

Araştırma Makalesi • Research Article

The Basel Agreements' Impact on Banking and Monetary Authority of Singapore Policy

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ABSTRACT

This article focuses on the historical context of the Basel Accords, explores the relevance of the Basel Accords to banking systems, and emphasises the efforts that the Basel Accords are making to minimise the risk associated with banking. In addition, I discuss the goals of the Monetary Authority of Singapore (MAS) for financial oversight and stability, and I seek to differentiate between the capital requirements of the MAS and those of the Basel Standards that apply to financial institutions. The objectives of the MAS regarding monitoring and financial stability are worthy of praise. As a result, the MAS is in a solid position to safeguard the financial stability of the nation. The MAS is examining its objectives to expand Singapore into a flourishing financial centre while also ensuring that the stability of the financial system will be maintained. These evaluations aim to ensure that Singapore will continue to retain its position as an international financial centre.

1. Giriş

Since the late 1970s, the risks a bank has to manage to function effectively within a financial system have significantly increased. The financial industry has seen significant expansion, intense competition, and an increase in the prevalence of several risks, including insolvency and bankruptcy. Risk-taking and capital regulation are becoming more important for financial businesses. In the 1980s, the governors of the central banks of the G10 countries came together and established the Committee on Banking

Regulations and Supervisory Practises (Penikas, 2015: 15).

This was done to address disruptions that occurred in the financial markets. Later, this organization decided to use the name of the Basel Committee for the banking oversight committee they established (Lichtenstein, 1991: 987). Banks are subject to regulations, oversight, and practises designed to strengthen their authority worldwide to ensure the system's continued financial viability. In 1988, the group that developed the Basel I standard for the banking sector

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released it under "International Convergence of Capital Measurement and Capital Standards" (Santos, 2001:51).

2. The Basel Committee and the Basel Accord

Basel I improved the global banking system by bolstering two essential components: the robustness and the financial sector stability (Lichtenstein, 1991: 976). The goals of Basel I were to enhance the consistency and quality of the international finance and to develop and keep circumstances that were competitive and fair for international institutions in place. In order to accomplish these goals, banks are obliged to maintain a level of equity equivalent to at least 8% of their risk-weighted assets. The laws of Basel I divided the sources of capital into two distinct groups: Tier 1 (also known as core) capital and Tier 2 (also known as supplementary) capital. At least 4% of the total risk-weighted assets must be allocated to Tier 1, which includes the surplus, common stock, and undivided profits (also known as retained earnings). According to Rose & Hudgings (2013: 496), the maximum amount of subordinated debt and reserves covered in Tier 2 capital is restricted to 4% of the total amount of Tier 1 capital.

Although Basel I was responsible for the creation of several critical rules and a methodology for risk-weighted assets, it needed to improve. For example, it did not take into consideration the risk management, corporate governance, or credit history of any of the corporate borrowers. Regardless of how effectively the borrowers could repay the loans, they were all bound to the same demand for the amount of capital. In addition, Basel I encouraged loan securitization, so the laws established by Basel I needed to be more complex and adequate because they assigned the same risk weight to all different kinds of loans (Arnold, 2013:460). Student loans and credit card debt, for example, were given the same weight in the same risk category despite the fact that their risk levels were significantly different. In order to purchase more risky assets, banks sold off assets with a lower level of risk without increasing the amount of capital that was required of them. According

to Bollen, Skully, & Wei's (2014: 13) view, the Basel I agreement did not contribute to the control of banking risks.

In addition to these unfavourable elements, the "one size fits all" policy used by Basel I was also called into doubt. Rose & Hudgings (2013:503) stated that the "one size fits all" approach used by Basel I was unsuccessful in regulating all different types of banks since it tended to encourage banks to take on more risk rather than less risk. Their reasoning was based on the fact that other banks had different risk profiles. As a direct consequence, Basel I was revised in 1999 and received an amendment concerning market risk (Galai, 1999: 68). Despite the fact that this amendment filled up a substantial hole, there were still risks to operations, reputation, and strategy. Consequently, Basel II was established as a result of an agreement achieved in 1999 by the Basel Committee (Sbârcea, 2014a:73).

