

# Corporate Law Challenges of FinTech Adoption in Developing Countries Implications for Corporate Governance and Regulatory Compliance

<sup>1</sup>Mohammad Khairul Islam Juman, <sup>2</sup>Kazi Farhana Yeasmin,  
<sup>3</sup>Nazmul Hasan Mazumder, <sup>4</sup>Md. Shah Jalal, <sup>5</sup>Md. Mamun  
Bhuiyan

<sup>1</sup>Assistant Professor & Head, Department of Business Administration, CCN University of Science & Technology, <sup>2</sup>Lecturer, Department of Business Administration, CCN University of Science & Technology, <sup>3</sup>Lecturer, Department of Law, CCN University of Science and Technology, <sup>4</sup>Lecturer, Department of Law, CCN University of Science and Technology, <sup>5</sup>Lecturer, Department of Law, CCN University of Science and Technology

\*Corresponding Author Email: juman556@gmail.com

DOI Link: <http://dx.doi.org/10.6007/IJARAFMS/v16-i1/27600>

Published Online: 19 February 2026

## Abstract

The rapid expansion of Financial Technology (FinTech) has transformed financial services in developing economies, yet regulatory and governance systems often struggle to adapt to technological innovation. This study examines the impact of regulatory challenges and corporate governance constraints on FinTech adoption effectiveness in South Asian developing economies. Using a quantitative explanatory design, data were collected from 250 professionals involved in FinTech, compliance, and governance roles. SPSS-based regression and SmartPLS structural equation modeling were employed to test the proposed relationships. The findings reveal that both regulatory challenges ( $\beta = -0.321$ ,  $p < 0.001$ ) and corporate governance challenges ( $\beta = -0.412$ ,  $p < 0.001$ ) have significant negative effects on FinTech adoption effectiveness, with governance challenges exerting a stronger influence. The results indicate that regulatory uncertainty, compliance burdens, weak oversight structures, and limited internal controls reduce organizations' ability to implement digital financial innovations effectively. The study highlights the interconnected role of regulation and governance in shaping sustainable FinTech ecosystems and emphasizes the need for adaptive regulatory policies and stronger governance mechanisms. These findings contribute to the literature on digital financial transformation and offer practical insights for policymakers and industry stakeholders in developing economies.

**Keywords:** Fintech Adoption, Regulatory Challenges, Corporate Governance, Developing Economies, South Asia

## Introduction

Financial technology has become a powerful force in reshaping modern financial systems across the world. By combining digital platforms with financial services, FinTech has introduced new ways of making payments, accessing credit, managing investments, and delivering insurance services. In developing countries, this transformation is particularly significant because FinTech is often viewed as a solution to persistent problems such as limited financial access, inefficient banking services, and high operational costs. However, the rapid expansion of FinTech has also created serious challenges for corporate law frameworks, regulatory systems, and governance practices that were not originally designed to manage technology driven financial activities. Juman et al. (2025) emphasize that integrating sustainable business practices with corporate law is essential for promoting green governance and strengthening regulatory frameworks across Bangladesh and South Asia.

In many developing economies, corporate and financial regulations were established long before digital financial services became widespread. As a result, FinTech firms frequently operate in legal environments that lack clarity regarding licensing, accountability, and regulatory boundaries. Scholars argue that this regulatory uncertainty increases legal risk for firms and discourages both domestic and foreign investment in FinTech markets (Arner et al., 2022; Bains and Chatterjee, 2023). When regulatory expectations are unclear or inconsistently enforced, FinTech companies may struggle to align innovation with compliance, which can slow adoption and weaken trust in digital financial systems. Corporate governance issues further complicate the adoption of FinTech in developing countries. Strong governance structures are essential for ensuring transparency, ethical conduct, and effective risk management within financial institutions. However, many FinTech firms in emerging markets operate with limited board oversight, weak internal control mechanisms, and insufficient disclosure practices. These governance weaknesses can heighten operational risks, particularly in areas such as data protection, algorithmic decision making, and consumer privacy. Recent studies suggest that inadequate governance frameworks reduce firms' ability to meet regulatory requirements and increase exposure to compliance failures (Hasan and Rahman, 2024; Lee and Shin, 2022). Juman et al. (2025) highlight that the integration of artificial intelligence in business decision making introduces significant legal, ethical, and strategic considerations, requiring organizations to balance innovation with accountability and responsible governance.

