu H, 'Bank Lending and Commercial Property Cycles: Some Cross-Country Evidence' (2005) 29(9) Journal of Banking & Finance 2325

Davis ML, 'Regulating Banks by Regulating Capital' (2018) 41(1) Regulation 38

De Bandt O and Hartmann P, 'Systemic Risk: A Survey' (2000) 6(3) European Journal of Finance 213

Dell'Ariccia G and Ratnovski L, 'Bailouts and Systemic Insurance' (2019) 105 Journal of Banking & Finance 166

Demirgüç-Kunt A and Huizinga H, 'Bank Activity and Funding Strategies: The Impact on Risk and Returns' (2010) 98(3) Journal of Financial Economics 626

Deshpande R, 'Whistle Blowers Protection under Corporate Governance System' (2023) International Journal of Law, Management and Humanities 947

Devi SA, Sayyed S and Bahr IA, 'Corporate Governance in the Banking Sector' (2017) 2(1) International Journal of Multidisciplinary Empirical Research 88

Dewantara R, Munir M, Sihabudin and Sukarmi, 'Supervision of Banking Institutions in Achieve Sound Banking in Indonesia' (2015) 41 Journal of Law, Policy and Globalization 97

DeYoung R and Jang KP, 'Do Banks Actively Manage their Liquidity?' (2016) 66 Journal of Banking & Finance 143

Di Noia C and Di Giorgio G, 'Should Banking Supervision and Monetary Policy Tasks Be Given to Different Agencies?' (1999) 2(3) International Finance 361

Diamond DW and Rajan RG, 'Fear of Fire Sales, Illiquidity Seeking, and Credit Freezes' (2011) 126(3) Quarterly Journal of Economics 557

Dibra R, 'Corporate Governance Failure: The Case of Enron and Parmalat' (2016) 12 European Scientific Journal 283

Diebold W and Spero JE, 'The Failure of the Franklin National Bank: Challenge to the International Banking System' (1980) 58 Foreign Affairs 976

Drehmann M and Tarashev N, 'Systemic Importance: Some Simple Indicators' (2011) BIS Quarterly Review 25

Drumond I, 'Bank Capital Requirements, Business Cycle Fluctuations and the Basel Accords: A Synthesis' (2009) 23(5) Journal of Economic Surveys 798

Duan J-C, 'Risk Weighting, Risk-Based Capital Regulation, and Deposit Insurance Pricing Under Endogenous Bank Moral Hazard' (2018) 92 Journal of Economic Dynamics and Control 1

Duca JV, Muellbauer J and Murphy A, 'Housing Markets and the Financial Crisis of 2007–2009: Lessons for the Future' (2010) 6(4) Journal of Financial Stability 203

Duffie D, 'Replumbing Our Financial System: Uneven Progress' (2018) 9 International Journal of Central Banking 251

Duijm P and Wierts P, 'The Effects of Liquidity Regulation on Bank Assets and Liabilities' (2016) International Journal of Central Banking 385

Echevarría CA and García-Enríquez J, 'The Economic Consequences of the Libyan Spring: A Synthetic Control Analysis' (2019) 30(5) Defence and Peace Economics 592

Edweib AKS, Shafii Z and Ahmad N, 'Stock Market and Economic Growth in Libya' (2013)

2(1) IOSR Journal of Economics and Finance 43

Edwards M, 'Expert Directors' (2019) 90 University of Colorado Law Review 1051

Eichengreen B and Frankel JA, 'The Empirics of International Currencies: Network

Externalities, History and Persistence' (2009) 119 Economic Journal 643

Eisenbeis RA and Kaufman GG, 'Cross-Border Banking and Financial Stability in the EU'

(2008) 4(3) Journal of Financial Stability 168

Eisenberg L and Noe TH, 'Systemic Risk in Financial Systems' (2001) 47(2) Management

Science 236

El-Firjani E, Menacere K and Pegum R, 'Developing Corporate Accounting Regulation in

Libya: Past and Future Challenges' (2014) 4(1) Journal of Accounting in Emerging

Economies 22

Management 143

Cultural Change 293

El-Halaby S and Hussainey K, 'Determinants of Compliance with AAOIFI Standards by Islamic Banks' (2016) 9(1) International Journal of Islamic and Middle Eastern Finance and

El-Zamly MH and Amin A, 'Organization and Job Attractiveness to Applicants in Egypt and Its Relationship with Core Self-Evaluation' (2011) 1(4) Review of Management 39

Elbadawi IA, 'Reviving Growth in the Arab World' (2005) 53(2) Economic Development and

Elbannan MA, 'The Financial Crisis, Basel Accords and Bank Regulations: An Overview'

(2017) 7(2) International Journal of Accounting and Financial Reporting 225

Elgharbawy A and others, 'Does Compliance with Corporate Governance Code Hinder

Corporate Entrepreneurship? Evidence from the UK' (2016) 16(4) Corporate Governance 765

Elijah A and Ayemere IL, 'Audit Committee Attributes and Earnings Management: Evidence

from Nigeria' (2015) 5(4) International Journal of Business and Social Research 14

Elkrghli S and Yahya A, 'Bankers' Views Towards Islamic Banking and Islamic Marketing: The Case of Libyan Main Wahda Bank in Benghazi City' (2018) 6(1) Management Studies 37 Ellis L, Haldane A and Moshirian F, 'Systemic Risk, Governance and Global Financial Stability' (2014) 45 Journal of Banking and Finance 175

Elnihewi I, Fadzil FH and Mohamed R, 'The Effect of Institutional Factors on the Organizational Performance through Performance Measures of Commercial Banks in Libya' (2014) 164 Procedia – Social and Behavioral Sciences 635

Elshahoubi I and others, 'Challenges to Compliance with Corporate Governance Mechanisms and Accountability in Emerging Markets: Evidence from Libyan Listed Companies' (2019) 8(3) Journal of Governance and Regulation 24

Epstein L and King G, 'The Rules of Inference' (2002) 69(1) University of Chicago Law Review 1

Epstein L and King G, 'The Rules of Inference' (2002) 69 University of Chicago Law Review 1

Erkens DH, Hung M and Matos P, 'Corporate Governance in the 2007–2008 Financial Crisis: Evidence from Financial Institutions Worldwide' (2012) 18 Journal of Corporate Finance 389 Erkens DH, Hung M and Matos P, 'Corporate Governance in the 2007-2008 Financial Crisis: Evidence from Financial Institutions Worldwide' (2012) 18 Journal of Corporate Finance 389 European Banking Authority, EBA Report on Liquidity Measures under Article 509(1) of the CRR (2016)

Fairfax LM, 'The Uneasy Case for the Inside Director' (2010) 96 Iowa Law Review 127
Fama EF, 'Efficient Capital Markets: A Review of Theory and Empirical Work' (1970) 25
Journal of Finance 383

Faraj S and El-Firjani E, 'Challenges Facing IASs/IFRS Implementation by Libyan Listed Companies' (2014) 2(3) Universal Journal of Accounting and Finance 57

Farj RMH, Jais MB and Isa AHBM, 'Importance of Accounting Information to Investors in the Stock Market: A Case Study of Libya' (2016) 7(1) IOSR Journal of Economics and Finance 70

Fauver L and Taboada AG, 'Management and Governance of International Joint Ventures:

Lessons for Emerging Markets' (2006) 15 International Review of Economics & Finance 423

Feldman Y and Lobel O, 'The Incentives Matrix: The Comparative Effectiveness of Rewards,

Liabilities, Duties, and Protections for Reporting Illegality' (2010) 88 Texas Law Review

1151

Fernandes C and others, 'The Impact of Board Characteristics and CEO Power on Banks' Risk-Taking: Stable versus Crisis Periods' (2021) 22 Journal of Banking Regulation 319

Ferran E and Alexander K, 'Can Soft Law Bodies Be Effective? The Special Case of the European Systemic Risk Board' (2010) 35 European Law Review 751

Ferran E and Babis VSG, 'The European Single Supervisory Mechanism' (2013) 13 Journal of Corporate Law Studies 255

Ferrarini G and Ungureanu MC, 'Economics, Politics, and the International Principles for Sound Compensation Practices: An Analysis of Executive Pay at European Banks' (2011) 64(2) Vanderbilt Law Review 431

Fleming MJ and Sarkar A, 'The Failure Resolution of Lehman Brothers' (2014) 20(3) Economic Policy Review 175

Forbes KJ, 'Macroprudential Policy: What We've Learned, Don't Know, and Need to Do' (2019) 109 AEA Papers and Proceedings 470

Ford CL, 'New Governance in the Teeth of Human Frailty: Lessons from Financial Regulation' (2010) Wisconsin Law Review 101

Ford CL, 'New Governance in the Teeth of Human Frailty: Lessons from Financial Regulation' (2010) Wisconsin Law Review 441

Fox MB, 'Securities Class Actions against Foreign Issuers' (2012) 64 Stanford Law Review 1173

Freixas X, Parigi BM and Rochet J-C, 'Systemic Risk, Interbank Relations, and Liquidity Provision by the Central Bank' (2000) 32(3) Journal of Money, Credit and Banking 611 Freeman RE and Reed DL, 'Stockholders and Stakeholders: A New Perspective on Corporate Governance' (1983) 25 California Management Review 88

Frijns B, Dodd O and Cimerova H, 'The Impact of Cultural Diversity in Corporate Boards on Firm Performance' (2016) 41 Journal of Corporate Finance 521

Fulop MT, 'The Role of the Audit Committee in Corporate Governance and the Influence of the Exchange Rates' (2014) 4(1) International Journal of Academic Research in Accounting, Finance and Management Sciences 279

Gabor D, 'A Step Too Far? The European Financial Transactions Tax on Shadow Banking' (2016) 23(6) Journal of European Public Policy 925

Gadinis S, 'The Financial Stability Board: The New Politics of International Financial Regulation' (2013) 48 Texas International Law Journal 157

Gadinis S, 'Three Pathways to Global Standards: Private, Regulator, and Ministry Networks' (2015) 109(1) American Journal of International Law 1

Gagandeep and Kumar S, 'Corporate Governance in Banking Sector' (2016) 20 International Journal of Business Management and Scientific Research 10