The goals of Basel I were expanded upon in Basel II (Tarullo, 2008:143), which advocated for stricter processes in the area of risk management. Compared to Basel I, Basel II built a more robust and sensitive framework. Within this framework, capital requirements were more exposed to risk, and it embraced a variety of hazards, including operational and credit problems. Basel I was designed with the intention of preventing financial instability, and in contrast to Basel I, according to Rose & Hudgings (2013:495), Basel II acknowledged that assets with a low level of risk would need a lower level of capital than those with a high level of risk.

The primary foundation for Basel II was composed of three pillars. Pillar I introduced new minimum capital requirements as a consequence of its operational, market, and credit concerns. These requirements were established in line with the risk exposure that was evaluated for each kind of bank. Both the target standard ratio of capital-to-risk weight and the minimum capital adequacy ratio for accounting for credit risk were set at 8% by the Committee on Banking Supervision. In order to comply with the new supervisory evaluation approach for banks specified in Pillar II, it is necessary for each bank to put

in place a process that will assess the level of total capitalization of the institution in relation to the risk profile. In addition, the third pillar of Basel II, known as Pillar III, aimed to improve market discipline by increasing the amount of information disclosed by banks. According to Decamps, Rochet, & Roger (2004: 147), adequate disclosure is necessary to guarantee that market participants have a better knowledge of banks' risk profiles, the sufficiency of their capital levels, and the procedures employed for risk management. Adequate disclosure is also needed to ensure market participants have better access to information.

Despite the fact that it is organized in a three-pillar structure and other improvements have been made to the regulatory process, Basel II has been the subject of several criticisms. Basel II is said to have a "pro-cyclical" nature, as stated by Casu, Girardone, & Molyneux (2021:163). In the event that there is a downturn in the economic cycle, the Basel criteria might make possible implications much more severe. For instance, when the economy is in a recession and credit risk is rising, banks are required to restrict lending and increase their minimum capital requirements. Because of this, it disregarded the need for capital that arises whenever an economy is going through either inflation or deflation. When there is instability in the financial system, banks will need a considerable quantity of capital, which might significantly affect the profitability of banks.

Another potential drawback associated with Basel II's standards is that they may encourage financial institutions to transfer credit risk off of their balance sheets by using financial derivatives and asset-backed securitization. According to Casu, Girardone, & Molyneux (2021:164), astute bankers take advantage of Basel II's weakness for lower risk weighting by spreading risks. This is possible because banks have discretion over their valuation. As a consequence, the idea that Basel II may be faulted for its lack of diversity led to claims that Basel II needed to be more effective in its fight against the financial crisis between 2007 and 2008 (Cannata & Quagliariello, 2009: 17). This is because, during the financial crisis between 2007 and

2008, banks were made aware of the limits of Basel II. These limitations indicated that many banks needed more attention to capital adjustments and liquidity reserves. This is the reason why this occurred.

After the financial crisis, to mitigate the crisis's adverse effects and specific market issues, the Basel Committee decided to establish the Basel 2.5 regulations. Gleeson (2015: 354) explains that this limited banks' ability to trade their securitization assets and increased the risk fee associated with re-securitization. In addition, Gleeson (2015: 378) states that these two effects were caused by the same factor. In addition to these standards, the Basel Committee has published a number of principles concerning supervision, as well as the most recent version of the sound stress test. According to the Basel Committee Supervision (2011: 51), the impetus for this legislation was the need to acknowledge the possible adverse effects that may result from changes among banks in the market. The law may assist in minimizing banking risks, provided that the results are made in a fair and unbiased manner. This is because banks can predict potential threats and prepare for them.

The financial crisis proved that Basel I and Basel II's capital requirements were inadequate. Basel II regulations included the reduced and weakened capital composition that aggravated the preexisting crisis. This happened when the G-20 countries adopted Basel III rules in 2009, replacing Basel 2.5 standards (Gleeson, 2015: 381). On the other hand, Basel III advised setting more severe criteria to enhance the banking industry's capacity to resist financial and economic shocks and monitor the decrease of the contagion impact. This was done in order to increase the industry's ability to gauge the diminution of the contagion effect. According to Sbârcea (2014b:338), Basel III also investigated the systemic importance of the banks (i.e., whether or not they were too big to fail), developed substantial risk management strategies, and enhanced the openness of the banking industry.