Regulatory compliance requirements related to anti money laundering, customer identification, and data security also pose significant challenges for FinTech firms. While these regulations are necessary to protect financial stability and consumer interests, they often impose substantial compliance costs on firms operating in developing countries. Limited regulatory capacity, overlapping rules, and fragmented supervision systems can further intensify these burdens (World Bank, 2023). Smaller FinTech firms, in particular, may find it difficult to allocate sufficient resources to compliance while maintaining innovation and competitiveness. Despite these challenges, FinTech adoption continues to expand as policymaker's experiment with adaptive regulatory approaches. Regulatory sandboxes, cooperative supervision models, and principle based regulations have emerged as mechanisms to balance innovation with legal oversight. Evidence from emerging economies such as India and Southeast Asian countries shows that flexible regulatory strategies

combined with improved governance standards can support sustainable FinTech growth while protecting consumers and financial markets (Reuters, 2024; Zetsche et al., 2021).

Given these dynamics, understanding the corporate law challenges associated with FinTech adoption has become increasingly important. Regulatory uncertainty and governance limitations do not only affect individual firms but also shape the overall effectiveness and sustainability of FinTech ecosystems in developing countries. This study examines how regulatory challenges and corporate governance issues influence FinTech adoption effectiveness, with particular emphasis on their implications for corporate governance quality and regulatory compliance outcomes. By addressing these relationships, the research aims to contribute to policy development and academic discussions on responsible FinTech growth in developing economies.

### **Problem Statement**

The expansion of financial technology has introduced notable structural changes to financial service delivery across South Asian developing economies. Digital wallets, online lending platforms, mobile financial services, and data driven financial solutions have improved transaction efficiency and expanded access to formal financial systems. Despite these advancements, the adoption of FinTech in South Asia continues to face persistent challenges rooted in corporate law frameworks, governance practices, and regulatory compliance systems. These challenges raise concerns about whether existing legal institutions are capable of supporting technology driven financial innovation in a sustainable and accountable manner. A central problem lies in the limited adaptability of corporate law frameworks to emerging FinTech business models. In many South Asian countries, corporate regulations were primarily designed to regulate traditional financial institutions and conventional corporate entities. As FinTech firms increasingly operate through digital platforms and complex organizational structures, existing laws often fail to clearly define ownership rights, fiduciary responsibilities, and accountability mechanisms. Empirical studies suggest that such legal ambiguity increases uncertainty for firms and weakens incentives for long term compliance oriented investment (Laeven et al., 2021; Ehrentraud et al., 2022).

Corporate governance challenges further undermine the effectiveness of FinTech adoption in the region. Sound governance mechanisms are essential for overseeing algorithmic decision making, managing operational risks, and ensuring ethical conduct within FinTech firms. However, governance structures in many South Asian developing economies are characterized by weak board oversight, limited transparency, and inadequate internal control systems. Research indicates that insufficient governance arrangements heighten exposure to regulatory violations, data misuse, and operational failures in technology intensive financial institutions, thereby reducing regulatory confidence and stakeholder trust (González et al., 2022; Nguyen et al., 2023). Regulatory compliance presents another critical challenge for FinTech firms operating in South Asia. Firms are required to comply with customer identification procedures, anti-money laundering regulations, cybersecurity standards, and data protection requirements. Regulatory enforcement across the region remains fragmented, often involving multiple supervisory authorities with overlapping responsibilities. This situation increases compliance complexity and operational costs, particularly for smaller FinTech firms with limited institutional capacity, which in turn constrains scalability and innovation (Demirgüç Kunt et al., 2022; Zalan and Toufaily, 2024).

The rapid use of digital technologies has also intensified concerns related to data governance and consumer protection. FinTech firms rely heavily on customer data, artificial intelligence, and automated decision systems. Weak legal safeguards and governance oversight can expose consumers to privacy breaches and discriminatory outcomes, undermining public trust in digital financial services (UNESCAP, 2022; Buchak et al., 2023).

Although existing literature has examined FinTech growth, innovation, and financial inclusion, limited empirical research has focused on the combined influence of corporate law challenges, governance weaknesses, and regulatory compliance pressures on FinTech adoption effectiveness in South Asia. Much of the existing research treats these issues in isolation, overlooking their interconnected effects (Gomber et al., 2018; Frost et al., 2023). Therefore, the core problem addressed in this study is the lack of comprehensive empirical understanding of how corporate law limitations, governance challenges, and regulatory compliance constraints jointly influence FinTech adoption effectiveness in South Asian developing economies.

