IOSR Journal of Business and Management (IOSR-JBM)
e-ISSN:2278-487X, p-ISSN: 2319-7668. Volume 28, Issue 5. Ser. 3 (May. 2026), PP 74-83
www.iosrjournals.org

Regulatory Capital Framework for Banks: A Descriptive Study on the BASEL Accord

Md. Zakir Hossain[1], Md. Nazmul Huda[2*]
[1]*Professor, Department of Accounting and Information Systems, Islamic University, Bangladesh*
[2]*Associate Professor, Department of Accounting and Information Systems, Islamic University, Bangladesh*

[*]*Corresponding Author: nazmuliu07@gmail.com*

Abstract
The banking sectors play a significant role in the economic growth and financial stability. BCBS introduced different Accords to reduce the banking risk and strengthen supervision after failing major problems. The objective of the study is to examine the concept, features, implementation, and challenges of Basel Accords in the banking sectors in Bangladesh. The research employed a qualitative method to achieve its descriptive aims, analyzing secondary data from various sources, including published reports, relevant books, journals, articles, seminar papers, publications from research institutions, and specifically data from Bangladesh Bank. Basel III reforms focus on higher capital quality and expanded risk coverage and emphasize supervisory review and public disclosures. Despite its advantages, challenges in Bangladesh include compliance difficulties in developing nations, high implementation costs, and a reliance on external credit rating agencies. Recommendations for overcoming these obstacles include training for bank employees and adapting Basel standards for Islamic banking institutions. Overall, successful risk management through Basel standards is crucial for improving financial stability and attracting foreign investments in developing countries.
Keywords: *Basel Accords, Capital Adequacy, Credit Risk, Market Risk, Basel III*

Date of Submission: 16-05-2026 Date of Acceptance: 26-05-2026

I. Introduction

The banking sectors play a crucial role in economic growth, financial intermediation, and monetary stability. Currently, banks in the banking industry encounter various risks while conducting their activities. Banks mainly oversee deposits and loan activities, but for banks, loans are the largest and most obvious source of risk. After facing banking crises in 1974, especially Herstatt Bank (Germany), and Franklin National Bank (USA), the critical need for a regulatory framework for bank supervision (Adnan Bashir & Hassan, 2017; A Bashir et al., 2023). The BCBS was established as the committee on banking regulations and supervisory practices by the central bank governors of 10 development countries. After that, a series of banking regulations about laws and regulations were issued to prevent such failure, treated as Basel Accords (Bitar et al., 2018; Haron et al., 2020; Lalon & Kabir, 2017). Since the inaugural conference in February 1975, there have been three or four regular gatherings annually (Goodhart, 2011). Argentina, Brazil, Belgium, Canada, China, France, Hong Kong, Germany, India, Italy, Japan, Russia, Spain, Saudi Arabia, UK, USA and many other countries are represented on the Committee. Countries are represented by their central bank and, in cases where the central bank is not the central bank, by the body formally in charge of the prudential regulation of the banking industry (Goodhart, 2011).

The Basel Accords represent a comprehensive framework of international banking regulations to standard laws, improve supervision systems, and reduce systematic risk within the global system (Bitar et al., 2018). These guidelines were initiated by the BC to standardize banking operations and supervise internationally to minimize the losses and build public confidence (Haron et al., 2020; Hessami, 2019). During 1970-1980, banks recognize the importance of maintaining sufficient capital, though it varied significantly among the institutions, which indicates inconsistent regulatory standards (Atuahene et al., 2021).

To address these inconsistencies among institutions, the BCBS launched the Basel Accord in 1988, which is treated as Basel I. Basel I was established internationally to maintain a minimum capital based on the risk–weighted assets, establishing a uniform and risk-reducing framework for banks' operations across the different countries of the world (Jacques, 2017). Under this framework, banks must hold a fixed portion of capital to their risk exposure, primarily focus on credit risk, and subsequently incorporate market risk through revision (Vallascas & Hagendorff, 2013).

The Basel framework underwent many changes as the global financial climate changed and banking operations grew more complicated, resulting in the creation of Basel II, Basel II.5, and Basel III. Emerging issues such as operational complexity, financial market volatility, and the quick development of novel financial

instruments were the focus of these changes (Allouche & Hijazi, 2024; Sayah, 2017). After the global financial crisis of 2007–2008, Basel III strengthened capital quality, introduced liquidity standards, and improved resilience against financial shocks.

In Bangladesh, Basel I was introduced in 1996, followed by Basel II, which was adopted from 2007, although full activation is pending. Regulatory authority BB is working on strategies for implementing the full form of Basel II from 2010, which consists of three pillars: minimum capital requirement (Pillar-1), supervisory review (Pillar-2), and market discipline (Pillar-3). Subsequently, Basel III was mandated to be implemented to enhance banking loss absorption capacity and resilience through improved capital quality and risk management systems in response to factors that contributed to the global economic crisis.

