

Global Banking Regulations and Performance: A Study of Basel III Implementation in Developing and Developed Nations

Dr. Deepika Dhawan¹

Assistant Professor, Department of Management, Rayat Bahra University

Abstract

This study explores the impact of Basel III regulations on bank performance in both developing and developed countries. A stable financial system is recognized as a key driver of economic growth, with banks playing a central role in facilitating technological advancements and economic development. However, advancements in global banking, alongside financial crises such as the 2007-08 global downturn, have highlighted the need for robust risk management frameworks. The Basel norms, particularly Basel III, were introduced to strengthen capital requirements, liquidity buffers, and supervisory processes to mitigate systemic risks. This research compares the effects of Basel III on banks in five developing countries (Bangladesh, India, Malaysia, Sri Lanka, Thailand) and five developed countries (Canada, France, Germany, the UK, USA), focusing on changes in efficiency and productivity. By examining these countries' progress in Basel III implementation, the study offers valuable insights into how global banking regulations impact bank performance, highlighting differences across economic contexts and contributing to a deeper understanding of financial sector stability.

Background of Study

A stable and efficiently functioning financial system is widely recognized as a fundamental driver of economic growth (Korkmaz, 2015). An effective financial system acts as the backbone of a country's economic development (Patrick, 1996; Santana, 2020). The Endogenous Growth Theory, which emerged in the late 1980s, elucidates the relationship between financial sector development and economic growth, forming the basis for many subsequent models (Juhro et al., 2020; Pagano, 1993). Numerous studies have provided robust empirical evidence reinforcing the positive correlation between the financial system and economic growth through cross-country data (Andrianova et al., 2008; Demetriades et al., 2008; Levine & Zervos, 1998).

Banks, as a crucial component of the financial system, not only propel economic development but also facilitate the emergence of new technologies and industries that further boost growth. This significance is reflected in the expansion of the banking sector's assets, which increased from USD 4.7 trillion in 2002 to USD 183 trillion in 2020 (Statista, 2023). This trend underscores the intrinsic link between the growth of banks and the prosperity of nations, driving researchers to focus on examining bank performance (Awdeh, 2012). However, advancements in technology, financial innovations, deregulation, and the globalization of financial markets have contributed to a complex and uncertain international banking environment (Sahajwala & Van den Bergh, 2000). The globalized nature of banking has made it increasingly challenging to balance profitability with stability. This challenge was exemplified by the collapse of a major German bank in 1974, which highlighted the international dimensions of credit risk amid uncertainty and volatility in global banking markets, exacerbated by a lack of standardized regulations (Goodhart, 2011).

The incident illustrated the necessity for uniform rules and regulations to fortify the banking sector and highlighted the critical need for information sharing among banking supervisors, given that asymmetrical

information could lead to systemic risks and financial contagion (Ojo, 2010). In light of the volatility experienced in the banking sector over recent decades (Fadun, 2013), enhancing information exchange and adhering to standardized protocols are essential for promoting financial stability.

To address above mentioned challenges, central banks of the G-10 countries established the Basel Committee on Banking Supervision (BCBS) in 1974 in Basel, Switzerland. This platform fosters the exchange of information and collaborative efforts on supervisory matters (Kaur and Kapoor, 2015). Since its inception, the committee has expanded to include 45 members from 28 jurisdictions (BIS, 2022). The BCBS aims to issue international risk management guidelines and recommend sound frameworks for banking supervision through the Basel norms. These norms are designed to enhance financial stability by promoting sound banking practices and reducing the risk of banking crises. To achieve this, the BCBS encourages banks to maintain minimum capital standards relative to their risk exposures (BCBS, 2009). Although these norms are not legally binding for member or non-member countries, their widespread acceptance underscores their value in promoting consistency and harmonization in banking regulations globally. In an increasingly interconnected world, where international business expansion has created a global loan market, harmonizing banking regulations is key to capturing opportunities and ensuring a level playing field for all participants. This is why national banking authorities often refer to the Basel norms when crafting new regulations.

Review

The importance of credit risk management was highlighted by the 1974 collapse of a German bank, which was linked to poor credit risk management practices. In response, the Basel I norms, introduced in 1988, established an international framework for capital adequacy requirements, aimed at ensuring the financial health of the banking sector. By 1980, more than 130 countries had faced financial distress in their banking sectors (Banerjee, 2012), often due to deteriorating asset quality. As a result, the BCBS focused on reducing credit risk through Basel I by establishing a minimum capital risk-adjusted ratio (CRAR) in relation to risk-weighted assets (RWA). These standards, initially intended for G-10 countries, were voluntarily adopted by over 100 nations (Roy, 2014).