Gait AH and Worthington AC, 'Attitudes of Libyan Banks Towards Islamic Methods of Finance' (2018) 11(2–3) Current Politics and Economics of Africa 185

Galati G and Moessner R, 'Macroprudential Policy – A Literature Review' (2013) 27(5)

Journal of Economic Surveys 846

Gambacorta L and Shin HS, 'Why Bank Capital Matters for Monetary Policy' (2018) 48

Journal of Financial Intermediation 17

Garrett BL and Mitchell G, 'Testing Compliance' (2020) 83 Law and Contemporary Problems
47

Garslian L, 'Towards a Universal Model Regulatory Framework for Derivatives: Post-Crisis Conclusions from the United States and the European Union' (2016) 37 University of Pennsylvania Journal of International Law 941

Garwe EC, 'Increase in the Demand for Private Higher Education: Unmasking the "Paradox" (2016) 30(2) International Journal of Educational Management 232

Gauthier C, Lehar A and Souissi M, 'Macroprudential Capital Requirements and Systemic Risk' (2012) 21(4) Journal of Financial Intermediation 594

Gelter M and Gurrea-Martinez A, 'Addressing the Auditor Independence Puzzle: Regulatory Models and Proposal for Reform' (2020) 53 Vanderbilt Journal of Transnational Law 787 Gerding EF, 'Credit Derivatives, Leverage, and Financial Regulation's Missing Macroeconomic Dimension' (2008) 8(2) Berkeley Business Law Journal 29 Gerding EF, 'Credit Derivatives, Leverage, and Financial Regulation's Missing Macroeconomic Dimension' (2011) 8(2) Berkeley Business Law Journal 29

Macroeconomic Dimension' (2011) 8 Berkeley Business Law Journal 29
Gilad S, 'It Runs in the Family: Meta-Regulation and Its Siblings' (2010) 4(4) Regulation &
Governance 485

Gerding EF, 'Credit Derivatives, Leverage, and Financial Regulation's Missing

Gilson RJ and Kraakman RH, 'The Mechanisms of Market Efficiency' (1984) 70 Virginia Law Review 549

Giovanoli M, 'The Reform of the International Financial Architecture after the Global Crisis' (2009) 42 New York University Journal of International Law and Politics 81

Glinkowska B and Kaczmarek B, 'Classical and Modern Concepts of Corporate Governance (Stewardship Theory and Agency Theory)' (2015) 19(2) Management 84

Godwin A, Howse T and Ramsay I, 'A Jurisdictional Comparison of the Twin Peaks Model of

Financial Regulation' (2017) 18 Journal of Banking Regulation 103

Goldstein I and Pauzner A, 'Demand–Deposit Contracts and the Probability of Bank Runs' (2005) 60(3) The Journal of Finance 1293

Gomes T and Wilkins C, 'The Basel III Liquidity Standards: An Update' (2013) Bank of Canada Financial System Review 37

González L, Guzmán M and Quast T, 'Oil and Political Instability: A New Framework' (2013) 25 International Review of Economics & Finance 316

Goodhart C, The Basel Committee on Banking Supervision (Cambridge University Press 2011)

Goodhart C, 'The Organizational Structure of Banking Supervision' (2002) 31(1) Economic Notes 1

Goodhart C and Lastra R, 'Populism and Central Bank Independence' (2018) 29 Open Economies Review 49

Goodhart C and Schoenmaker D, 'Should the Functions of Monetary Policy and Banking Supervision Be Separated?' (1995) 47 Oxford Economic Papers 539

Goodhart CA, 'The Organizational Structure of Banking Supervision' (2002) 31(1) Economic Notes 1

Gordon KJ, 'Risk-Based Capital Requirements: The Proper Approach to Safe and Sound Banking' (1991) 10 Annual Review of Banking Law 491

Gorton G and Metrick A, 'Securitized Banking and the Run on Repo' (2012) 104(3) Journal of Financial Economics 425

Gorton G and Metrick A, 'Securitized Banking and the Run on Repo' (2012) 104 Journal of Financial Economics 425

Gorton G and Schmid FA, 'Capital, Labor, and the Firm: A Study of German

Codetermination' (2004) 2 Journal of the European Economic Association 863

Gorton GB and Metrick A, 'Securitized Banking and the Run on Repo' (2012) 104(3) Journal of Financial Economics 425

Goshen Z and Parchomovsky G, 'The Essential Role of Securities Regulation' (2006) 55 Duke Law Journal 711

Green CP and Homroy S, 'Female Directors, Board Committees and Firm Performance' (2018) 102 European Economic Review 19

Gropp R and Heider F, 'The Determinants of Bank Capital Structure' (2010) 14 Review of Finance 587

Gropp R and Heider F, 'The Determinants of Bank Capital Structure' (2010) 14(4) Review of Finance 587

Haggard S and Kaufman RR, 'The Political Economy of Financial Internationalization in the Developing World' (1995) 49(1) International Organization 35

Hakenes H and Schnabel I, 'Bank Size and Risk-Taking under Basel II' (2011) 35 Journal of Banking & Finance 1436

Haldane A, 'The \$100 Billion Question' (2010) 12 Revista de Economía Institucional 22 Hamuda K and Sawan N, 'Perceptions of Auditor Independence in Libyan Audit Market' (2014) 7(2) International Business Research 120

Hamuda K and Sawan N, 'Perceptions of Auditor Independence in Libyan Audit Market' (2024) 7(2) International Business Research 120

Hanson SG, Kashyap AK and Stein JC, 'A Macroprudential Approach to Financial Regulation' (2011) 25 Journal of Economic Perspectives 3

Hanson SG, Kashyap AK and Stein JC, 'A Macroprudential Approach to Financial Regulation' (2011) 25(1) Journal of Economic Perspectives 3

Hasan I and Xie R, 'Foreign Bank Entry and Bank Corporate Governance in China' (2013) 49(2) Emerging Markets Finance and Trade 4

Hassan N, 'Reviving Revolution: The Role of Market-Driven Transnationalism, Democracy, and Agents' (2013) Mellon Mays Undergraduate Fellowship Journal 69

Hawashe AAM, 'Commercial Banks' Attributes and Annual Voluntary Disclosure: The Case of Libya' (2016) 5(2) International Journal of Accounting and Financial Reporting 208

Hawashe HA, 'Voluntary Information Disclosure in the Annual Reports of Libyan's

Commercial Banks: A Longitudinal Analysis Approach' (2016) 4(5) European Journal of

Accounting, Auditing and Finance Research 22

Hiebl MR, 'Agency and Stewardship Attitudes of Chief Financial Officers in Private Companies' (2015) 7(1) Qualitative Research in Financial Markets 4

Hockett R, 'Implementing Macroprudential Finance-Oversight Policy: Legal Considerations' (2013) 18 Indiana Law Review 211

Hockett R, 'The Macroprudential Turn: From Institutional Safety and Soundness to Systematic Financial Stability in Financial Supervision' (2014) 9 Virginia Law & Business Review 201

Hofmann C, 'Central Bank Collateral and the Lehman Collapse' (2011) 6(4) Capital Markets Law Journal 456

Hong H, Huang J-Z and Wu D, 'The Information Content of Basel III Liquidity Risk Measures' (2014) 15 Journal of Financial Stability 91

Hopt KJ, 'Comparative Corporate Governance: The State of the Art and International Regulation' (2011) 59 American Journal of Comparative Law 1

Hopt KJ, 'Corporate Governance of Banks and Other Financial Institutions After the Financial Crisis' (2013) 13(2) Journal of Corporate Law Studies 219

Hopt KJ and Leyens PC, 'Board Models in Europe: Recent Developments of Internal Corporate Governance Structures in Germany, the United Kingdom, France, and Italy' (2004) European Company and Financial Law Review 135

Hotori E and Wendschlag M, 'The Formalization of Banking Supervision in Japan and Sweden' (2019) 22(2) Social Science Japan Journal 211

Houston JF and others, 'Cross-Country Causes and Consequences of the 2008 Crisis: Early Warning' (2012) 24(1) Japan and the World Economy 1

Huang H and others, 'Operating Performance Following Acquisitions: Evidence from Taiwan's IT Industry' (2014) 43(5) Asia-Pacific Journal of Financial Studies 739

Huizinga H and Laeven L, 'Banking Risk and Regulation: Does One Size Fit All?' (2012)

21(3) Journal of Financial Intermediation 436

Hult GTM and others, 'Stakeholder Marketing: A Definition and Conceptual Framework' (2011) 1(1) AMS Review 44

Hussainey K and Al-Najjar B, 'Understanding the Determinants of RiskMetrics/ISS Ratings of the Quality of UK Companies' Corporate Governance Practice' (2012) Canadian Journal of Administrative Sciences 366

Hutchinson T and Duncan N, 'Defining and Describing What We Do: Doctrinal Legal Research' (2012) 17 Deakin Law Review 83

Iqbal J, Strobl S and Vähämaa S, 'Corporate Governance and the Systemic Risk of Financial Institutions' (2015) 82(1) Journal of Economics and Business 42

Iswaissi H and Falahati K, 'Challenges to Corporate Governance Practices: Case Study of Libyan Commercial Banks' (2017) 1 Corporate Governance and Sustainability Review 67 Jackson HE, 'Variation in the Intensity of Financial Regulation: Preliminary Evidence and Potential Implications' (2007) 24 Yale Journal on Regulation 253

Jackson KT, 'Global Corporate Governance: Soft Law and Reputational Accountability' (2010) 35 Brooklyn Journal of International Law 41

Jalloul R and Haque M, 'Systemic Risk and Commercial Bank Stability in the Middle East and North Africa (MENA) Region' (2025) 13 Risks 120

Jensen MC and Meckling WH, 'Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure' (1976) 3(4) Journal of Financial Economics 305

Jensen MC and Meckling WH, 'Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure' (1976) 3 Journal of Financial Economics 305

Jesover F and Kirkpatrick G, 'The Revised OECD Principles of Corporate Governance and Their Relevance to Non-OECD Countries' (2005) 13 Corporate Governance 127