II. Review of the Related Literature

Various research papers have been studied to make a conceptual framework and comparative analysis among the different Basel accords. Some are stated below:

Yamin et al. (2025) used secondary data from 20 banks between 2014 and 2023 and investigated how Basel III rules affect the financial performance of Bangladesh's banking industry. Higher capital adequacy, especially Tier-1 Capital Ratio and CRAR, has a favorable impact on profitability (ROA) and lowers non-performing loans (NPLs), according to a multivariate regression model. Nonetheless, greater NPLs and worse ROA are associated with larger banks, and higher NPLs are also a result of higher provisions. The results demonstrate how Basel III has improved the industry's financial stability and profitability.

Barra et al. (2023) examined the relationship between the Basel II and III accords and the efficiency of profit-oriented and mutual cooperative banks. A stochastic frontier approach is applied to evaluate these banks' performance using data from Italy (1994-2015). Findings indicate that Basel II led to a decrease in profit inefficiency but an increase in cost inefficiency for mutual cooperative banks, while Basel III exacerbated profit inefficiency without affecting cost inefficiency significantly. Market competition showed no statistically significant effects on regulatory impacts. The 2008 recession and revenue inefficiency considerations did not alter these conclusions, with noted spatial effects of Basel II at the LMA level.

Berka and Zimmermann (2018) examined loan activity under Basel Accord-type rules, noting that loan volume tends to drop when entrepreneurs experience declining investment returns. They explore policies to stimulate the economy during downturns, concluding that active monetary policy can enhance loan volume even in favorable conditions. Additionally, they found that implementing stricter capital requirement policies during adverse times can also be effective. The analysis utilizes a heterogeneous agent economy that includes occupational choice, financial intermediation, and aggregate shocks affecting entrepreneurial returns.

Ahmed (2016) revealed that Basel III offers improved risk management systems for banks, including those in Bangladesh, due to its simplicity. The non-risk-based regulatory leverage ratio reduces leverage and supplements risk-based capital ratios. However, risk capital may not shield banks from serious losses. Banks should periodically review risk and act quickly when it exceeds the threshold limit. We need a dynamic risk reduction approach with all employees managing local risks. Risk management systems should withstand external shocks and strengthen global financial links.

Roy et al. (2013) explored how the financial system and banking industry are fundamentally impacted by credit and market risks, which arise from lending and borrowing activities. To manage these risks, the BCBS announced Basel 1 in 1988, focusing on a standardized capital adequacy ratio (CAR). However, significant operational risks emerged due to fraud and system failures, leading to Basel 2, which provided more flexible risk management approaches. In India, the RBI implemented stricter standards than Basel norms. Nonetheless, Basel 2 failed to avert crises like the subprime mortgage crisis and the collapse of Lehman Brothers. To rectify these shortcomings, Basel 3 norms were established in 2010.

Lalon and Kabir (2017) highlighted the importance of Basel II implementation, which requires banks to manage credit, market, and operational risks. With competitive pressures, banks must enhance their capital bases to safeguard depositors. Agrani Bank Ltd. (ABL) adheres to Basel II standards set by the Bangladesh Bank but needs to develop its own policies aligned with the Basel Accords. The BC's advancement to Basel III necessitates global compliance by 2014. Understanding risk management is crucial to avoid incidents similar to those involving the "Bismillah group" and "Hallmark."

Akter et al. (2019) stated that after the 2007 financial crisis, the Basel Committee on Banking Supervision (BCBS) issued banking sector norms, specifically Basel III. It aims to improve the banking capital framework and set loan-capital requirements. The qualitative research shows that banks must have a minimum common equity Tier-1 of 4.5%, a Tier-1 capital ratio of 5.5% to 6%, and a total capital ratio of 10%. Banks must have a 2.5% capital conservation buffer and strong supervisory processes like internal controls and risk assessments.

Akhtar (2006) the former governor of the State Bank of Pakistan emphasized that the Basel II Accord is designed to align banks' capital with their risk profiles. He describes it as elaborate and superior in detail,

effectively advancing risk management. The Accord aims to foster the development of a robust risk management system, promoting efficient, equitable, and prudent resource allocation.

Although numerous studies have examined the Basel Accords and their impact on bank performance and risk management, several research gaps existing in the context of Bangladesh. Most of the research was based on secondary data, with an insignificant impact of qualitative matters due to lack of knowledge. There is a lack of comparative analysis between Basel I, Basel II, and Basel III. Therefore, this study fills up the gaps by providing a comprehensive analysis of the regulatory capital framework under the Basel Accords and its effects on the banking sectors in Bangladesh.

III. Objectives of the Study

The major objective of the study is to examine the concept, features, implementation, and challenges of Basel Accords in Bangladesh. The specific objectives are:

(i) To explore the concept of the Basel Accords;
(ii) To analyze the major features of different Basel Accords like I, II, and III;
(iii) To understand the current status of Basel III implementation in Bangladesh;
(iv) To identify the significant challenges to implementing Basel Accords'
(v) To provide recommendations for policy implications.