Because of these presumptions, financial actors can explore different financial or

regulatory regimes under which to operate. For example, the newly elected president of the United States sent a letter to the head of the Federal Reserve in which he stated his disagreement with the global system of financial regulation because of the damage it had brought to the economy of the United States and his support for a new legal system that is more suited than international rules. The central argument of this article is that the one-size-fits-all Basel approach is only appropriate for select countries since each nation has its distinct dynamics, and regulatory standards should take these into consideration.

According to Clare et al. (2016:15), a significant increase in shadow banking could result from the stringent Basel regulatory rules. In this system, regulated institutions participate in unregulated activities and rely heavily on financial instruments such as credit default swaps, derivatives, and hedge funds, all of which are held responsible for the global financial crisis in 2007 and 2008. In addition, Li, Hsu, & Qin (2014:123) utilized a stress test to examine the solvency risk of the Chinese banking sector. They found that the activities of China's shadow banks constitute an existential danger to insolvency and liquidity shortage risks. This finding was based on the fact that the shadow banking business in China poses a significant risk to the Chinese economy. According to the results of this study, the economy that is now ranked in second place worldwide is at risk of experiencing a new financial crisis in the years to come.

In conclusion, the banking sector strongly depends on a regulatory framework, even though it is possible that rules governing banks may not avoid financial disasters. Banking may become more expensive due to stricter capital requirements, yet regulatory agreements in the type of Basel will make the industry safer.

3. The Monetary Authority of Singapore

Up until 1970, the majority of Singapore's financial operations were managed by state institutions and organisations. Following the

rapid development of its economy, Singapore found that these institutions needed to be more robust for handling monetary issues. It was essential to further simplify services in order to provide a more effective and consistent policy for Singapore because of the banking system's and financial needs growing complexity. In order to establish the Monetary Authority of Singapore (MAS), Parliament passed the Singapore Monetary Act in 1971. The MAS law gave the power to regulate the financial sector.

The MAS has been given permission by the government to serve as its banker and financial agent. Enhancing credit and foreign currency laws that foster economic development falls within its purview as well. In addition, the Security Industries Act of 1984 gave MAS regulatory responsibility. The Monetary Commission Members and the MAS merged in 2002, and the MAS was granted control over currency matters. A variety of laws relating to money, banking, insurance, securities, and general financial concerns are now under MAS's supervision.

The MAS also plays a vital international and regional role as a significant financial centre in the region. As a consequence, it promotes global financial regulation and aids in preserving the stability of the international monetary system. The MAS is a participant in the Basel Banking Audit Committee (BCBS), the International Monetary Fund (IMF), the World Bank, the Association of Southeast Asian Nations (ASEAN), the East Asia Pacific Central Banks Management Meeting (EMEAP), the Association of Southeast Asian Nations (ASEAN), and the Association of Southeast Asian Nations.

Singapore is ranked as the world's third-most competitive financial centre on the latest Global Financial Centre Index. The Singaporean government is creating a sophisticated financial hub as part of a forward-thinking ambition to overtake New York and London and establish itself as a critical global economic powerhouse. The government gives the MAS a lot of power to accomplish these objectives since it is an essential regulatory and policy-making body for the financial industry. This authority

allows the MAS to monitor and control banks' adherence to Basel standards for managing asset-quality risks.

3.1 MAS Policies for Regulations and Financial Stability

The MAS is taking many steps to make Singapore's banking industry more resilient and profitable in the face of competition from other countries. For example, the MAS bases its regulatory decisions on the principle that the safety of individual financial institutions is just as crucial as the systemic stability of the whole financial sector. The Accords of Basel are an essential set of recommendations for the implementation of this concept. MAS addresses the Basel criteria by using a strategy that is suitable to the level of risk and is outcome focused. For this reason, the MAS implemented the Basel II criteria in the year 2008. The MAS was aided in its supervision of the banking industry by maintaining regular contact with the Basel Committee on Banking Supervision throughout this period. This is because the significant mission of the Basel Committee on Banking Supervision is to improve the quality of global banking supervision.

After that, the MAS imposed stricter capital requirements on Singapore's banks as a reaction to the global financial crisis. Because banks have such a substantial retail presence in Singapore's economy, the MAS considers them to be an essential part of the country's financial system. As a direct consequence of this, the MAS has significant requirements for its capital. In order to accomplish this objective, the MAS released the following criteria in 2011 in accordance with the standards established by Basel III. Basel III mandates that Singaporean banks raise both the quantity and quality of the capital that they hold, intending to bolster the banks' liquidity safeguards and find a solution to the problem of "too big to fail" institutions. This is accomplished by subjecting institutions that are vital to the financial system to more stringent monitoring requirements.