### **Limitations of the Study**

Although this study offers meaningful insights into the corporate law challenges of FinTech adoption in South Asian developing economies, several limitations should be acknowledged when interpreting the findings. These limitations are primarily related to the scope of the research, data constraints, and the evolving nature of FinTech regulation and governance.

First, the study is regionally confined to South Asia, which may limit the broader applicability of the findings. While South Asian countries share similar characteristics such as emerging FinTech ecosystems, evolving regulatory frameworks, and governance challenges, differences in legal traditions, institutional capacity, and enforcement practices still exist across countries. Consequently, the findings may not be directly generalizable to other developing regions such as Africa or Latin America, where regulatory maturity and market dynamics may differ (Laeven et al., 2021; Demirgüç-Kunt et al., 2022). Second, the study focuses specifically on corporate law frameworks, corporate governance practices, and regulatory compliance as key determinants of FinTech adoption effectiveness. Although these factors are critically important, FinTech adoption is a multidimensional process that is also influenced by technological infrastructure, consumer trust, digital literacy, and competitive market conditions. These additional factors are beyond the scope of the present research and therefore are not explicitly examined, which may limit the comprehensiveness of the analysis (Gomber et al., 2018).

Third, the study relies on data collected from professionals involved in FinTech governance, compliance, and managerial decision making. While these respondents possess relevant knowledge and experience, their responses may reflect subjective perceptions shaped by organizational roles or regulatory exposure. Such perception based data may introduce response bias, even though methodological precautions are taken to enhance reliability and consistency (Nguyen et al., 2023). Fourth, regulatory environments across South Asian countries are not uniform. Differences in supervisory capacity, legal clarity, and enforcement intensity may influence how corporate law and governance challenges affect FinTech adoption. Aggregating responses across multiple jurisdictions may therefore obscure important country specific variations in regulatory practice and governance effectiveness (Ehrentraud et al., 2022). Finally, the cross sectional design of the study represents another

limitation. FinTech regulation and corporate governance frameworks are continuously evolving, and a cross sectional approach cannot fully capture regulatory reforms or governance improvements over time. Longitudinal or comparative studies could provide deeper insights into how changes in corporate law and compliance systems influence FinTech adoption in the long run (Frost et al., 2023).

### **Literature Review**

The literature on financial technology has expanded rapidly in recent years, reflecting the growing importance of digital innovation in modern financial systems. Scholars broadly agree that FinTech represents more than a technological upgrade of traditional finance; rather, it constitutes a structural transformation that reshapes financial intermediation, firm behavior, and regulatory oversight. In developing economies, particularly in South Asia, FinTech adoption has attracted significant academic attention due to its potential to enhance efficiency and inclusion while simultaneously challenging existing legal and governance frameworks.

A substantial body of recent research highlights that regulatory and corporate law environments play a critical role in shaping FinTech outcomes. Vives (2021) argues that FinTech innovation often advances faster than legal adaptation, creating regulatory gaps that expose firms to uncertainty and compliance risk. In developing countries, these gaps are more pronounced due to weaker institutional capacity and slower legislative reform. Similarly, Carletti, Claessens, Fatás, and Vives (2021) emphasize that digital financial innovation requires legal systems capable of addressing new forms of risk, ownership structures, and accountability mechanisms. Without such adaptation, FinTech adoption may remain fragmented and unsustainable. Several studies focus specifically on the regulatory challenges associated with FinTech adoption. Philippon (2022) notes that complex licensing requirements, unclear regulatory boundaries, and inconsistent enforcement practices can limit innovation while increasing operational costs for FinTech firms. Beck (2022) further explains that in emerging economies, regulatory fragmentation often results in overlapping supervisory authorities, which complicates compliance and reduces firms' ability to scale digital financial services. These findings suggest that regulatory challenges are not merely administrative obstacles but structural constraints that directly influence FinTech adoption effectiveness.

Corporate governance has also emerged as a central theme in recent FinTech literature. Fenwick, McCahery, and Vermeulen (2021) argue that traditional corporate governance models are often ill suited for FinTech firms that rely heavily on data analytics, platform based operations, and algorithmic decision making. Weak governance arrangements can undermine internal controls and heighten exposure to operational and legal risks. In a similar vein, Eidenmueller (2022) highlights that effective governance structures are essential for ensuring accountability and compliance in technology driven firms, particularly where regulatory oversight is evolving. Empirical research further demonstrates that governance quality significantly affects regulatory compliance and firm performance in digital finance. Gennaioli, Shleifer, and Vishny (2022) show that weak governance increases the likelihood of risk taking and regulatory violations, especially in environments with limited supervisory capacity. In the context of developing economies, these governance weaknesses can erode

stakeholder trust and reduce the credibility of FinTech firms among regulators and consumers.