IV. Methodology of the Study

The research deployed a qualitative method to fulfill its descriptive objectives. This study analyzed secondary data gathered from published reports, newspapers, relevant books, journals, articles, seminar papers, publications from national and international research institutions, reports from various financial institutions, public records and statistics, and specifically, from Bangladesh Bank.

V. Basel Accords: Concept and Meaning

The Basel Accords represent a collection of banking rules of regulation formulated by the Basel Committee on Banking Supervision (BCBS). The BCBC is a collection consisting of banking supervisory authorities. The governors of the central banks of the Group of Ten different countries formed the committee set up in 1974. The Basel Accords comprise a structure of banking laws developed by the 10 largest economies internationally. The BCBS creates a platform for ongoing collaboration about banking supervision issues. The group of 10 established BCBS to ensure that banks operate securely and efficiently. It acts as an internationally recognized advisory body on financial systems. The Basel launched are presented in Table -1

Table -1: Four Basel Accords launched

Particulars	Basel I	Basel II	Basel III	Basel IV
Year of introduction	1988	2004	2010	2023
Deadline of implementation	1992	2008	2017	2030

Source: https://morssoftware.com/basel-iv-regulation-recap/

About four Basel Accords

Basel Accord I

Basel I was introduced in 1988 to establish a standard capital globally for developing banking business (Van Greuning & Bratanovic, 2020) designed to enhance financial stability (Svalova, 2018). The main features of the Basel Accords are the following:

1. Focused on credit risk, and financial institutions must hold a minimum 8% CAR of the risk-weighted assets (Haron et al., 2020; Siddika & Haron, 2020). If assets show a 0% risk weight (government securities), banks are not required to hold capital for such assets. Conversely, assets that have a 20% weight risk have to maintain 1.6% (20×8%) of total assets value. Lastly, assets with a 100% risk weight require banks to hold capital equal to 8% of the asset's value (Chandrasegaran, 2020).
   CAR=---------------(1)

2. Classified capital in two tiers:

Tier-1 capital	First part -core capital (equity capital and retained earnings) (Uzun, 2008)
Tier-2 capital	Second part-all internal sources of capital (Uzun, 2008)

Source: (Lee & Stebunovs, 2012)

In Basel Accord I, Tier 1 capital must represent half of total capital i.e., tier 1 must be 100% of Tier 2 capital. After ten years of Basel I implementation, many changes in technology, finance, and financial innovations have emerged, resulting in significant shortcomings shown in Basel I, such as 8% CAR. The banks

transfer their high-risk assets off the balance sheet; another shortcoming is that the Basel Accord I does not account for operational risk (Mohanty, 2008).

Basel Accord II

Building upon Basel I, Basel II introduced a more nuanced framework structured under three pillars (Tepetepe, 2022) and decided that change was made the existing Basel into a more sensitive Basel (Akhtar, 2006). After analyzing Basel Accord I's shortcomings, the BCBS issued Basel Accord II, a more risk-sensitive Basel (Akhtar, 2006). The goal of Basel II was to make capital requirements more closely related to the actual risk faced by the bank. It allowed banks to use their own internal model to measure risk, which is more flexible and risk-sensitive (Cerutti et al., 2016; Господарчук, 2019).

Table 2: Three Pillars of Basel II

Pillar-1	Minimum capital requirement
Pillar-2	Capital adequacy and internal risk assessment supervision
Pillar-3	Promoting market discipline through public disclosure.

Source : (Uzun, 2008)

This Basel Accord provides a more risk-sensitive framework for all financial institutions, especially on banks. The risk is measured with the equation below:

Risk-Based Capital = Capital/ Credit Risk+ Market Risk+ Operational Risk-------(2) (Uzun, 2008)

However, Basel II also had several weaknesses. The framework became very complex and costly because banks needed advanced systems to measure and manage risks (Anevski & Tamelkovksa-Anevska, 2017). In addition, some banks could manipulate their internal risk models to show lower risk levels and reduce the amount of capital they were required to hold, which weakened the effectiveness of the framework (De Vita et al., 2024).

Basel Accord –III

Basel III was announced after the 2008 international financial crisis for the purpose of strengthening banking regulation, supervision, and risk management (Adeniran et al., 2024; Kalloub et al., 2018). The aim of Basel III was to reduce the risk of future financial crises by increasing the amount and quality of capital that banks must maintain and by introducing stronger liquidity and leverage requirements (Halteh et al., 2018). Basel III implementation began in 2013 and continued gradually until 2019 because banks required time to adjust to the new regulatory standards (Kalaš et al., 2016). Overall, Basel III was designed to create a more stable and resilient global banking sector capable of withstanding economic and financial shocks (Habiba, 2023).