Jiménez G and others, 'Macroprudential Policy, Countercyclical Bank Capital Buffers, and Credit Supply: Evidence from the Spanish Dynamic Provisioning Experiments' (2017) 125(6)

Journal of Political Economy 2126

Johnson KN, 'Governing Financial Markets: Regulating Conflicts' (2013) 88 Washington Law Review 185

Jones D, 'Emerging Problems with the Basel Capital Accord: Regulatory Capital Arbitrage and Related Issues' (2000) 24(1) Journal of Banking & Finance 35

Jones LS and Maynard GP Jr, 'Unfulfilled Promises of the Fintech Revolution' (2023) 111 California Law Review 801

Joyce A, 'Libyan Arab Foreign Bank v Bankers Trust: Common Law Meets Its Limits' (1988) 29 Harvard International Law Journal 451

Judge K, 'The First Year: The Role of a Modern Lender of Last Resort' (2012) 116 Columbia Business Law Review 843

Judge K, 'Interbank Discipline' (2012) 60 UCLA Law Review 1262

Judge K, 'Information Gaps and Shadow Banking' (2016) 103 Virginia Law Review 411

Judge K, 'The First Year: The Role of a Modern Lender of Last Resort' (2016) 116 Columbia Law Review 843

Judge K, 'Information Gaps and Shadow Banking' (2017) 103 Virginia Law Review 411

Judge K, 'Investor-Driven Financial Innovation' (2019) 8 Harvard Business Law Review 291

Judge K, 'Guarantor of Last Resort' (2019) 97 Texas Law Review 707

Kaminsky GL, Reinhart CM and Vegh CA, 'The Unholy Trinity of Financial Contagion' (2003) 17(4) Journal of Economic Perspectives 51

Kane EJ, 'Shadowy Banking: Theft by Safety Net' (2014) 31 Yale Journal on Regulation 773 Kapstein EB, 'Resolving the Regulator's Dilemma: International Coordination of Banking Regulations' (1989) 43 International Organization 323

Karmel RS and Kelly CR, 'The Hardening of Soft Law in Securities Regulation' (2009) 34 Brooklyn Journal of International Law 883

Kaufman GG, 'Bank Contagion: A Review of the Theory and Evidence' (1994) 8 Journal of Financial Services Research 123

Kaufman GG, 'Bank Contagion: A Review of the Theory and Evidence' (1994) 8(2) Journal of Financial Services Research 123

Kerwer D, 'Holding Global Regulators Accountable: The Case of Credit Rating Agencies' (2005) 18(3) Governance: An International Journal of Policy, Administration, and Institutions 453

Kerwer D, 'Holding Global Regulators Accountable: The Case of Credit Rating Agencies' (2005) 18 Governance: An International Journal of Policy, Administration, and Institutions 453

Kerwer D, 'Rules That Many Use: Standards and Global Regulation' (2005) 18(4) Governance: An International Journal of Policy, Administration, and Institutions 611 Kerwer D, 'Rules That Many Use: Standards and Global Regulation' (2005) 18(4) Governance 611

Khafafa AJ and Shafii Z, 'Customer Satisfaction and Islamic Banking Awareness in the Islamic Banking Window System in Libya' (2013) 13(13) Middle-East Journal of Scientific Research 12

Khalid M and Kunhibava S, 'Fintech Regulatory Sandboxes in Australia and Malaysia: A Legal Analysis' (2020) 28 International Islamic University Malaysia Law Journal (IIUMLJ) 1 Khalil A, Rathnasinghe AP and Kulatunga U, 'Challenges for the Implementation of Sustainable Construction Practices in Libya' (2021) 21(3) Construction Economics and Building 243

King MR, 'The Basel III Net Stable Funding Ratio and Bank Net Interest Margins' (2013) 37 Journal of Banking & Finance 4144

King MR, 'The Basel III Net Stable Funding Ratio and Bank Net Interest Margins' (2013) 37(1) Journal of Banking & Finance 4144

Kingsbury B and others, 'The Emergence of Global Administrative Law' (2005) 68 Law and Contemporary Problems 15

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

Kituku KS and Ahmad A, 'Factors Influencing the Effectiveness of Malaysian Audit Committees in Performing Their Roles' (2016) 16 Contemporary Business Journal 1 Kleist N, 'Disrupted Migration Projects: The Moral Economy of Involuntary Return to Ghana from Libya' (2017) 87(2) Africa 322

Klomp J and de Haan J, 'Banking Risk and Regulation: Does One Size Fit All?' (2012) 36 Journal of Banking & Finance 3197 Kodres LE and Pritsker M, 'A Rational Expectations Model of Financial Contagion' (2002) 57(2) Journal of Finance 769

Korinek A and Simsek A, 'Liquidity Trap and Excessive Leverage' (2016) 106(3) American Economic Review 699

Koutsias M, 'The Fallacy of Property Rights' Rhetoric in the Company Law Context: From Shareholder Exclusivity to the Erosion of Shareholders' Rights' (2017) 28(6) *International Company and Commercial Law Review* 217

Koziol C and Vogt J, 'Timing Ability of Corporate and Financial Issuers: Evidence from the German Market' (2016) 5 Journal of Contemporary Management 12

Kribat M, 'Perceptions of the Users of Financial Information about the Content and Usefulness of Libyan Banks' Annual Reports' (2015) 42(2) Dirasat: Administrative Sciences 643

Krishnamurthy P, 'Rules, Standards, and Complexity in Capital Regulation' (2014) 43 Journal of Legal Studies S273

Kupiec P and Nickerson D, 'Assessing Systemic Risk Exposure from Banks and GSEs under Alternative Approaches to Capital Regulation' (2004) 28 Journal of Real Estate Finance and Economics 123

Kuttner KN and Shim I, 'Can Non-Interest Rate Policies Stabilize Housing Markets?

Evidence from a Panel of 57 Economies' (2016) 26 Journal of Financial Stability 31

La Porta R and others, 'Law and Finance' (1998) 106 Journal of Political Economy 1113

La Porta R and others, 'Corporate Ownership Around the World' (1999) 54 Journal of Finance

471

La Porta R and others, 'Investor Protection and Corporate Governance' (2000) 58 Journal of Financial Economics 3

La Porta R and others, 'The Economic Consequences of Legal Origins' (2008) 46(2) Journal of Economic Literature 285

Laeven L and Kodres LE, 'The Regulatory Responses to the Global Financial Crisis: Some Uncomfortable Questions' (2014) 10 Journal of Financial Stability 7

Laeven L and Levine R, 'Bank Governance, Regulation and Risk Taking' (2009) 93 Journal of Financial Economics 259

Laeven L and Valencia F, 'Systemic Banking Crises Database' (2013) 61(2) IMF Economic Review 225

Laga M, 'Obstacles of Adoption and Implementation of IFRS in Libya' (2013) 8(1) European Journal of Business and Economics 1

Laldin MA and Furqani H, 'Innovation versus Replication: Some Notes on the Approaches in Defining Shari'ah Compliance in Islamic Finance' (2016) 54(2) Al-Jami'ah: Journal of Islamic Studies 249

Lamandini M, Ramos D and Solana J, 'The European Central Bank (ECB) as a Catalyst for Change in EU Law, Part 1: The ECB's Mandate' (2016) 23 Columbia Journal of European Law 1

Lang A and Scott J, 'The Hidden World of WTO Governance' (2009) 20(3) European Journal of International Law 575

Lastra RM, 'Systemic Risk, SIFIs and Financial Stability' (2011) 6 Capital Markets Law Journal 197

Lastra RM, 'Systemic Risk, SIFIs and Financial Stability' (2011) 6(2) Capital Markets Law Journal 197

Lastra RM and Skinner CP, 'Sustainable Central Banking' (2023) 63 Virginia Journal of International Law 397

Lawhaishy ZB, 'English Legal and Regulatory Framework of Islamic Banking in Libya' (2018) 1(2) Al Mashalih – Journal of Islamic Law 46

Le Mire S, 'Independent Directors: Partnering Expertise with Independence' (2016) 16 Journal of Corporate Law Studies 1

Lee E, 'Basel III and Its New Capital Requirements, as Distinguished from Basel II' (2014)

131 Banking Law Journal 27

Lehar A, 'Measuring Systemic Risk: A Risk Management Approach' (2005) 8(10) Journal of Banking & Finance 2577

Levine R, 'The Governance of Financial Regulation: Reform Lessons from the Recent Crisis' (2012) 12(1) International Review of Finance 39

Levine R and Renelt D, 'A Sensitivity Analysis of Cross-Country Growth Regressions' (1992) 82(4) American Economic Review 942

Ligere E, 'Identifying Systemic Risk – A Risky Business' (2016) 133 Banking Law Journal 364

Lin C-C and Ho L-C, 'Valuing Individual Mortgage Servicing Contracts: A Comparison between Adjustable Rate Mortgages and Fixed Rate Mortgages' (2005) 8 Review of Pacific Basin Financial Markets and Policies 131

Linck JS, Netter JM and Yang T, 'The Effects and Unintended Consequences of the Sarbanes-Oxley Act on the Supply and Demand for Directors' (2008) 22 Review of Financial Studies 3287

Lovett WA, 'Transnational Finance Regulation and the Global Economy' (2011) 20 Tulane Journal of International and Comparative Law 43

Macey JR and O'Hara M, 'The Corporate Governance of Banks' (2003) 9(1) Economic Policy Review 91

Madhavan A, Porter D and Weaver D, 'Should Securities Markets Be Transparent?' (2005) 8

Journal of Financial Markets 265

Maitah M, Zedan K and Shibani B, 'Factors Affecting the Usage Level of Financial Analysis by Credit Officers in the Credit Decision in Libyan Commercial Banks' (2012) 3(10)

International Journal of Business and Social Science 78

Mallin C, Michelon G and Raggi D, 'Monitoring Intensity and Stakeholders' Orientation: How Does Governance Affect Social and Environmental Disclosure?' (2013) 114 Journal of Business Ethics 29

Markose SM and others, 'Too Interconnected to Fail: Financial Contagion and Systemic Risk in Network Model of CDS and Other Credit Enhancement Obligations of US Banks' (2012) 83(3) *Journal of Economic Behavior & Organization* 627