Common Equity Tier 1 (CET1), Tier 1 (Tier 1), and Total (Total) capital adequacy ratios (CARs) have minimum standards that financial institutions must fulfil starting in

2015. In accordance with Basel III, the required minimums for CET1 CAR, Tier 1 CAR, and Total CAR are, respectively, 4.5%, 6%, and 8% of the total. In addition, the minimum acceptable standard calls for the establishment of a capital conservation buffer of 2.5% over the minimum required amount of capital. This criterion will be used beginning in 2016 and continuing until 2019. To satisfy the 9% CET1 CAR, banks that are established in Singapore are subject to an extra requirement known as the capital conservation buffer. This figure is higher than the level set by Basel III, which is 7% in the MAS (2021) annual report.

The high CAR prohibits Singaporean banks from competing on an equitable playing field with their overseas competitors, which has led to several concerns regarding the high capital rules enforced by the MAS. High CAR increases the amount of idle capital on the company's balance sheet; these funds are not employed for any investments or transactions. It is possible that their profitability may suffer as a direct consequence of the increasing regulatory duties. However, considering the importance that incorporated banks play in the functioning of the economy, it is imperative that they have enough capital. The global financial crisis illustrated how, as a result of the interdependence of each bank, it is possible for one bank's bankruptcy or exposure to any other risk to have an effect on the whole banking system if the banks are interconnected.

To protect the safety of the banking system, the MAS recognised Fintech's significance in the financial sector's overall development. To that end, the MAS has been lending a hand to banks in their efforts to recognise fintech companies in the position of facilitators, whose results would show that banks and fintech businesses are working together. As a consequence of this, the MAS has said that it plans to invest a total of \$225 million over the course of the subsequent five years in Fintech innovation, with a particular emphasis on new financial sector technology and innovation projects (Menon, 2015:13). The establishment of the Fintech Office made it possible to devise an innovative design for a

payment platform, which included provisions for the operation of this system on mobile devices. The MAS has also initiated a "regulatory sandbox" policy to boost financial institutions' confidence in their ability to develop and introduce innovative services and products within predetermined boundaries. The regulatory sandbox might also include the incorporation of practical procedures that take the possibility of failure into consideration and work to maintain the stability of the financial industry.

In addition to the regulatory benefits offered by the MAS, policies on financial technology promote bank participation in fintech-related fields. This gives the banks a competitive advantage over their international competitors. Fintech companies benefit from Singapore's banking system since it makes it possible for them to penetrate new markets and areas. Fintech advancements are assisting financial institutions all over the globe in coping with growing compliance with regulatory costs and diminishing revenues. As a result, Singapore's banks can cut operating expenditures and manage financial risks as a result of these advancements. In conclusion, investments in Fintech have the potential to boost the efficiency of financial institutions, preserve the integrity of the financial system, and open up new avenues leading to improved job opportunities within Singapore's financial industry.

4. Conclusion

A thorough investigation of the history of the Basel Accords indicates that there has yet to be a proposal made for an agreement that would be acceptable to all parties involved in the financial industry. Especially in the aftermath of the financial crisis, there has been a rise in the prevalence of opinions that are in opposition to the Basel norms. These perspectives doubt Basel 3.5 or Basel IV, both of which may have higher requirements for capital than prior agreements.

In spite of the assertions that suggest otherwise, the financial sector has expanded quickly, which has made it necessary to establish regulatory mechanisms to protect the whole economy. Banks are essential to the functioning of an economy because they

provide a variety of other functions in addition to making loans and accepting deposits. The global financial crisis demonstrated to us that every problem that arises inside the financial system has the potential to have repercussions for the whole economy. Therefore, stringent capital requirements are necessary to improve a banking system's capability to preserve its financial stability. These principles contribute to effective risk management and make it easier for banks to absorb risks.