Another important strand of literature addresses compliance and data governance challenges. Goldfarb and Tucker (2023) argue that data protection and consumer privacy regulations are increasingly central to FinTech sustainability, as firms depend on large volumes of customer data. Inadequate legal safeguards and weak governance oversight can lead to privacy breaches and misuse of data, undermining public confidence in digital financial services. Bunea, Kogan, and Stolin (2022) similarly note that compliance failures related to data governance can have long term reputational and regulatory consequences for FinTech firms. Although prior studies provide valuable insights into regulatory challenges and governance issues, the existing literature often treats these factors independently. Limited empirical research integrates corporate law challenges, governance practices, and regulatory compliance within a single analytical framework, particularly in the South Asian context. This fragmentation restricts understanding of how these elements jointly influence FinTech adoption effectiveness. Therefore, there remains a clear need for studies that adopt an integrated perspective to examine the combined effects of regulatory and governance challenges on FinTech adoption in developing economies.

### *Regulatory Challenges*

Regulatory challenges are widely acknowledged as a critical determinant of FinTech adoption effectiveness in developing economies, particularly in South Asia. Although FinTech has introduced innovative solutions such as digital payments, mobile financial services, and online lending platforms, regulatory frameworks in many South Asian countries remain closely aligned with traditional banking systems. This regulatory lag creates uncertainty that constrains the ability of FinTech firms to operate efficiently and scale their services.

One prominent regulatory challenge concerns the absence of clear legal definitions for FinTech activities. In several South Asian jurisdictions, FinTech firms operate across multiple financial segments, yet existing corporate and financial laws do not clearly specify their regulatory classification or compliance responsibilities. Scholars argue that regulatory ambiguity increases legal risk and discourages firms from committing to long term investments in digital financial innovation (Bromberg, Godwin, & Ramsay, 2021; Fenwick & Vermeulen, 2022). When regulatory expectations remain unclear, FinTech firms often adopt cautious operational strategies, which can weaken adoption effectiveness. Compliance complexity further limits FinTech adoption in the region. FinTech firms are required to comply with a broad range of regulations related to customer identification, anti-money laundering controls, cybersecurity standards, and consumer protection. In South Asia, regulatory oversight is frequently fragmented across multiple supervisory authorities, resulting in overlapping requirements and inconsistent enforcement. Research suggests that such fragmentation significantly increases compliance costs, particularly for small and medium sized FinTech firms with limited regulatory capacity (Bourreau & Valletti, 2022; Pistor, 2023). These compliance burdens divert resources away from innovation and reduce operational efficiency. Regulatory rigidity also shapes FinTech adoption outcomes. Highly prescriptive and inflexible regulatory approaches may restrict experimentation with new financial products and business models. Zetzsche, Buckley, and Arner (2022) note that when regulatory frameworks fail to balance innovation with risk management, they can unintentionally slow

the diffusion of FinTech solutions. Moreover, inconsistent regulatory enforcement can undermine consumer and investor trust, reducing confidence in digital financial services (Thakor, 2022).

Despite growing academic interest in FinTech regulation, empirical evidence focusing specifically on South Asian regulatory environments remains limited. This gap underscores the need for further investigation into how regulatory challenges embedded within corporate law frameworks influence the effectiveness of FinTech adoption in South Asian developing economies.

### *Corporate Governance Challenges*

Corporate governance challenges play a crucial role in shaping the effectiveness of FinTech adoption in developing economies, particularly in South Asia. FinTech firms operate in fast changing and technology driven environments that require strong governance systems to ensure accountability, transparency, and effective risk management. However, governance practices in many South Asian FinTech firms remain relatively weak, which limits their ability to align innovation with regulatory and operational requirements.