Masciandaro D and Quintyn M, 'The Governance of Financial Supervision: Recent Developments' (2016) 11 Journal of Economic Surveys 470

Masoud N, 'A Review of Libya's Economy, Structural Changes and Development Patterns' (2013) 4(2) Business and Economics Journal 1

Masoud N, 'The Determinants of Capital Structure Choice: Evidence from Libyan Firms' (2014) 5(1) Research Journal of Finance and Accounting 67

Masoud N, 'The Development of Accounting Regulation in the Libyan Region Countries in Africa' (2016) 7(12) Research Journal of Finance and Accounting 45

Maudos J and Fernández de Guevara J, 'Factors Explaining the Interest Margin in the Banking Sectors of the European Union' (2007) 31(7) Journal of Banking & Finance 2043

McCoy PA, 'Systemic Risk Oversight and the Shifting Balance of State and Federal Authority over Insurance' (2015) 5 UC Irvine Law Review 1389

McCoy PA, 'Countercyclical Regulation and Its Challenges' (2015) 47 Arizona State Law Journal 1181

McKinley V, 'Is There Value in Revisiting the Lehman Collapse' (2017) 40 Regulation 48 McPhilemy S, 'Integrating Macro-Prudential Policy: Central Banks as the "Third Force" in EU Financial Reform' (2016) 39 West European Politics 526

Mdaghri Alaoui A and Oubdi L, 'Basel III Liquidity Regulatory Framework and Bank Liquidity Creation in MENA Countries' (2022) 30(2) Journal of Financial Regulation and Compliance 129

Menkhoff L, 'Reform Options for the Countercyclical Capital Buffer' (2022) 102(1) Wirtschaftsdienst 59

Mesnard A, 'Temporary Migration and Capital Market Imperfections' (2004) 56(2) Oxford Economic Papers 242

Molina AD, 'A Systems Approach to Managing Organizational Integrity Risks: Lessons from the 2014 Veterans Affairs Waitlist Scandal' (2018) 48 American Review of Public Administration 872

Moloney N, 'European Banking Union: Assessing Its Risks and Resilience' (2014) 51 Common Market Law Review 1609

Moore MT, 'Redressing Risk Oversight Failure in UK and US Listed Companies: Lessons from the RBS and Citigroup Litigation' (2017) 18 European Business Organization Law Review 733

Moravcsik A, 'Taking Preferences Seriously: A Liberal Theory of International Politics' (1997) 51(4) International Organization 513

Muller-Kahle M and Lewellyn KB, 'Did Board Configuration Matter? The Case of US

Subprime Lenders' (2011) 19 Corporate Governance: An International Review 405

Mutize M, Tefera E and Nkhalamba M, 'The Development of Financial Markets in Africa:

Trends, Challenges and Prospects' (2020) 12(1J) Journal of Economics and Behavioral

Studies 46

Mwenda N and Yang C, 'Basel III and Bank Stability' (2020) 40 International Review of Financial Analysis 101531

Naili M and Lahrichi Y, 'The Determinants of Banks' Credit Risk: Review of the Literature and Future Research Agenda' (2022) 27(1) International Journal of Finance & Economics 334 Nasef AE, 'The Challenges Facing the Libyan Customs and Its Impact on the Libyan Economy' (2019) 8(2) International Journal on Global Business Management & Research 60 Nelemans MDH, 'Financial Regulation and Corporate Governance in Banks' (2019) 11 European Journal of Comparative Corporate and Financial Law (EJCCL) 21 Nielsen VL and Parker C, 'Testing Responsive Regulation in Regulatory Enforcement' (2009) 7(4) Regulation & Governance 376

Nietsch M, 'Corporate Illegal Conduct and Directors' Liability: An Approach to Personal Accountability for Violations of Corporate Legal Compliance' (2018) 18 Journal of Corporate Law Studies 151

Öhman P and Wallerstedt E, 'Audit Regulation and the Development of the Auditing Profession: The Case of Sweden' (2012) 17(2) Accounting History 241

Omarova ST, 'The Quiet Metamorphosis: How Derivatives Changed the "Business of Banking" (2009) 63 University of Miami Law Review 1041

Omarova ST, 'License to Deal: Mandatory Approval of Complex Financial Products' (2012) 90 Washington University Law Review 63

Omarova ST, 'Wall Street as Community of Fate: Toward Financial Industry Self-Regulation' (2012) 159 University of Pennsylvania Law Review 411

Omarova ST, 'The Merchants of Wall Street: Banking, Commerce, and Commodities' (2013) 98 Minnesota Law Review 265

Omarova ST, 'Rethinking the Future of Self-Regulation in the Financial Industry' (2015) 35 Brooklyn Journal of International Law 665 Omarova ST, 'New Tech v New Deal: Fintech as a Systemic Phenomenon' (2019) 36 Yale Journal on Regulation 735

Osei-Kyei R and Chan APC, 'Developing Transport Infrastructure in Sub-Saharan Africa through Public–Private Partnerships: Policy Practice and Implications' (2016) 36(2) Transport Reviews 170

Ozili PK, 'Non-Performing Loans and Financial Development: New Evidence' (2019) 20(1) Journal of Risk Finance 59

Pagliari S, 'Who Governs Finance? The Shifting Public–Private Divide in the Regulation of Derivatives, Rating Agencies and Hedge Funds' (2012) 18(1) European Law Journal 44

Pan EJ, 'Challenge of International Cooperation and Institutional Design in Financial Supervision: Beyond Transgovernmental Networks' (2010) 11 Chicago Journal of International Law 243

Pargendler M, 'The Rise of International Corporate Law' (2021) 98 Washington University Law Review 1765

Patro DK, Qi M and Sun X, 'A Simple Indicator of Systemic Risk' (2013) 9 Journal of Financial Stability 105

Patro DK, Qi M and Sun X, 'A Simple Indicator of Systemic Risk' (2013) 9(1) Journal of Financial Stability 105

Paulsson J, 'May a State Invoke Its Internal Law to Repudiate Consent to International Commercial Arbitration?' (1986) 2 Arbitration International 90

Pelletier A, Khavul S and Estrin S, 'Innovations in Emerging Markets: The Case of Mobile Money' (2020) 29(2) Industrial and Corporate Change 395

Plekhanov D, Franke H and Netland TH, 'Digital Transformation: A Review and Research Agenda' (2023) 41 European Management Journal 821

Polizzi S, Scannella E and Suárez N, 'The Role of Capital and Liquidity in Bank Lending: Are Banks Safer?' (2020) 11 Global Policy 28

Porter T, 'Why International Institutions Matter in the Global Credit Crisis' (2009) 15(1) Journal of Banking Regulation 3

Porter T, 'Technical Systems and the Architecture of Transnational Business Governance Interactions' (2014) 8(1) Regulation & Governance 110

Portes R and Rey H, 'The Determinants of Cross-Border Equity Flows' (2005) 65 Journal of International Economics 269

Posch M, Schmitz SW and Strobl P, 'Strengthening the Euro Area by Addressing Flawed Incentives in the Financial System' (2018) Q2/18 Monetary Policy and the Economy 34 Pradella L and Taghdisi Rad S, 'Libya and Europe: Imperialism, Crisis and Migration' (2017) 38(11) Third World Quarterly 2411

Puchniak DW and Lan LL, 'Independent Directors in Singapore: Puzzling Compliance Requiring Explanation' (2017) 65(2) American Journal of Comparative Law 179

Quaglia L and Spendzharova A, 'Regulators and the Quest for Coherence in Finance: The Case of Loss Absorbing Capacity for Banks' (2019) 97(3) Public Administration 499

Qizam I, 'Developing Financial Disclosure Quality in Sukuk and Bond Market: Evidence from Indonesia, Malaysia, and Australia' (2019) 63 Journal of International Financial Markets, Institutions and Money 74

Quintyn M and Taylor MW, 'Regulatory and Supervisory Independence and Financial Stability' (2003) 40 CESifo Economic Studies 259

Redo M and Gebska M, 'Globalization in Growing Financial Markets as a Threat to the Financial Security of the Global Economy' (2020) 23 European Research Studies Journal 335 Repullo R and Saurina J, 'The Countercyclical Capital Buffer of Basel III: A Critical Assessment' (2011) 13(2) CFA Institute Financial Analysts Journal 1

Repullo R and Suarez J, 'The Procyclical Effects of Bank Capital Regulation' (2013) 26(2) Review of Financial Studies 452

Rhee RJ, 'The Neoliberal Corporate Purpose of Dodge v Ford and Shareholder Primacy: A Historical Context 1919–2019' (2023) 28 Stanford Journal of Law, Business and Finance 202 Rieger C and Elliott J, 'LCR, NSFR, and Their Challenges' in Liquidity Risk Management: Practitioners' Perspectives (2016)

Ritchie B and Khorwatt E, 'The Attitude of Libyan Auditors to Inherent Control Risk Assessment' (2007) 39(1) The British Accounting Review 39

Rizopoulos V and Zachariadis M, 'The Impact of the FinTech Revolution on the Future of Banking: Opportunities and Risks' (2022) 81 International Review of Financial Analysis 101203

Rochet J-C, 'Liquidity Regulation and the Lender of Last Resort' (2008) 11 Financial Stability Review 45

Romano R, 'For Diversity in the International Regulation of Financial Institutions: Critiquing and Recalibrating the Basel Architecture' (2014) 31 Yale Journal on Regulation 1
Saidane D, Sène B and Kanga KD, 'Pan-African Banks, Banking Interconnectivity: A New Systemic Risk Measure in the WAEMU' (2021) 74 Journal of International Financial Markets, Institutions and Money 101405

Saurina J, 'Loan Loss Provisions in Spain: A Working Macroprudential Tool' (2009) 17(1)
Revista de Estabilidad Financiera 11

Sawan N and Abdulaziz A, 'Does Audit Quality in Libya Meet the International Standards Levels?' (2015) 10(6) International Journal of Business and Management 112

Sawan N and Alzeban A, 'Does Audit Quality in Libya Meet the International Standards