The MAS increased the required amount of capital in order to comply with Basel regulatory norms. This had a negative impact on the profitability of Singaporean banks in comparison to those of their international competitors. However, these rules have the potential to improve banks' capacity to operate under pressure, absorb risks, protect depositors, decrease economic risk, and offer financial stability to the banking system as a whole. In addition to the advantages connected with the supervision that the MAS provides, the regulations on financial technology encourage banks to engage in industries related to fintech in order to give them a competitive edge over other international rivals. This advantage comes in addition to the benefits associated with the laws themselves.

The presence of a robust regulatory entity, like the MAS, in conjunction with adherence to Basel criteria, has significant implications for the future sustainability of the banking sector in Singapore, particularly in terms of ensuring financial stability. The establishment of a robust and enduring banking system is crucial for fostering long-term economic development since banks play a pivotal role in facilitating the flow of credit between those who save and those who invest.

Within this particular framework, regulations and the role of MAS serve to enhance global capital and liquidity standards, so aiming to foster a banking industry that is more solid and resistant to potential challenges. The main limitation of this study is the lack of access to data to evaluate the performance of the MAS. In a future study, the effects of

possible new BASEL regulations on the banking and finance system can be investigated by examining the roles of authorized institutions similar to the MAS operating in other important financial centres of the world.

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References

- Arnold, G. (2013). *Financial Times Handbook of Corporate Finance: A Business Companion to Financial Markets, Decisions and Techniques*. Pearson UK.
- Bollen, B., Skully, M. T., & Wei, X. (2014). Basel capital adequacy agreements and bank risk: Some Australian evidence. In 2014 Financial Markets & Corporate Governance Conference.
- Cannata, F., & Quagliarello, M. (2009). The role of Basel II in the subprime financial crisis: guilty or not guilty?. CAREFIN research paper, (3/09).
- Casu, B., Girardone, C., & Molyneux, P. (2021). Introduction to banking. Pearson Higher Ed.
- Clare, A., Duygun, M., Gulamhussen, M., & Pozzolo, A. (2016). Bank business models, regulation, and the role of financial market participants in the global financial crisis. *Journal of Banking and Finance*, 72, S1-S5.
- Decamps, J. P., Rochet, J. C., & Roger, B. (2004). The three pillars of Basel II: optimizing the mix. *Journal of Financial Intermediation*, 13(2), 132-155.
- Galai, D. (Ed.). (1999). *Risk Management and Regulation in Banking: Proceedings of the International Conference on Risk Management and Regulation in Banking (1997)*. Springer Science & Business Media.
- Gleeson, S. (2015). *Gleeson on the international regulation of banking*. OUP Oxford.
- Li, J., Hsu, S., & Qin, Y. (2014). Shadow banking in China: institutional risks. *China Economic Review*, 31, 119-129.
- Lichtenstein, C. C. (1991). Bank for International Settlements: Committee on Banking Regulations and Supervisory Practices' Consultative Paper on International Convergence of Capital Measurement and Capital Standards. *International Legal Materials*, 30(4), 967-1008.
- MAS Annual Report 2020/21 and Monetary Authority of Singapore, Overview, [online] available from <<https://www.mas.gov.sg/publications/annual-report/2021/annual-report-2020-2021>> [20 February 2023]
- Menon, R. (2015). A Smart Financial Centre. In Keynote Address Presented at the Global Technology Law Conference 2015.
- Penikas, H. (2015). History of banking regulation as developed by the Basel Committee on Banking Supervision 1974-2014. *Estabilidad financiera*. N° 28 (mayo 2015), p. 9-47.
- Rose, P. S., & Hudgins, S. C. (2013). *Bank management and financial services*. 9th ed. New York: McGraw-Hill/Irwin.
- Santos, J.A.C. (2001). Bank capital regulation in contemporary banking theory: A review of the literature. *Financial Markets, Institutions, and Instruments*, 10(2), 41-84.
- Sbârcea, I. (2014a). The analysis of the Romanian Banking System evolution in the important milestones from its history. *Studies in Business and Economics*, 9(2), 70-77.
- Sbârcea, I. (2014b). International Concerns for Evaluating and Preventing the Bank Risks – Basel I Versus Basel II Versus Basel III. *Procedia Economics and Finance*, 16, 336-341.
- Basel Committee Supervision (2011). *Basel committee on banking supervision*. Principles for Sound Liquidity Risk Management and Supervision (September 2008).
- Tarullo, D. K. (2008). *Banking on Basel: the future of international financial regulation*. Peterson Institute.