The Asian financial crisis of 1997-98, which started in Thailand and spread across other Asian countries, highlighted the importance of market risk. The crisis, caused by weak financial regulations and unsustainable foreign borrowing, led to currency depreciation, stock market crashes, and severe economic downturns (Sachs & Woo, 2000; Sufian, 2010). This crisis demonstrated the need to address market and operational risks in addition to credit risk. Consequently, market risk was included in the Basel framework through the 1997 market risk amendment (BCBS, 2004). The Asian financial contagion showed how the globalization of financial markets can spread risks across borders, prompting the BCBS to modify Basel I to create the more sophisticated Basel II framework, which included enhanced risk management techniques.

The Basel II Accord, introduced in 2004, was designed to address the limitations of Basel I by incorporating a more risk-sensitive framework. It focused on three pillars: minimum regulatory capital, market discipline, and supervisory review. Basel II considered credit, market, and operational risks to determine the minimum capital requirements. It also introduced a supervisory review process (Pillar II), which required banks to assess and address risks beyond credit, market, and operational risks, such as residual and concentration risks. The final pillar, market discipline, required banks to disclose material information, risk exposures, and market outlook, enhancing market transparency (BCBS, 2004). Basel II introduced three levels of capital—Tier I, Tier II, and Tier III—to safeguard against unexpected losses.

However, during the implementation of Basel II, the global financial crisis of 2007-08 exposed significant weaknesses in the financial sector. Lax lending standards and aggressive mortgage lending led to defaults on

subprime mortgages, triggering a widespread financial crisis. The interconnectedness of global financial markets meant that the crisis spread rapidly, leading to significant losses across financial institutions worldwide. The crisis raised concerns about Basel II's ability to manage systemic risk, prompting regulators to strengthen capital adequacy standards to address unforeseen events. In response, the BCBS introduced Basel III in 2013, a more robust version of Basel II.

Basel III, which introduced stricter capital requirements and additional buffers, was designed to better address systemic risk. It increased Tier 1 capital from 4% to 6% and introduced a capital conservation buffer of 2.5% of risk-weighted assets, aimed at absorbing losses during economic downturns. A countercyclical buffer was also introduced, ranging from 0% to 2.5%, depending on the importance of the bank to the economy. The Liquidity Coverage Ratio (LCR) and the Net Stable Funding Ratio (NSFR) were also introduced to ensure that banks had sufficient liquidity to meet short-term obligations and maintain stable funding over a one-year horizon (Antoun et al., 2021).

These changes reflect the evolution of Basel norms to address the challenges posed by financial crises. The 2007-08 global financial crisis highlighted the importance of a healthy and resilient banking system. A well-regulated banking system is vital for economic growth, and the adoption of Basel norms helps ensure greater consistency and stability across countries. While Basel norms are not legally binding, they have been widely adopted by over 100 countries (Roy, 2014). Countries that implement these norms are at different stages, with some still adhering to Basel I, others to Basel II, and some having fully adopted Basel III (FSB, 2019). Basel III, with its more stringent capital requirements, plays a crucial role in enhancing the stability of the banking sector, and understanding its impact on bank performance is vital.

To assess the impact of these enhanced regulations on bank performance, it is important to examine countries that are at similar stages of Basel III implementation. With over 30 countries in comparable stages (FSB, 2019), it is challenging to evaluate the effects of these regulations in each country individually. Therefore, this study focuses on a balanced sample of five developing and five developed countries. These include Bangladesh, India, Malaysia, Sri Lanka, and Thailand (developing countries), and Canada, France, Germany, the UK, and the USA (developed countries).

In Sri Lanka, the implementation of Basel III was facilitated by the introduction of an Internal Capital Adequacy Assessment Process in 2013, and most banks maintained a solid Capital Adequacy Ratio (CAR) around 10% even before Basel III implementation (Jayatillake, 2013). India gradually infused capital to meet Basel III's stringent requirements (Jayadev, 2013), while Bangladesh revised its regulatory framework to align with Basel III, addressing liquidity and capital issues (Bank, 2014). Thailand's public banks already met the required capital ratios, while Malaysia adopted Basel III guidelines, improving capital quality and introducing new buffers (Shamsuddin, 2013).

In developed countries, the USA adhered strictly to Basel III norms following the 2007-08 financial crisis (Getter, 2012), while Canada, the UK, and France implemented Basel III with some adjustments to suit their local markets (Chouinard and Paulin, 2014; Dhawan et al., 2023; Batomunkueva and Senakosava, 2013; Härle et al., 2012).

Conclusion

The implementation of Basel III norms, including stricter capital requirements, liquidity buffers, and supervision, has impacted the performance of banks. Several methods, including ratio and comparative analysis, can measure bank performance, with efficiency and productivity being key indicators. This study examines the impact of Basel III implementation on the performance of banks in both developing and developed nations. By exploring the effects of Basel III compliance across different economic contexts, the study aims to provide valuable insights

into how global banking regulations influence financial sector compliance. For the future reference, the comparison between developing and developed countries will offer a deeper understanding of the varying impacts of Basel III and its role in enhancing the stability and effectiveness of banks in diverse economies.