Levels?' (2024) 10(6) International Journal of Business and Management 155

Schenk CR, 'Summer in the City: Banking Failures of 1974 and the Development of

International Banking Supervision' (2014) 129(540) The English Historical Review 1129

Schmulow AD, 'The Four Methods of Financial System Regulation: An International

Comparative Survey' (2015) 26 Journal of Banking and Finance Law and Practice 151

Schoenmaker D, 'The Financial Trilemma' (2011) 111(1) Economic Policy 57

Schoenmaker D and Oosterloo S, 'Financial Supervision in an Integrating Europe: Measuring

Cross-Border Externalities' (2005) 8 International Finance 1

Schoenmaker D and Torna R, 'Strengthening Banking Supervision in the European Union:

The Role of Capital' (2020) 58 Journal of Common Market Studies 1142

Schwarcz DL and Zaring D, 'Regulation by Threat: Dodd-Frank and the Nonbank Problem'

(2017) 84 University of Chicago Law Review 1813

Schwarcz SL, 'Systemic Risk' (2008) 97 Georgetown Law Journal 193

Schwarcz SL, 'Regulating Complexity in Financial Markets' (2009) 87 Washington University

Law Review 211

Schwarcz SL, 'Regulating Shadow Banking' (2012) 31 Review of Banking and Financial Law

619

Schwarcz SL, 'Regulating Financial Change: A Functional Approach' (2016) 100 Minnesota

Law Review 1441

Schwarcz SL, 'Conflicts and Financial Collapse: The Problem of Secondary-Management

Agency Costs' (2016) 26 Yale Journal on Regulation 457

Schwarcz SL, 'Misalignment: Corporate Risk-Taking and Public Duty' (2016) 92(1) Notre

Dame Law Review 1

Schwarcz SL, 'Corporate Governance of SIFI Risk-Taking' (2018) 41 Dublin University Law

Journal 33

Schwarcz SL, 'Soft Law as Governing Law' (2020) 104 Minnesota Law Review 2471

Schwarcz SL and Anabtawi I, 'Regulating Systemic Risk: Towards an Analytical Framework' (2011) 86 Notre Dame Law Review 1349

Sepe SM, 'Regulating Risk and Governance in Banks: A Contractarian Perspective' (2012) 62 Emory Law Journal 327

Shaharuddin A, 'Maslahah-Mafsadah Approach in Assessing the Shari'ah Compliance of Islamic Banking Products' (2010) 1(1) International Journal of Business and Social Science 128

Shahbaz M, Nasir M-A and Lahiani A, 'Role of Financial Development in Economic Growth in the Light of Asymmetric Effects and Financial Efficiency' (2020) International Journal of Finance and Economics 1

Shariha J, 'The Role of Audit Bureau in Eradicating Financial Corruption in Libya' (2014) 5(1) Jurnal Akuntansi Multiparadigma 18

Shin HS, 'Reflections on Northern Rock: The Bank Run That Heralded the Global Financial Crisis' (2009) 23(1) Journal of Economic Perspectives 101

Shim J, 'Bank Capital Buffer and Portfolio Risk: The Influence of Business Cycle and Revenue Diversification' (2013) 37(3) Journal of Banking & Finance 761

Shim Y, 'Fit and Proper Regulation for Controlling Shareholders of Financial Companies' (2021) 11 Yonsei Law Journal 51

Shleifer A and Vishny R, 'Fire Sales in Finance and Macroeconomics' (2011) 25(1) Journal of Economic Perspectives 29

Shleifer A and Vishny RW, 'A Survey of Corporate Governance' (1997) 52(2) Journal of Finance 737

Shleifer A and Vishny RW, 'A Survey of Corporate Governance' (1997) 52 Journal of Finance 737

Siems MM, 'Legal Originality' (2008) 28 Oxford Journal of Legal Studies 147

Skinner CP, 'Misconduct Risk' (2016) 84 Fordham Law Review 1559

Smets F, 'Financial Stability and Monetary Policy: How Closely Interlinked?' (2018) 35 International Journal of Central Banking 263

Sommer P and Pasquali S, 'Liquidity – How to Capture a Multidimensional Beast' (2016) 11(2) Journal of Trading 21

Srivastav A and Hagendorff J, 'Corporate Governance and Bank Risk-Taking' (2016) 24(3) Corporate Governance: An International Review 334

Stela A and Abdulsalam A, 'The Citizens Satisfaction Level on the Islamic Banking System of Libya' (2016) 7(6) IOSR Journal of Economics and Finance 12

Stellinga B, 'The Open-Endedness of Macroprudential Policy: Endogenous Risks as an Obstacle to Countercyclical Financial Regulation' (2019) 22(1) Business and Politics 224

Sterzel A, 'Reforming the Regulatory Treatment of Sovereign Exposures in Banking

Regulation' (2020) 53(1) Credit and Capital Markets 81

Stevcevska-Srbinoska D and Gjelevska V, 'Liquidity-Profitability Dynamics: Is the Banking Industry Resilient in Times of Crisis?' (2024) Facta Universitatis, Series: Economics and Organization 1

Summer A, 'Managing Systemic Risk and Systemic Regulation' (2014) 31(2) Journal of International Banking Law and Regulation 64

Tarullo DK, 'Macroprudential Regulation' (2014) 31 Yale Journal on Regulation 505

Taylor MW, 'The Road from Twin Peaks – and the Way Back' (2009) 16 Connecticut

Insurance Law Journal 61

Taylor MW and Fleming A, 'Integrated Financial Supervision: Lessons of Scandinavian Experience' (2000) 36(4) Finance & Development 42

Thakor A, 'Capital Requirements, Monetary Policy, and Aggregate Bank Lending: Theory and Empirical Evidence' (1996) 51 Journal of Finance 279

Thiemann M, 'Is Resilience Enough? The Macroprudential Reform Agenda and the Lack of Smoothing of the Cycle' (2019) 97(3) Public Administration 561

Thomas JP and others, 'Regulatory Reform and the Unforeseen? The Case of the Basel Guidelines and the 2007–08 Financial Crisis' (2017) 25 Competition and Change 86

Tomic LA, Tomasek D and Zunic M, 'Fit and Proper Assessment of Board Members' (2020) 7

InterEULawEast: Journal for the International and European Law, Economics and Market Integrations 263

Tröger TH, 'The Single Supervisory Mechanism – Panacea or Quack Banking Regulation?

Preliminary Assessment of the New Regime for the Prudential Supervision of Banks with

ECB Involvement' (2014) 15(4) European Business Organization Law Review 449

Troug HA and Murray M, 'The Asymmetric Effects of Fluctuations in Oil Prices on the

Performance of the Libyan Economy: A VAR Approach' (2020) 10(5) International Journal of

Economics and Financial Issues 282

Tsang C-Y, 'Balancing the Governance of the Modern Financial Ecosystem: A New Governance Perspective and Implications for Market Discipline' (2018) 40 Houston Journal of International Law 531

Tsomocos DP, 'Equilibrium Analysis, Banking and Financial Instability' (2003) 6 Financial Markets, Institutions & Instruments 1

Tuan T, 'The Impact of Balanced Scorecard on Performance: The Case of Vietnamese Commercial Banks' (2020) 7(1) Journal of Asian Finance, Economics and Business 71 Tung F, 'Pay for Banker Performance: Structuring Executive Compensation for Risk Regulation' (2011) 105 Northwestern University Law Review 1205

Twati JM and Gammack JG, 'The Impact of Organisational Culture Innovation on the Adoption of IS/IT: The Case of Libya' (2006) Journal of Enterprise Information Management

Ullah H, 'Shari'ah Compliance in Islamic Banking: An Empirical Study on Selected Islamic Banks in Bangladesh' (2014) International Journal of Islamic and Middle Eastern Finance and Management 234

Vaidya R, 'Role of Accounting Information in Making Share Investment Decisions: A Survey of Investors in Nepalese Stock Market' (2021) 6(1) Journal of Business and Social Sciences Research 63

Van Jaarsveld IL, 'Domestic and International Banking Regulation and Supervision – Defying the Challenges' (2002) 119 South African Law Journal 71

Van Loo R, 'Making Innovation More Competitive: The Case of Fintech' (2018) 65 UCLA Law Review 232

Vandewalle D, 'Qadhafi's "Perestroika": Economic and Political Liberalization in Libya' (1991) 45(2) Middle East Journal 216

Veeramoothoo S and Hammoudeh S, 'Impact of Basel III Liquidity Regulations on US Bank Performance in Different Conditional Profitability Spectrums' (2022) 63 North American Journal of Economics and Finance 101826

Verdier P-H, 'Transnational Regulatory Networks and Their Limits' (2009) 34 Yale Journal of International Law 113

Verdier P-H, 'The Political Economy of International Financial Regulation' (2009) 88 Indiana Law Journal 1405

Verdier P-H, 'The Political Economy of International Financial Regulation' (2013) 88 Indiana Law Journal 1405

Viterbo A, 'The European Union in the Transnational Financial Regulatory Arena: The Case of the Basel Committee on Banking Supervision' (2019) 22(2) Journal of International Economic Law 205

Vives X, 'Competition and Stability in Banking' (2010) 27(1) International Journal of Industrial Organization 52

Walker GA, 'Basel III Market and Regulatory Compromise' (2011) 12 Journal of Banking Regulation 95

Weber A, 'Securing Stability and Growth in a Post-Crisis World' (2011) 15 Financial Stability Review 151

Weber RF, 'New Governance, Financial Regulation, and Challenges to Legitimacy: The Example of the Internal Models Approach to Capital Adequacy Regulation' (2010) 62

Administrative Law Review 783

Weber RF, 'New Governance, Financial Regulation, and Challenges to Legitimacy: The Example of the Internal Models Approach to Capital Adequacy Regulation' (2010) 62(3) Administrative Law Review 783

Weber RF, 'A Theory for Deliberation-Oriented Stress Testing Regulation' (2014) 98 Minnesota Law Review 2236

Weber RH and Arner DW, 'Toward a New Design for International Financial Regulation' (2007) 29(2) University of Pennsylvania Journal of International Law 391