Basel Accord- IV

BCBS introduced Basel IV, which is commonly called the final version of Basel III, to strengthen the global banking system by improving the consistency, transparency, and reliability of banking capital regulation. The main focus of the Accords is to reduce the excessive variability in the RWA calculation. It introduced reforms, including an output floor, revised approaches for credit risk, operational risk, market risk, leverage ratio requirements, and enhanced disclosure standards to improve market discipline. This change ensures that banks maintain adequate capital to absorb financial losses and enhance the resilience of internal financial systems (Basel III, 2017). While Basel IV is anticipated to enhance financial stability, some allege that the raised capital requirements could escalate compliance expenses and decrease banks' lending capacity (Obadire & Obadire, 2023).

Purpose of Capital and Liquidity Standards

A particular approach to ensure the financial stability of the banking system is to uphold sufficient capital. Capital mitigates losses and safeguards depositors and other creditors in the event of a bank's bankruptcy.

Maintaining liquidity is as crucial as capital for sustaining the stability of the financial sector. Financial institutions must have enough reserves of high-quality liquid assets to endure challenging circumstances. They ought to finance their activities with more solid funding sources and refrain from undue dependence on short-term revenues to support long-term assets. Capital and liquidity rules dictate the minimum levels of capital and liquidity that banks must uphold. (Chan et al., 2005).

Basel I, Basel II, Basel III, and Basel IV

BCBS is one of the six committees of BIS. It is referred to as Basel I, the capital standard that was implemented by the Committee in 1988. In 2004, Basel I was superseded by Basel II as a result of certain deficiencies. Basel-II was once again perceived as inadequate during the most recent global financial crisis.

Consequently, Basel III was established in 2010 with the intention of gradually implementing it from January 1, 2013, and of fully implementing it from January 1, 2019. Basel III encompasses both capital and liquidity requirements. The earlier versions included capital standards only.

Table 3: Comparative Analysis of Four Basel

Basis	Basel I	Basel II	Basel III	Basel IV
Year	1988	2004	2010	2023
Focus	Credit risk	Comprehensive risk	Financial stability	Financial stability and risk mitigation
Coverage of risk	Limited coverage	Broader coverage	Extensive coverage	High coverage
Liquidity rules	No	Limited liquidity	Strong liquidity	Strong liquidity
Capital position	Basic	Improved	High-quality capital	Highly improved to maintained capital
Nature	Simple to use	Moderately complex	Highly complex	Complex task

Source: Compiled by researcher.

Basel III for Islamic Banks

The Islamic Financial Services Board formulated special rules for Islamic banks because they follow Shariah law, which is a different set of rules for banks than traditional banks. But these rules are also meant to be the same as international banking standards like Basel III. Therefore, Islamic banks can safely work with the rest of the world's financial system. To do so, the IFSB made changes to the Basel framework so that it could be used for Islamic banking and struck up a set of rules for Islamic financial organizations. IFSB-15, which is based on Basel III principles and looks at capital adequacy, is one of the most important guidelines. It was released in December 2013 and went into effect on January 1, 2015. Its goal is to help Islamic banks become more financially sound, better manage risks, and build up capital.

Basel III in Bangladesh

Basel I was placed in place in Bangladesh in 1996, and Basel II was put in position in 2010. Basel I was implemented in parallel in 2009. In line with Basel III, the BB released "GRBCA" in BRPD letter no. 18 on December 21, 2014. From January 1, 2015, Basel III has been gradually put into place in Bangladesh. Basel III will be fully implemented through operation in Bangladesh in January 2019.

Capital Standard

The three pillars of capital standards that must be maintained in Basel III are stated below:

Pillar 1: Minimum capital, capital buffer, and leverage;
Pillar 2: Risk management and supervision;
Pillar 3: Market discipline.

Pillar 1 of the capital standard represented ratios related to capital that must be maintained as minimum capital by the banks. The two major ratios are CRAR and leverage ratio.

CRAR (Capital to Risk-weighted Asset Ratio)

CRAR is calculated by taking eligible capital as a numerator and RWA as a denominator.

In Bangladesh, Bangladesh Bank maintained a minimum capital ratio of 10% of total capital or 400 crore, whichever is higher. In addition to this minimum capital, a CCB of 2.5% is to be gradually built up in the year 2019.

Eligible Capital

According to loss absorbance capacity/quality, the eligible capital is divided into two tiers:

1. **Tier 1 Capital:** It is better-quality capital. Tier 1 capital is further divided into two parts: CET-1 capital generally includes the items of paid-up capital, general reserve, statutory reserve, and retained earnings; CET-2 includes non-cumulative irredeemable bond/preference shares, etc.
2. **Tier 2 Capital:** It is lower-quality capital than Tier 1 capital. It includes subordinated bonds, general provisions, etc.

Risk-Weighted Asset (RWA):

It is needed for banks to figure out their RWA by looking at credit (investment) risk, market risk, and operational risk.

Leverage Ratio (LR):

As a supplement to CRAR, a simple leverage ratio that is not based on risk has been created. The leverage ratio uses total exposure as its base, while CRAR uses risk-weighted assets or exposure as its divisor. The leverage ratio is calculated as follows:

An absolute minimum of 3% debt is required for banks. In Bangladesh, the calculation of the leverage ratio was looked at again in 2017 if necessary after an evaluation in 2016. Banking institutions kept the leverage number in check starting in 2018.