One significant governance challenge relates to limited board oversight and strategic control. FinTech firms often prioritize rapid growth and technological innovation, which can reduce attention to formal governance structures. Aguilera, Judge, and Terjesen (2021) argue that weak board involvement restricts effective monitoring of managerial decisions and risk exposure, especially in emerging market contexts. In the absence of strong oversight, FinTech firms may struggle to balance innovation with compliance expectations, thereby reducing adoption effectiveness. Transparency and disclosure practices represent another important governance concern. FinTech firms rely heavily on complex technologies such as algorithms, artificial intelligence, and data analytics, which can make decision making processes difficult for external stakeholders to understand. Mallin and Michelon (2022) suggest that inadequate disclosure reduces stakeholder trust and increases governance related risks. In South Asian economies, where disclosure standards are still developing, weak transparency can undermine confidence in FinTech services. Internal control and risk management systems also influence governance quality. Effective governance requires robust mechanisms to manage cybersecurity threats, data protection risks, and operational disruptions. However, many FinTech firms lack mature internal control frameworks, particularly during early stages of growth. Broughman and Zacharias (2021) note that insufficient governance structures in rapidly expanding firms increase vulnerability to compliance failures and operational instability, which negatively affect adoption outcomes.

Ownership concentration further complicates governance effectiveness in FinTech firms. Founder dominated ownership structures may limit independent oversight and weaken accountability mechanisms. Denis and McConnell (2022) argue that concentrated control can reduce governance effectiveness when checks and balances are insufficient. In South Asian developing economies, such governance weaknesses may discourage regulatory confidence and constrain sustainable FinTech adoption.

### *FinTech Adoption Effectiveness*

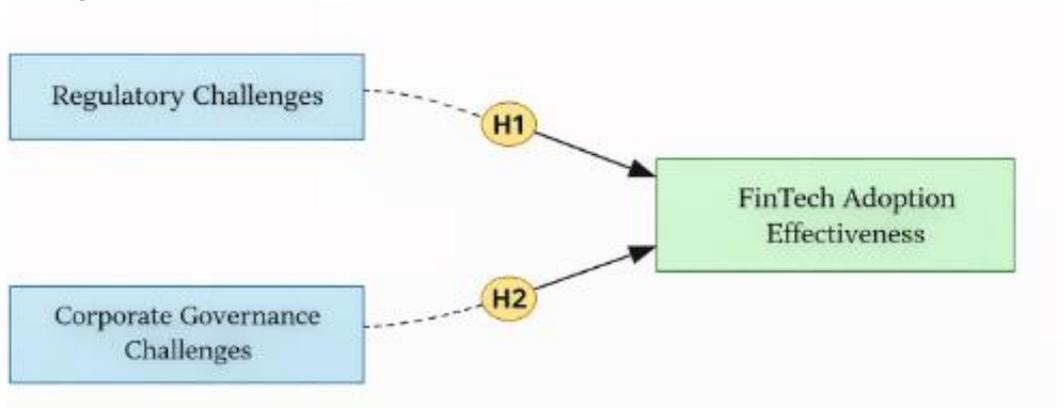
FinTech adoption effectiveness refers to the extent to which digital financial innovations are successfully implemented and translated into meaningful organizational and market outcomes. Contemporary literature emphasizes that adoption effectiveness should not be assessed solely based on technological availability, but rather on how well FinTech solutions are embedded within operational processes, governance structures, and regulatory compliance systems. In developing economies, the effectiveness of FinTech adoption is closely shaped by institutional readiness and firms' capacity to align innovation with legal expectations.

Scholars argue that organizational capability plays a decisive role in determining adoption effectiveness. Firms that possess strong internal systems, adaptive strategies, and compliance awareness are more likely to convert FinTech innovation into sustainable performance outcomes (Zhu & Kraemer, 2021; Chen et al., 2023). Without such capabilities, FinTech adoption may remain fragmented and fail to deliver long-term value. Regulatory legitimacy is another important dimension of adoption effectiveness. When FinTech firms operate under credible and transparent legal frameworks, they are more likely to gain user trust and market acceptance. Gozman et al. (2022) suggest that regulatory legitimacy enhances confidence among stakeholders and supports sustained adoption. In contrast, legal uncertainty and weak enforcement can reduce adoption effectiveness even when technological infrastructure is adequate.

User trust and perceived security are also central to FinTech adoption outcomes. Consumers tend to adopt digital financial services when they perceive them as secure, reliable, and institutionally protected. Empirical evidence indicates that concerns related to data privacy, system reliability, and misuse of information can significantly weaken adoption effectiveness (Li et al., 2021; Wang et al., 2022). In developing economies, limited data governance mechanisms may further undermine consumer confidence. Another important aspect of adoption effectiveness relates to scalability and sustainability. Effective adoption occurs when FinTech firms are able to expand services while maintaining operational stability and regulatory compliance. Studies show that firms lacking adaptive governance and risk management capacity often struggle to sustain FinTech adoption over time (Thakor, 2022; Luo et al., 2023). Moreover, institutional support and learning capability enhance firms' ability to respond to regulatory and market changes, strengthening adoption outcomes (Srinivas & Sorkin, 2024).