Wei X, Gong Y and Wu H-M, 'The Impacts of Net Stable Funding Ratio Requirement on Banks' Choices of Debt Maturity' (2017) 82 Journal of Banking & Finance 229

Wellink N, 'Mitigating Systemic Risk in OTC Derivative Markets' (2010) Financial Stability

Review 131

Westbrook AD, 'Does Banking Law Have Something to Teach Corporations Law about Directors' Duties' (2016) 55 Washburn Law Journal 397

White AM, 'Banks as Utilities' (2016) 90 Tulane Law Review 1241

Whitehead CK, 'The Goldilocks Approach: Financial Risk and Staged Regulation' (2012) 97 Cornell Law Review 1267 Woldie A and Dofan IM, 'Bank Supervision and Surveillance: A Critical Case Study Analysis of the Bank of Commerce and Development (Libya)' (2007) Google Scholar 1

Wymeersch E, 'The Structure of Financial Supervision in Europe: About Single Financial Supervisors, Twin Peaks and Multiple Financial Supervisors' (2007) 8 European Business

Organization Law Review 237

Yadav Y, 'Fintech and International Financial Regulation' (2020) 53 Vanderbilt Journal of Transnational Law 1109

Yermack D, 'Corporate Governance and Blockchains' (2017) 21(1) Review of Finance 7

Zagoub AA, 'Concept and Practices of Corporate Governance in Libyan Banks' (2019) Libyan

Academy for Graduate Studies Journal 67

Zakari M and Menacere K, 'The Challenges of the Quality of Audit Evidence in Libya' (2012) 1(1) African Journal of Accounting, Auditing and Finance 3

Zakari MA, 'Challenges of International Financial Reporting Standards (IFRS) Adoption in Libya' (2014) 4(2) International Journal of Accounting and Financial Reporting 390

Zaring D, 'International Law by Other Means: The Twilight Existence of International Financial Regulatory Organizations' (1998) 33 Texas International Law Journal 281

Zaring D, 'Regulating Banking Ethics: A Toolkit' (2020) 43 Seattle University Law Review 555

Zeitun R, 'Determinants of Islamic and Conventional Banks' Performance in GCC Countries
Using Panel Data Analysis' (2012) 5(1) Global Economy and Finance Journal 53
Zetzsche DA and others, 'Regulating FinTech Innovation: A Balancing Act' (2017) 12
European Business Organization Law Review 663

Zoellick RB, 'Fragile States: Securing Development' (2008) 50(6) Survival 67

3. Other Resources

Admati AR and others, 'Fallacies, Irrelevant Facts, and Myths in the Discussion of Capital Regulation: Why Bank Equity is Not Socially Expensive' (Max Planck Institute for Research on Collective Goods, 2013 Working Paper No 2013/23)

Admati AR and others, 'Fallacies, Irrelevant Facts, and Myths in the Discussion of Capital Regulation: Why Bank Equity is Not Socially Expensive' (2013) Stanford University Working Paper No 86

Ahmed ZA, The Barriers to Effective Marketization of Corporate Equity in Libya (PhD thesis, University of Gloucestershire 2011)

Al-Daragi HA, Choice of Capital Structure: A Study of Libyan Companies, A Comparison with UK Companies (PhD thesis, My Back Yard University 2011)

Alford D, 'Core Principles for Effective Banking Supervision: An Enforceable International Financial Standard?' (SSRN 2010) https://ssrn.com/abstract=1531760 accessed 15 March 2023

Alfatiemy MM, The Relationship Between Teaching Practices, Capabilities, and Resources with the Development of Core Competencies Among Libyan Accounting Students (PhD thesis, Sultan Idris Education University 2013)

Alkizza AA and Akbar S, The Impact of Business Environment on Management Accounting Practices: Libyan Evidence (PhD thesis, University of Liverpool 2006)

Altunbas Y, Gambacorta L and Marqués Ibañez D, Bank Risk and Monetary Policy (European Central Bank, Working Paper Series No 1075, July 2009)

Alvi N, Development of Libyan Economy Since 1969 (PhD thesis, Aligarh Muslim University 1982)

Amhalhal AMA, A Contingency-Based Investigation of the Effectiveness of the Use of Multiple Performance Measures in a Libyan Context (PhD thesis, University of Huddersfield 2013)

Anton E, 'Actual Banking Risk Approaches, Their Regulation, Policies, and Practices on Banking Risk Management' (2019) 19 USV Annals of Economics and Public Administration 192 http://www.annals.seap.usv.ro/index.php/annals/article/viewArticle/1176 accessed 27 February 2024

Autorité des Marchés Financiers, 'The AMF: Our Organisation' https://www.amf-france.org/en/amf/our-organization accessed 26 June 2020

Austin J, 'The Power and Influence of IOSCO in Formulating and Enforcing Securities Regulations' (2015) Asper Review of International Business and Trade Law (forthcoming) SSRN https://ssrn.com/abstract=2717521 accessed 10 January 2023

Avgouleas E, Bank Leverage Ratios and Financial Stability: A Micro- and Macroprudential Perspective (Levy Economics Institute Working Paper No 849, 2015)

Baej YMAH, A Comparison of Key Dimensions in Conventional and Islamic Banking: An International Perspective with Implications for the Bank Transformation Process in Libya (PhD thesis, Griffith University 2013)

BCBS, 'International Convergence of Capital Measurement and Capital Standards' (updated November 2005) http://www.bis.org/publ/bcbs107.htm accessed 26 December 2022

BCBS, Core Principles for Effective Banking Supervision (Bank for International Settlements, 20 December 2011) https://www.bis.org/publ/bcbs213.htm accessed 9 January 2024

BCBS, 'Core Principles for Effective Banking Supervision' (BIS, 14 September 2012) https://www.bis.org/publ/bcbs230.htm accessed 7 January 2024

BCBS, A Framework for Dealing with Domestic Systemically Important Banks (Bank for International Settlements, October 2012) https://www.bis.org/publ/bcbs233.pdf accessed 28 January 2024

BCBS, 'External Audits of Banks' (Bank for International Settlements, 31 March 2014)

https://www.bis.org/publ/bcbs244.pdf accessed 7 January 2024

BCBS, Guidelines for Identifying and Dealing with Weak Banks (BIS, 16 July 2015)

https://www.bis.org/bcbs/publ/d330.htm accessed 8 January 2024

BCBS, 'Implementation of Basel Standards: A Report to G20 Leaders' (Bank for International Settlements 2021)

BCBS, Evaluation of the Impact and Efficacy of the Basel III Reforms (BIS, 14 December 2022) https://www.bis.org/bcbs/publ/d544.htm accessed 28 January 2024

BCBS, Basel III: A Global Regulatory Framework for More Resilient Banks and Banking Systems (Bank for International Settlements, June 2010)

https://www.bis.org/publ/bcbs189.pdf accessed 28 January 2024

BCBS, 'Basel III: A Global Regulatory Framework for More Resilient Banks and Banking Systems – Revised Version June 2011' (BIS, 1 June 2011)

https://www.bis.org/publ/bcbs189.htm accessed 7 January 2024

Bédard J and Compernolle T, 'The External Auditor and the Audit Committee' in David Hay, WR Knechel and M Willekens (eds), Routledge Companion to Auditing (Routledge 2014) https://ssrn.com/abstract=2423389 accessed 27 February 2024

Belkhir M and others, 'Macroprudential Policy and Bank Systemic Risk: Does Inflation

Targeting Matter?' IMF Working Paper WP/23/119 (IMF, June 2023) https://www.imf.org/-/media/Files/Publications/WP/2023/English/wpiea2023119-print-pdf.ashx accessed 28

January 2024

Beretta E, 'On the Inflation-Debt-Bubble "Vicious Cycle" in Times of Evolving Money—A Memorandum of Forward-Looking Lessons' (2024) Economies https://www.mdpi.com/2227-7099/12/2/26 accessed 26 June 2020

Black J, 'The Rise, Fall and Fate of Principles-Based Regulation' (LSE Law, Society and Economy Working Paper 17/2010, 2010)

Black J, 'The Rise, Fall and Fate of Principles-Based Regulation' (LSE Law, Society and Economy Working Paper 17/2010, 2010)

https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1712862 accessed 27 February 2023

Julia Black, 'Restructuring Global and EU Financial Regulation: Capacities, Coordination and Learning' (LSE Law, Society and Economy Working Paper 18/2010, London School of Economics and Political Science)

Black J, 'Learning from Regulatory Disasters' (2014) LSE Law, Society and Economy Working Papers 24/2014

Black J, 'The Development of Risk-Based Regulation in Financial Services: Just "Modelling Through"?' (LSE Law, Society and Economy Working Paper 26/2016, 2016)

http://eprints.lse.ac.uk/64993/ accessed 13 March 2023

Blinco S and others, Bank Boards – A Review of Post-Crisis Regulatory Approaches (FSI Insights No 25, BIS March 2022) https://www.bis.org/fsi/publ/insights25.pdf accessed 9 January 2024

Bostandzic D and others, 'Capital Requirements and Systemic Risk: Evidence from a Quasi-Natural Experiment' (VoxEU.org, 15 January 2018) https://voxeu.org/article/capital-requirements-and-systemic-risk accessed 3 March 2022

Brei M and others, 'Bad Bank Resolutions and Bank Lending' (BIS Working Paper No 837, 2020)

Brunel C and Hufbauer GC, Reviving Maghreb Integration: Recommendations (Peterson Institute for International Economics, 2009)

https://www.piie.com/publications/chapters_preview/4266/13iie4266.pdf accessed 30 September 2025

Brunnermeier MK and others, The Fundamental Principles of Financial Regulation (Geneva Reports on the World Economy 11, 2009)

Buch CM and Prieto E, 'Do Better Capitalized Banks Lend Less? Long-Run Panel Evidence from Germany' (2012) University of Tübingen Working Papers in Economics and Finance No 37