Liquidity Standard:

In addition to the capital standard, Basel III added the liquidity standard. Two basic standards for liquidity were made. LCR and NSFR have these numbers. Bangladesh Bank followed Basel III and sent out "Guidance Note on LCR & NSFR" through DOS Circular No. 01 on January 1, 2015.

Liquidity Coverage Ratio (LCR):

The LCR is meant to ensure that a bank has enough high-quality, free liquid assets that can be turned into cash to cover its cash flow needs for 30 calendar days during a slow period. For figuring out LCR, use the following equation:

LCR

LCR must meet a minimum level of 100 or more.

Net Stable Funding Ratio (NSFR):

Within a year, NSFR aims to increase resilience by requiring banks to fund programs with more stable sources of funding. As market liquidity rises, NSFR tries to keep banks from relying too much on short-term wholesale borrowing. For figuring out NSFR, use the following equation:

NSFR

Table 4: Capital Requirement for Implementation Basel II in Bangladesh

Particulars	2016	2017	2018	2019	2020
Minimum total capital	10%	10%	10%	10%	10%
CCB	0.625%	1.25%	1.875%	2.50%	2.50%
Minimum total capital and CCB	10.625%	11.25%	11.875%	12.50%	12.50%
LR	3%	3% Readjustment	Mitigation Pillar-1		
LCR	≥ 100%	≥ 100%	≥ 100%	≥ 100%	≥ 100%
NSFR	>100%	100%	100%	100%	100%

Source: https://abbl.com/wp-content/uploads/2020/06/Disclosures-on-Risk-Based-Capital-Basel-III-2019.pdf

Preparation of Banks in Implementing Basel III

Banks in Bangladesh face several challenges in implementing Basel III rules. One major challenge is maintaining higher capital requirements, which increased to 12.5% by 2019. Private commercial banks are generally able to meet these requirements, but state-owned commercial banks face difficulties because of poor loan quality and weak internal capital generation. To solve these problems, banks need to reduce costs, improve the quality of loans, and raise funds from outside sources such as government support, public share offerings, and international organizations like the International Finance Corporation. Banks also need to maintain enough liquidity by following the LCR and NSFR requirements, although these are expected to create fewer difficulties. In addition, banks must improve technology and employee skills to calculate risk-weighted assets properly. Strong corporate governance and effective supervision by Bangladesh Bank are also important for improving financial performance and ensuring successful implementation of Basel II.

Implementation of Basel III in Bangladesh

An action plan was issued for implementing Basel-III in Bangladesh vide the above-mentioned circular. Since the issuance of the roadmap, the GRBCA (RRCF in line with Basel III) has undergone a rigorous review and consultative process to ensure its effective implementation issued vide BRPD Circular No. 35/2010 (Bangladesh Bank, 2018).

Table 5: Action Plan

Action	Deadline
Issuance of Guidelines on Risk-Based Capital Adequacy (GRBCA)	December, 2014

Started Basel III implementation process	January, 2015
Capacity building of banks and BB officials	January, 2015- December,2019
Full implementation of Basel III	January, 2020

The Basel III modifications represent the BCBS's initiative to improve the banking system's ability to withstand shocks from financial and economic stress, regardless of their origin, thereby mitigating the risk of spillover from the financial sector to the real economy. "Basel III: A global regulatory framework for enhancing the resilience of banks and banking systems" (referred to as Basel III capital standards) was established in December 2010. The Basel III reforms improve micro-prudential regulation at the bank level to improve the resilience of individual banking institutions during periods of stress. Furthermore, the modifications possess a macro-prudential emphasis, targeting systemic vulnerabilities that may accumulate throughout the banking sector, along with the pro-cyclical exacerbation of these risks over time. The new standard focuses on the following:

- Improve the sufficient and quality capital so that banks can absorb losses during normal and financial crisis times.
- Increase risk coverage within the capital framework;
- Introduce a leverage ratio as a backup to measure risk-based capital requirements;
- Strengthen supervisory review (Pillar II) and public disclosure requirements (Pillar III) to improve transparency, accountability, and financial stability.

Capital buffers enshrine Basel III macro-prudential elements. The CCB and countercyclical buffer safeguard banks from excessive credit growth. BB conducted two QIS on banks to ensure a successful Basel III implementation. It had sufficient funds and quality for Basel-III phasing. After the last QIS, a roadmap was set up. Banks have to comply with the regulations and minima as stipulated under Basel III capital standards on an ongoing basis.

For a smooth transition to Basel III, transitional arrangements have been made to fulfill minimum capital ratios, make full regulatory adjustments to capital components, etc. On January 1, 2019, Basel III capital standards would be completely enforced. These rules will continue to be based on three equally underlying pillars: minimum capital requirements, supervisory evaluation of capital adequacy, and Basel II market discipline. The Basel III framework will continue to offer a standardized approach for credit risk, a standardized measure method for market risk, and the BIA and TSA for operational risk under Pillar 1. These guidelines make regulatory requirements more appropriate and help banks follow instructions more quickly, ensuring Bangladesh's banking sector's Basel III implementation.