References

Andrianova, S., Demetriades, P., & Shortland, A. (2008). Government ownership of banks, institutions, and financial development. *Journal of development economics*, 85(1-2), 218-252.

Awdeh, A. (2012). Banking sector development and economic growth in Lebanon. *International Research Journal of Finance and Economics*, 100(1), 54-62.

Basel Committee on Banking Supervision (1997), *Core Principles*, Bank for International Settlement, Basel.

Basel Committee on Banking Supervision. (2004). *Basel II: international Convergence of Capital Measurement and Capital Standards: A Revised Framework*. Bank for International Settlements. Available at <http://www.bis.org>.

Basel Committee on Banking Supervision. (1999). *Capital Requirements and Bank Behavior: The Impact of the Basel Accord*. Bank for International Settlements. Available at <http://www.bis.org>.

Basel Committee on Banking Supervision. (2002). *Overview Paper for the Impact Study*. Bank for International Settlements. Available at <http://www.bis.org>

Basel Committee on Banking Supervision. (2006a). *Results of the fifth quantitative impact study (QIS 5)*. Bank for International Settlements. Available at <http://www.bis.org>.

Basel Committee on Banking Supervision: The Internal Ratings-Based Approach Consultative Document. Bank for International Settlements, May (2001). Available at <http://www.bis.org>.

Batomunkueva, Y., & Senakosava, H. (2013). Basel III implementation: The Change in UK banks as a result of Basel III framework.

Banerjee, S. (2012). Basel I and Basel II compliance issues for banks in India. *Macroeconomics and Finance in Emerging Market Economies*, 5(2), 228-245.

BCBS 2004, *Internal Convergence of Capital Measurement and Capital Standards: A Revised Framework*, BIS, viewed on 29 December 2019, < www.bis.org/publ/bcbs107a.pdf

Chouinard, É., & Paulin, G. (2014). making banks Safer: implementing basel iii. *Financial System Review*, 53-59.

- Demitriades PO, Du J, Girma S, Xu S (2008) Does the Chinese Banking System Promote the Growth of Firms?, University of Leicester Discussion Paper 08/6.
- Dhawan, D., & Mehta, S. K. (2022). Performance of banking sector-A case of select developed nations. *Academy of Marketing Studies Journal*, 26(S5).
- Financial Stability Board. (2018, November 28). *Implementation and Effects of the G20 Financial Regulatory Reforms*. <https://www.fsb.org/2018/01/fourth-fsb-annual-report/>
- Goodhart, C. (2011). *The Basel Committee on Banking Supervision: A history of the early years 1974–1997*. Cambridge University Press.
- Härle, P., Lüders, E., Papanides, T., Pfetsch, S., Poppensieker, T., & Stegemann, U. (2010). Basel III and European banking: Its impact, how banks might respond, and the challenges of implementation. *EMEA Banking*, 13, 2012.
- Jayadev, M. (2013). Basel III implementation: Issues and challenges for Indian banks. *IIMB Management Review*, 25(2), 115-130
- Juhro, S. M., Narayan, P. K., Iyke, B. N., & Trisnanto, B. (2020). Is there a role for Islamic finance and R&D in endogenous growth models in the case of Indonesia?. *Pacific-Basin Finance Journal*, 62, 101297.
- Kaur, M., & Kapoor, S. (2011). Basel II in India: compliance and challenges. *Management and Labour Studies*, 36(4), 299-318.
- Korkmaz, S. (2015). Impact of bank credits on economic growth and inflation. *Journal of Applied Finance and Banking*, 5(1), 57-69.
- Levine, R., & Zervos, S. (1998). Stock markets, banks, and economic growth. *American economic review*, 537-558.
- Ojo, M. (2010). The impact of capital and disclosure requirements on risks and risk taking incentives.
- Pagano, M. (1993). Financial markets and growth: an overview. *European economic review*, 37(2-3), 613-622.
- Patrick, H. T. (1966). Financial development and economic growth in underdeveloped countries. *Economic development and Cultural change*, 14(2), 174-189.
- Roy, D. (2014). Performance of the Indian Banking Sector in the Basel Regime. *Indian Institute of Management Indore*.
- Sachs, J., & Woo, W. T. (2000). Understanding the Asian financial crisis. *The Asian financial crisis: Lessons for a resilient Asia*, 13-43.

Sahajwala, R., & Van den Bergh, P. (2000). *Supervisory risk assessment and early warning systems*. Basle Committee on Banking Supervision.

Santana, A. (2020). The relationship between financial development and economic growth in Latin American countries: the role of banking crises and financial liberalization. *Global Economy Journal*, 20(04), 1-26.

Statista. (2023). *Total assets of banks worldwide from 2002 to 2021*. Ströer Media. <https://www.statista.com/statistics/421215/banks-assets-globally/>. Accessed on 5 January, 2023.