Business Process Incubator, 'Systemic Risk Explained: How to Measure and Identify
Systemic Risk Items' https://www.businessprocessincubator.com/content/systemic-risk-explained-how-to-measure-and-identify-systemic-risk-items/ accessed 27 March 2023
Caruana J, 'Systemic Risk: How to Deal with It?' (Bank for International Settlements, 12
February 2010) https://www.bis.org/publ/othp08.htm accessed 27 March 2022
Carson E and Dowling C, 'The Production of Audit Services: Global Audit Firm Networks'
Relationship Between Audit Support System Design and Audit Pricing' (Unpublished Working Paper, 2010)

http://www.accg.mq.edu.au/Accg_docs/pdf/seminar_papers/2010/Carson_Dowling_22_April 10.pdf accessed 10 November 2023

Cebotari A, Contingent Liabilities: Issues and Practice (IMF Working Paper WP/08/245, 2008)

CBL, 'Strategic Plan of the CBL' (Institutional Information) https://cbl.gov.ly/en/strategic-plan/ accessed 12 March 2022

CBL, 'Banking Supervision Annual Report 2019' (CBL 2020)

Céspedes LF, Chang R and Velasco A, 'Financial Intermediation, Exchange Rates, and Unconventional Policy in an Open Economy' (NBER Working Paper No 18431, 2012)

Čihák M and others, 'Bank Regulation and Supervision Around the World: A Crisis Update' (2012) World Bank Policy Research Working Paper No 6286

Čihák M and Tieman AF, 'Quality of Financial Sector Regulation and Supervision Around the World' (IMF Working Paper WP/08/190, August 2008)

Claessens S and Kodres LE, 'The Regulatory Responses to the Global Financial Crisis: Some Uncomfortable Questions' (IMF Working Paper WP/14/46, March 2014)

Corbacho A and Peiris SJ, The ASEAN Way (IMF eBook, 2018)

https://doi.org/10.5089/9781513558905.071 accessed 2 December 2022

Corporate Finance Institute, 'Systemic Risk' (Corporate Finance Institute, 2022)

https://corporatefinanceinstitute.com/resources/knowledge/finance/what-is-systemic-risk/accessed 27 February 2022

Cucinelli D and Soana MG, 'Systemic Risk in Non-Financial Companies: Does Governance Matter?' (2023) 87 International Review of Financial Analysis 102601

Davarnejad L, 'In the Shadow of Soft Law: The Handling of Corporate Social Responsibility

https://doi.org/10.1016/j.irfa.2023.102601 accessed 24 March 2022

Disputes under the OECD Guidelines for Multinational Enterprises' (2011) Journal of Dispute Resolution

https://scholarship.law.missouri.edu/cgi/viewcontent.cgi?article=1630&context=jdr accessed 10 November 2023

De Bandt O and Hartmann P, 'Systemic Risk: A Survey' (ECB Working Paper No 35, 2000) de Gregorio J, 'Economic Growth in Latin America: From the Disappointment of the Twentieth Century to the Challenges of the Twenty-First' (Working Paper No 377, Central Bank of Chile, November 2006)

de Lange N and Petros M, 'Prudential Supervision of Banks in the South African Context – the Supervisory Review and Evaluation' (Bank for International Settlements, 2 August 2010) https://www.bis.org/ifc/publ/ifcb33o.pdf accessed 25 December 2023

Duygun M, Ladley D and Shaban M, 'Challenges to Global Financial Stability:

Interconnections, Credit Risk, Business Cycle and the Role of Market Participants' (2020) 112

Journal of Banking and Finance 105735 https://doi.org/10.1016/j.jbankfin.2020.105735

accessed 22 March 2022

Edge R and Liang N, New Financial Stability Governance Structures and Central Banks (HKIMR Working Paper No 06/2017, 2017)

Elgnaidi M and Toprak M, 'Interconnectedness of Libyan Financial and Real Sectors' (29 December 2023) Quantrade Journal

https://dergipark.org.tr/en/pub/quantrade/issue/81261/1344943 accessed 15 November 2023 Ellabbar K, Capital Market and Accounting Disclosure in Emerging Economies: The Case of

Libya (PhD thesis, University of Salford 2007)

Ellabbar K and Havard T, 'The Effects of Absence of Capital Market on Libyan Privatisation Programmes' https://www.irbnet.de/daten/iconda/CIB14692.pdf accessed 27 February 2022 Eller CK, Can Using the Internal Audit Function as a Training Ground for Management Deter Internal Auditor Fraud Reporting? (PhD thesis, Virginia Commonwealth University 2014) Elmadani M, The Study of Service Quality in Libyan Commercial Banks (PhD thesis, University of Huddersfield 2015)

Elsakit OM, The Disclosure and Use of Social and Environmental Information by Libyan Banks (PhD thesis, Griffith University 2015)

Emhemed M, The Potential Economic Impacts of Financial Liberalization in Libya in Case of Accession to the World Trade Organization (WTO) (PhD thesis, University of Huddersfield 2016)

Enamul Hossen GK, 'Consumer Perceptions of the Barriers to Adoption of Internet Banking: A Case Study in Libya' (University of Southern Queensland, 1970) https://research.usq.edu.au/item/q3286/consumer-perceptions-of-the-barriers-to-adoption-of-internet-banking-a-case-study-in-libya accessed 26 January 2024

EBA, 'Regulatory Technical Standards on the Content Lists of Conditions to be Used by the European Banking Authority When Drafting Regulatory Technical Standards on the Application of Article 7(3) of Regulation (Capital Requirements) No 575/2013' (2013) https://www.eba.europa.eu accessed 7 January 2024

EBA, Single Programming Document Years 2024–2026 (June 2023)

https://www.eba.europa.eu/sites/default/files/2024-01/a9b1c021-821b-4718-9a9b-

2691bba32cc3/EBA%202024-2026%20SPD%20FINAL.pdf accessed 8 January 2024

ECB, 'Recent Developments in Supervisory Structures in the EU Member States (2007–10)' (ECB Report, October 2010)

ECB, 'Systemic Risk Mitigation: The Roles of Capital and Corporate Governance' (ECB Banking Supervision, 17 March 2017)

https://www.bankingsupervision.europa.eu/press/speeches/date/2017/html/se170317.en.html accessed 20 March 2022

ECB, Financial Integration in Europe (ECB Report, May 2018)

ECB, 'Why Do Banks Need to Hold Capital?'

https://www.bankingsupervision.europa.eu/about/ssmexplained/html/hold_capital.en.html accessed 27 February 2022

Ferran E and Alexander K, 'Can Soft Law Bodies Be Effective? Soft Systemic Risk Oversight Bodies and the Special Case of the European Systemic Risk Board' (University of Cambridge Faculty of Law Research Paper No 36/2011, 2010) https://ssrn.com/abstract=1676140 accessed 26 January 2024

Ferrarini G, 'Understanding the Role of Corporate Governance in Financial Institutions: A Research Agenda' (European Corporate Governance Institute, Law Working Paper No 347/2017)

FCA, 'DP18/2: Transforming Culture in Financial Services' (12 March 2018)

https://www.fca.org.uk/publications/discussion-papers/dp18-2-transforming-culture-financial-services accessed 21 January 2024

FCA, Individual Accountability: Extending the Senior Managers & Certification Regime to all FCA Firms (Consultation Paper CP17/25, July 2017)

https://www.fca.org.uk/publication/consultation/cp17-25.pdf accessed 11 January 2024 FSA, Competence and Ethics (Consultation Paper CP10/12, 2010)

https://www.fca.org.uk/publication/consultation/cp10_12.pdf accessed 15 January 2024

FSB, 'About the FSB' https://www.fsb.org/about/ accessed 28 February 2023

FSB, Peer Review Report on Risk Governance: Thematic Review on Risk Governance (Thematic Peer Review Report, 12 February 2013)

FSB, Thematic Review on Risk Governance – Peer Review Report (12 February 2013) https://www.fsb.org/wp-content/uploads/r_130212.pdf accessed 9 January 2024

FSB, 'Implementation and Effects of the G20 Financial Regulatory Reforms' (9 November 2015) https://www.fsb.org/2015/11/implementation-and-effects-of-the-g20-financial-regulatory-reforms/ accessed 7 January 2024

FSB, IMF and BIS, Guidance to Assess the Systemic Importance of Financial Institutions, Markets and Instruments: Initial Considerations and Background Paper (Report to G20 Finance Ministers and Governors, October 2009) http://www.bis.org/publ/othp07.pdf accessed 23 January 2023

FSB ,IMF and BIS, Guidance to Assess the Systemic Importance of Financial Institutions, Markets and Instruments: Initial Considerations and Background Paper (Report to G20 Finance Ministers and Governors, October 2009) http://www.bis.org/publ/othp07.pdf accessed 30 September 2021

FSB ,IMF and World Bank, Financial Stability Issues in Emerging Market and Developing Economies: Report to the G-20 Finance Ministers and Central Bank Governors (2 November 2011)

Frait J and Komárková Z, 'Financial Stability, Systemic Risk and Macroprudential Policy' in Financial Stability Report 2011 (Czech National Bank 2010)

Frait J and Komárková Z, 'Financial Stability, Systemic Risk and Macroprudential Policy' in Financial Stability Report 2011 (2010)

G20, High-Level Principles for Preventing Corruption and Ensuring Integrity in State-Owned Enterprises (2018) https://www.unodc.org/documents/corruption/G20-Anti-Corruption-

Resources/Accountability-and-Monitoring-Reports/2018_G20_High-

Level Principles for Preventing Corruption and Ensuring Integrity in State-

Owned Enterprises.pdf accessed 11 January 2024

Gai P and Kiyotaki N, 'Regulatory Complexity and the Quest for Robust Regulation' (Advisory Scientific Committee Report, 2 February 2019)

https://ideas.repec.org/p/srk/srkasc/20198.html accessed 9 January 2024

Gambacorta L and Marques-Ibañez D, 'The Bank Lending Channel: Lessons from the Crisis' (BIS Working Papers No 345, 2011)

Gambacorta L and Shin HS, 'Why Bank Capital Matters for Monetary Policy' (BIS Working Papers No 558, 2016)

Gerged AM and Masli AM, 'Corporate Governance in Libya: A Systematic Review and Comparative Analysis with UK Standards' (2024) SSRN Working Paper https://www.ssrn.com/abstract=5282790 accessed 19 August 2024