VI. Challenges for Implementing BASEL Accords

Failure of Basel I

United States bank supervisors argued that advanced approaches such as the AIRB and AMA were highly complex and mainly suitable for enormous banks with assets above $250 billion. Many emerging Asia-Pacific countries also faced difficulties implementing Basel standards because of limited resources, lack of expertise, weak market structures, and poor coordination among governments. As a result, the implementation of Basel regulations became a major challenge for bank supervisors and managers in developing countries (Mohanty, 2008).

Failure of Basel II

Basel II faced several implementation challenges for both banks and regulators. Supervisors needed high-quality data and continuous improvement in technical skills to apply the framework effectively. Banks also struggled to collect reliable time-series data required for the IRB approach and faced difficulties meeting accounting and disclosure requirements under Pillar III of Basel II (Parrenas, 2002). Another major challenge of Basel II was the use of complex models such as AIRB and AMA for measuring risk. Many banks lacked reliable databases, technological support, and skilled professionals to apply these advanced models properly. Financial institutions connected with foreign banks also faced implementation difficulties if their home countries had not adopted Basel standards (Griffith-Jones, 2006).

Basel II was also criticized for its pro-cyclical nature. During periods of economic growth, banks were required to hold less capital, while during economic downturns they needed more capital, which could worsen financial instability. In addition, banks depended heavily on external credit rating agencies, and incorrect ratings could expose banks to higher financial risks (Teply, 2010; Udeshi, 2004).

Another weakness of Basel II was its high implementation cost and complexity. Banks needed advanced technology, skilled employees, and high-quality data systems to meet Basel requirements. The framework was difficult for both regulators and banks to understand and implement effectively. Basel II also

failed to ensure equal competition among banks because larger institutions benefited more from advanced approaches than smaller banks (Hai et al., 2007).

Basel III Challenges

Basel III introduced stricter banking regulations to strengthen financial stability, but it also created several challenges. Higher capital requirements increased barriers to entry into the banking sector and reduced competition by favoring existing banks. Large systemically important banks were also required to hold more capital, which could limit their growth and expansion. Critics argued that Basel III did not significantly change the risk-weighting system that contributed to the global financial crisis and continued to encourage banks to hold AAA-rated assets because they required lower capital reserves.

Another challenge of Basel III was its continued dependence on external credit rating agencies for risk assessment. The framework also aimed to harmonize banking regulations globally, although countries have different economic conditions and regulatory systems. Some economists argued that Basel III could slow economic growth, especially in developing countries, because banks would need to hold more capital instead of using those funds for lending and investment activities.

VII. Recommendations

It is recommended that the regulatory authority provide proper training for employees who work with Basel Accord implementation because many bank employees do not have enough knowledge, skill, and expertize in this area. Banks often face difficulties in hiring qualified officers and spending a huge amount of money for training programs, as a result, regulators should support banks by providing resource persons and training facilities. It is also recommended that Basel Accords be properly adopted for Islamic bank Shariah Boards and Islamic institutions because the assets may involve different types of risks compared to conventional banks. Regulatory authorities should also help banks collect and maintain high quality, which is essential for implementing Basel effectively. In addition, banks should be allowed to use internal credit rating systems instead of depending completely on external rating agencies.

VIII. Conclusion

Risk management is very important for banks and financial institutions because it helps to ensure safety and avoid financial losses. To improve safety and stability, the Basel Committee introduced Basel I in 1988 as the first international banking standard, after that subsequently; Basel II was launched in 2004 to remove the weaknesses and drawbacks of Basel I. Later, after the global financial crisis in 2008, Basel II was considered ineffective and insufficient, so Basel III was introduced in 2010. Basel III was implanted in the various phases and gradually improved, and it was fully implanted from 2019. After the final amendment of Basel III was treated as Basel IV for capital rules and liquidity rules to make the banks position more solvent and stable. Many developing countries adopted Basel standards because strong banking regulations help attract foreign investment and improve financial stability.

IX. Acronyms

AIRB	Advanced Internal Rating Based
AMA	Advanced Measurement Approach
BB	Bangladesh Bank
BC	Basel Committee
BCBS	Basel Committee on Banking Supervision
BIA	Basic Indicator Approach
BIS	Bank for International Settlements
CAR	Capital Adequacy Ratio
CCB	Capital Conservation Buffer
CET 1	Common Equity Tier 1
CRAR	Capital to Risk-Weighted Assets Ratio
GRBCA	Guidelines on Risk-Based Capital Adequacy
IRB	Internal Rating Based
LCR	Liquidity Coverage Ratio
NPL	Non-Performing Loans
NSFR	Net Stable Funding Ratio
QIS	Quantitative Impact Studies QIS
RBI	Reserve Bank of India
RRCF	Revised Regulatory Capital Framework
RWA	Risk Weighted Assets
TSA	The Standardized Approach

References

[1]. Adeniran, I. A., Abhulimen, A. O., Obiki-Osafiele, A. N., Osundare, O. S., Agu, E. E., & Efunniyi, C. P. (2024). Strategic Risk Management In Financial Institutions: Ensuring Robust Regulatory Compliance. Finance & Accounting Research Journal, 6(8), 1582-1596. Doi: Https://Doi.Org/10.51594/Farj.V6i8.1508
[2]. Ahmed, B. (2016). Basel III-Implementation In And Challenges For Bangladesh. Paper Presented At The Proceedings.
[3]. Akhtar, S. (2006). Basel II Implementation Issues, Challenges And Implications. Paper Presented At The Speech By Governor Of State Bank Of Pakistan, At 56th Annual General Meeting Of The Institute Of Bankers Pakistan, Karachi. 12th September. Available At Www. Bis. Og.
[4]. Akter, R., Ahmad, S., Kulsum, U., Hira, N. J., Akhter, S., & Islam, M. S. (2019). A Study On The Implementation Of Basel III: Bangladesh Perspective. Academy Of Strategic Management Journal, 18(6), 1-10.
[5]. Allouche, I. K., & Hijazi, N. (2024). Financial Stability In The MENA Region: The Impact Of Banking Capitalization And Institutional Environment On Credit Availability. International Business Research, 17(1), 1-18. Doi: 10.5539/Ibr.V17n1p1
[6]. Anevski, D., & Tamelkovksa-Anevska, E. (2017). International Regulatory Changes In Financial Systems As A Factor Of Stability. The European Journal Of Applied Economics, 14(1), 24-31.
[7]. Atuahene, S. A., Yusheng, K., Benturn-Micah, G., & Aboagye, A. K. (2021). Impact Of Capital Adequacy On Banks' Performance: Considering The Basel International Regulatory Framework For Banks. Etikonomi Journal, 19(1), 45-54. Doi: 10.15408/Etk.V20i1.15590
[8]. Barra, C., Papaccio, A., & Ruggiero, N. (2023). Basel Accords And Banking Inefficiency: Evidence From The Italian Local Market. International Journal Of Finance & Economics, 28(4), 4079-4119.
[9]. Basel III, B. (2017). Finalising Post-Crisis Reforms. BIS, Basel.
[10]. Bashir, A., & Hassan, A. (2017). Interrelationship Among Basel Capital Regulation, Risk, And Efficiency In Pakistani Commercial Banks. Business & Economic Review, 9(2), 165-186. Doi: 10.22547/BER/9.2.7
[11]. Bashir, A., Khan, M., Sajid, M., & Sorooshian, S. (2023). Basel Accord Capital Regulations And Financial Risk Management: Empirical Evidence From Pakistan's Financial Institutions. Accounting, 9(1), 1-8. Doi: 10.5267/J.Ac.2022.10.001
[12]. Berka, M., & Zimmermann, C. (2018). The Basel Accord And Financial Intermediation: The Impact Of Policy.
[13]. Bitar, M., Pukthuanthong, K., & Walker, T. (2018). The Effect Of Capital Ratios On The Risk, Efficiency And Profitability Of Banks: Evidence From OECD Countries. Journal Of International Financial Markets, Institutions And Money, 53, 227-262. Doi: 10.1016/J.Intfin.2017.12.002
[14]. Cerutti, M. E. M., Correa, M. R., Fiorentino, E., & Segalla, E. (2016). Changes In Prudential Policy Instruments—A New Cross-Country Database: International Monetary Fund.
[15]. Chan, J. K., Tam, C., & Cheung, R. (2005). Monitoring Financial Health Of Contractors At The Aftermath Of The Asian Economic Turmoil: A Case Study In Hong Kong. Construction Management And Economics, 23(5), 451-458.
[16]. Chandrasegaran, L. (2020). Capital Adequacy Requirements And Profitability: An Empirical Study On Banking Industry In Sri Lanka. Journal Of Economics And Business, 3(2). Doi: Https://Doi.Org/10.31014/Aior.1992.03.02.223
[17]. De Vita, G., Tanna, S., & Luo, Y. (2024). How Consistent Are Measures Of Financial Liberalization In Assessing Its Impact On Bank Cost Efficiency? A Cross–Country Empirical Analysis. Journal Of Business Economics, 94(9), 1169-1199. Doi: Https://Doi.Org/10.1007/S11573-024-01195-7
[18]. Goodhart, C. (2011). The Basel Committee On Banking Supervision: A History Of The Early Years 1974–1997: Cambridge University Press.
[19]. Habiba, M. (2023). Basel Agreements In The Efficiency Of Algerian Banks Financial Evolution And Interdisciplinary Research.