Gobat J, Yanase M and Maloney J, 'The Net Stable Funding Ratio: Impact and Issues for Consideration' (IMF Working Paper WP/14/106, 2014)

Gobat J, Yanase M and Maloney J, The Net Stable Funding Ratio: Impact and Issues for Consideration (IMF Working Paper WP/14/106, 2014)

https://www.imf.org/external/pubs/ft/wp/2014/wp14106.pdf accessed 28 January 2024

Goffe V, 'Supporting Financial Sector Development in Libya in Hope that Peace Will Follow'

(World Bank Blogs, 18 September 2020) https://blogs.worldbank.org/arabvoices/supporting-financial-sector-development-libya-hope-peace-will-follow accessed 25 January 2024

Goodhart CAE and others, 'Financial Regulation in General Equilibrium' (National Bureau of Economic Research Working Paper No 17909, 2012)

Gorton GB, 'Slapped in the Face by the Invisible Hand: Banking and the Panic of 2007' (2009) SSRN Working Paper https://ssrn.com/abstract=1401882 accessed 10 January 2023 Government Pension Fund Global, 'Responsible Investment Government Pension Fund Global' (Ministry of Finance Norway 2020) https://www.regjeringen.no/en/topics/the-economy/the-government-pension-fund/responsible-investments/id1439299/ accessed 15 November 2023

Hanke SH, 'Basel's Capital Curse' (CATO Institute, 2013)

http://www.cato.org/publications/commentary/basels-capital-curse accessed 12 October 2023

Hannoun H, 'The Basel III Capital Framework: A Decisive Breakthrough' (BIS, 2010)

https://www.bis.org/speeches/sp101125a.htm accessed 11 November 2021

Harun CA and Gunadi I, 'Financial Stability and Systemic Risk' in Perry Warjiyo and Solikin M Juhro (eds), Central Bank Policy Mix: Issues, Challenges, and Policy Responses (Springer 2022) https://doi.org/10.1007/978-981-16-6827-2_5 accessed 12 March 2022

Helleiner E, 'The Contemporary Reform of Global Financial Governance: Implications of and Lessons from the Past' in G20 at 10: Progress, Prospects and Policy Options (UNCTAD, G-24

Discussion Paper No 55, April 2009) https://unctad.org/system/files/official-

document/gdsmdpg2420092 en.pdf accessed 28 February 2023

Hoerova M and others, 'Benefits and Costs of Liquidity Regulation' (2018) ECB Working Paper No 2199

Hopt KJ, 'Better Governance of Financial Institutions' (European Corporate Governance Institute, Law Working Paper No 207/2013)

Hosen EERA, A Review of the Libyan Insolvency and Restructuring Laws Informed by Insolvency Law Theory and International Benchmarks (PhD thesis, Nottingham Trent University 2020)

Husien NM, Financial Sector Development, Savings and Economic Performance: A Case Study of Libya (PhD thesis, University of Salford 2007)

IFRS Foundation, The Conceptual Framework for Financial Reporting (2010)

Igan D and Kang H, Do Loan-to-Value and Debt-to-Income Limits Work? Evidence from Korea (IMF Working Paper WP/11/297, 2011)

Ingves S, 'Basel III: Strengthening the Resilience of the Banking Sector' (BIS Speech, 2010) https://www.bis.org/speeches/sp101223.pdf accessed 17 January 2023

IMF, Global Financial Stability Report: Responding to the Financial Crisis and Measuring Systemic Risks (IMF 2009)

IMF, Global Financial Stability Report: Risk Taking, Liquidity, and Shadow Banking (IMF 2014)

IMF, Global Financial Stability Report: Moving from Liquidity- to Growth-Driven Markets (IMF 2014)

IMF, 'Financial Sector Assessment Program' https://www.imf.org/en/what-we-do/financial-sector-policies accessed 16 January 2024

IMF, The Impact of Fintech on Central Bank Governance: Key Legal Issues (IMF, 24 August

2021) https://www.imf.org/en/Publications/FIN/Issues/2021/08/24/The-Impact-of-Fintech-on-

Central-Bank-Governance-Key-Legal-Issues-463305 accessed 25 January 2024

IMF, The Impact of Fintech on Central Bank Governance: Key Legal Issues (FinTech Note

No 2021/001, International Monetary Fund, 24 August 2021)

https://www.imf.org/en/Publications/FIN/Issues/2021/08/24/The-Impact-of-Fintech-on-

Central-Bank-Governance-Key-Legal-Issues-463305 accessed 25 January 2024

IMF, Global Financial Stability Report, October 2021 (IMF, 6 October 2021)

https://www.imf.org/en/Publications/GFSR/Issues/2021/10/12/global-financial-stability-

report-october-2021 accessed 28 January 2024

IMF, 'United Kingdom Financial Sector Assessment Program: Banking Supervision and

Issues in Financial Stability' (IMF Country Report No 22/105, 2022) https://www.imf.org/-

/media/Files/Publications/CR/2022/English/1GBREA2022006.ashx accessed 7 January 2024

IMF, 'South Africa: Financial Sector Assessment Program – Technical Note on Banking

Regulation and Supervision' (IMF Staff Country Report 22/184, June 2022)

https://www.elibrary.imf.org/view/journals/002/2022/184/002.2022.issue-184-en.xml

accessed 9 January 2024

IMF, Country Report No 23/201 Libya (IMF 2023) https://www.imf.org/-

/media/Files/Publications/CR/2023/English/1LBYEA2023001.ashx accessed 28 January 2024

IMF, IMF Country Report (2023) https://doi.org/10.5089/9798400244070.002 accessed 8

February 2024

IOSCO, Objectives and Principles of Securities Regulation (International Organization of

Securities Commissions 2007) https://www.iosco.org/library/pubdocs/pdf/IOSCOPD154.pdf

accessed 13 January 2023

Ivanyna M and Salerno A, Governance for Inclusive Growth (IMF Working Paper 21/098,

2021) https://doi.org/10.5089/9781513582467.001 accessed 17 March 2022

Jackson P and others, 'Capital Requirements and Bank Behaviour: The Impact of the Basle

Accord' (Basel Committee on Banking Supervision Working Paper No 1, April 1999)

https://www.bis.org/publ/bcbs wp1.pdf accessed 26 June 2023

Jackson P and others, 'Capital Requirements and Bank Behaviour: The Impact of the Basle

Accord' (Basel Committee on Banking Supervision Working Paper No 1, April 1999)

https://www.bis.org/publ/bcbs_wp1.pdf accessed 10 January 2023

Jobst AA, 'Measuring Systemic Risk-Adjusted Liquidity (SRL) – a Model Approach' (2012)

SSRN Electronic Journal https://ssrn.com/abstract=2154937 accessed 27 February 2024

Kick TK and Pfingsten A, 'The Importance of Qualitative Risk Assessment in Banking

Supervision Before and During the Crisis' (2011) SSRN Electronic Journal

https://ssrn.com/abstract=2794064 accessed 10 October 2024

Kick TK and Pfingsten A, 'The Importance of Qualitative Risk Assessment in Banking

Supervision Before and During the Crisis' (2011) SSRN Electronic Journal

https://ssrn.com/abstract=2794064 accessed 27 May 2024

Koch C, Richardson G and Van Horn P, Countercyclical Capital Buffers: A Cautionary Tale

(National Bureau of Economic Research Working Paper 27466, 2020)

Kumati A, Commercial Banking in Libya and the Potential for Islamic Banking (PhD thesis,

Durham University 2008)

Laeven L and Valencia F, 'Systemic Banking Crises: A New Database' (IMF Working Paper

WP/08/224, 2008)

Laeven L and Valencia F, 'Systemic Banking Crises Revisited' (IMF Working Paper

WP/18/206, 2018)

Larbsh MM, An Evaluation of Corporate Governance Practice in Libya: Stakeholders' Perspectives (PhD thesis, Nottingham Trent University 2010)

Lay S, Empirical Assessment of International Financial Reporting Standards Adoption in Cambodia (PhD thesis, Lincoln University 2019)

LCMA, 'About Us' (Lcma.gov.ly, 2013) https://lcma.gov.ly/en/about/ accessed 27 February 2022

Levine R, 'The Corporate Governance of Banks: A Concise Discussion of Concepts and Evidence' (World Bank Policy Research Working Paper 3404, 2004)

Lim CH and others, 'Macroprudential Policy: What Instruments and How to Use Them? Lessons from Country Experiences' (IMF Working Paper WP/11/238, 2011)

Masoud NM, Libya's Economic Reform Programme and the Case for a Stock Market (PhD thesis, University of Huddersfield 2009)

Masoud NM, 'Does Islamic Banking Contribute to Sharia Law: Critical Issues on Libyan Banking and Financial Markets' (2014) SSRN Working Paper No 2426291 https://ssrn.com/abstract=2426291 accessed 27 February 2022

McQuinn A, 'Supporting Financial Innovation through Flexible Regulation' (Information Technology and Innovation Foundation, November 2019) https://www2.itif.org/2019-fintech-regulations.pdf accessed 26 January 2024

Mehran H, Morrison A and Shapiro J, 'Corporate Governance and Banks: What Have We Learned from the Financial Crisis?' (Federal Reserve Bank of New York Staff Reports, no 502, 2011)

Middle East Monitor, 'Libya Central Bank Re-established after 10 Years' (22 August 2023) https://www.middleeastmonitor.com/20230822-libya-central-bank-re-established-after-10-years/ accessed 25 January 2024

Mishkin FS, Monetary Policy Strategy: Lessons from the Crisis (National Bureau of Economic Research Working Paper No w16755, 2011)

Mohammed AH, 'Application of IFRS for the Preparation of Financial Reports in the Oil Sector in Libya' in Book of Proceedings 128

Nabar WCM S, 'The Global Economic Recovery 10 Years after the 2008 Financial Crisis' (IMF Working Paper, 26 April 2019)

https://www.imf.org/en/Publications/WP/Issues/2019/04/26/The-Global-Economic-Recovery-10-Years-After-the-2008-Financial-Crisis-46711 accessed 28 February 2