[20]. Hai, S. S., Minnhaj, S., & Ahmed, R. (2007). Implementation Of Basel Ii: Issues, Challenges And Implications For Developing Countries. Preprint. Http://Www. Hull. Ac. Uk/Php/Ecskrb/GDP2007/SESARO-58110. Pdf [Accessed On April 27th 2011].
[21]. Haron, R., Husin, M. M., & Murg, M. (2020). Banking And Finance: Bod–Books On Demand.
[22]. Hessami, A. G. (2019). Perspectives On Risk, Assessment And Management Paradigms: Bod–Books On Demand.
[23]. Jacques, K. T. (2017). Capital Regulations, Supervision And The International Harmonization Of Bank Capital Ratios. Banks & Bank Systems(12,№ 1 (Cont.)), 175-183. Doi: Https://Doi.Org/10.21511/Bbs.12(1-1).2017.11
[24]. Kalaš, B., Milenković, N., Andrašić, J., & Pjanić, M. (2016). Characteristics Of Basel Principles And Standards In Banking. European Journal Of Economic Studies(4), 486-491.
[25]. Kalloub, M., Kapusuzoglu, A., & Ceylan, N. (2018). The Impact Of Basel III Adoption By G20 Members On Their Credit Ratings. Eurasian Journal Of Economics And Finance, 6(1). Doi: Https://Doi.Org/10.15604/Ejef.2018.06.01.005
[26]. Lalon, R. M., & Kabir, B. (2017). BASEL–Ll Compliance Status Of State Owned Commercial Banks In Bangladesh:'A Study On Agrani Bank Ltd'. 5(2), 81-91. Doi: 10.11648/J.Ijefm.20170502.11
[27]. Lee, S. J., & Stebunovs, V. (2012). Bank Capital Ratios And The Structure Of Nonfinancial Industries. Doi: Https://Doi.Org/10.2139/Ssrn.2193891
[28]. Mohanty, S. K. (2008). BASEL II: CHALLENGES AND RISKS. Academy Of Banking Studies Journal, 7.
[29]. Obadire, A. M., & Obadire, K. (2023). The Impact Of Bank Regulation On Bank Performance: A Novel Analysis Of The Pre-Covid Era With Cross-Country Evidence. American Journal Of Industrial And Business Management, 13(3), 118-139.
[30]. Parrenas, J. (2002). The New Basle Accord: Challenges For Asia's Banks And Regulators. Paper Presented At The PECC Finance Forum Conference.
[31]. Roy, D. G., Kohli, B., & Khatkale, S. (2013). Basel I To Basel II To Basel III: A Risk Management Journey Of Indian Banks. AIMA Journal Of Management Research, 7(2/4), 1-23.
[32]. Sayah, M. (2017). Understanding Some New Basel III Implementation Issues For Lebanese Commercial Banks. Université De Lyon. Retrieved From Https://Tel.Archives-Ouvertes.Fr/Tel-01684871
[33]. Siddika, A., & Haron, R. (2020). Capital Adequacy Regulation. Banking And Finance.
[34]. Svalova, V. (2018). Risk Assessment. London: Intechopen.
[35]. Tepetepe, G. (2022). A Concurrent Triangulation Mixed Methods Study On Basel II/III Capital Modeling Techniques Implementation In Zimbabwean Banks. Journal Of Economics Finance And Accounting, 9(2), 48-71. Doi: Https://Doi.Org/10.17261/Pressacademia.2022.1566
[36]. Teply, P. (2010). The Key Challenges Of The New Bank Regulations. Paper Presented At The Proc. Of 2010 International Conference On Business, Economics And Tourism Management, Paris: World Academy Of Science, Engineering And Technology.
[37]. Udeshi, K. J. (2004). Implementation Of Basel II: An Indian Perspective. Reserve Bank Of India Bulletin, 653-655.
[38]. Uzun, A. (2008). Implications Of Basel II And Risk Management On Financial Reporting. Marmara Universitesi (Turkey).

[39]. Vallascas, F., & Hagendorff, J. (2013). The Risk Sensitivity Of Capital Requirements: Evidence From An International Sample Of Large Banks. Review Of Finance, 17(6), 1947-1988. Doi: Https://Doi.Org/10.1093/Rof/Rfs042

[40]. Van Greuning, H., & Bratanovic, S. B. (2020). Analyzing Banking Risk: A Framework For Assessing Corporate Governance And Risk Management: World Bank Publications.

[41]. Yamin, N., Asif, M., Hasnat, M. A., Islam, M. M., Nasiruddin, M., Khandakar, H., & Rahman, M. A. (2025). The Impact Of Basel III Implementation On The Financial Performance Of The Banking Industry In Bangladesh. Banks And Bank Systems, 20(1), 98-108. Doi: Http://Dx.Doi.Org/10.21511/Bbs.20(1).2025.09

[42]. Господарчук, Г. Г. (2019). Резервный Буфер Капитала Как Инструмент Макропруденциальной Политики. Финансы: Теория И Практика, 23(4), 43-56. Doi: Https://Doi.Org/10.26794/2587-5671-2019-23-4-43-56