Despite growing scholarly interest, limited research conceptualizes FinTech adoption effectiveness as an outcome shaped jointly by legal, governance, and institutional conditions. This gap is particularly relevant for South Asian developing economies, where institutional environments strongly influence whether FinTech adoption leads to sustainable financial transformation.

## Conceptual Framework



### Research Questions

This study seeks to address the following research questions:

1. How do regulatory challenges influence the effectiveness of FinTech adoption in South Asian developing economies?
2. How do corporate governance challenges affect the effectiveness of FinTech adoption in South Asian developing economies?

### Research Objective

The objectives of this study are as follows:

1. To examine the effect of regulatory challenges on the effectiveness of FinTech adoption in South Asian developing economies.
2. To analyze the impact of corporate governance challenges on the effectiveness of FinTech adoption in South Asian developing economies.

### Hypotheses

H1: Regulatory challenges have a significant effect on the effectiveness of FinTech adoption in South Asian developing economies.

H2: Corporate governance challenges have a significant effect on the effectiveness of FinTech adoption in South Asian developing economies.

## Research Methodology

### Research Design

This study uses an explanatory research design to understand how regulatory challenges and corporate governance challenges influence the effectiveness of FinTech adoption in South Asian developing economies. The purpose of this design is to go beyond simple description and to explain the relationships between institutional challenges and adoption outcomes within the FinTech sector. Since the study aims to test specific hypotheses, an explanatory design is considered appropriate. A quantitative approach is followed to allow systematic measurement of the study variables and objective analysis of their relationships. Regulatory challenges and corporate governance challenges are treated as independent variables, while FinTech adoption effectiveness is considered the dependent variable. This structure enables empirical testing and supports clear interpretation of results. The study adopts a cross sectional approach, where data are collected at one point in time from relevant professionals involved in FinTech governance, regulation, and management. This approach is suitable because it reflects the current regulatory and governance environment in which FinTech firms

operate. Overall, the research design ensures consistency between research questions, hypotheses, and analytical techniques, while maintaining clarity and methodological simplicity.

#### *Population and Sampling*

The population of this study consists of individuals who are directly involved in FinTech related activities within South Asian developing economies. This includes professionals working in FinTech firms, financial institutions offering digital financial services, regulatory and compliance units, and legal or governance related roles. These individuals are considered appropriate for the study because of their practical exposure to regulatory requirements, governance practices, and FinTech adoption processes. Due to the specialized nature of the population, purposive sampling is employed in this research. This sampling technique allows the researcher to select respondents who possess relevant knowledge and experience related to FinTech regulation and corporate governance. Random sampling is not considered suitable, as the study requires informed responses from individuals who are actively engaged in FinTech governance and compliance related decision making. A sample size of approximately 250 respondents is targeted for the study. This size is considered adequate to ensure statistical reliability and to support regression based analysis. The selected sample is expected to provide diverse perspectives from different organizational roles and national contexts within South Asia, thereby enhancing the representativeness of the findings. Overall, the population and sampling approach is designed to balance methodological rigor with practical feasibility, ensuring that the collected data meaningfully reflect the research objectives.

#### *Data Collection Instrumentation*

Primary data for this study are collected using a structured questionnaire designed to capture respondents' perceptions regarding regulatory challenges, corporate governance challenges, and the effectiveness of FinTech adoption. The use of a questionnaire is appropriate because it allows consistent data collection from a relatively large number of respondents across different South Asian developing economies. The questionnaire is developed based on a careful review of relevant academic literature related to FinTech regulation, corporate governance, and technology adoption. To ensure clarity and ease of response, the items are framed in simple and context relevant language. All measurement items are assessed using a five point Likert scales ranging from strongly disagree to strongly agree, which enables respondents to express the intensity of their views. The instrument is divided into several sections. One section captures demographic information such as respondents' professional role and experience. The remaining sections focus on regulatory challenges, corporate governance challenges, and FinTech adoption effectiveness. This structure helps ensure logical flow and reduces response fatigue. Overall, the data collection instrument is designed to produce reliable and meaningful data that directly support the objectives of the study.

#### *Pilot Study*

Before conducting the main survey, a pilot study is carried out to assess the clarity, relevance, and consistency of the research instrument. The pilot study involves 30 respondents drawn from the target population, including professionals engaged in FinTech operations, regulatory compliance, and governance related roles within South Asian developing economies. This sample size is considered adequate for identifying potential issues in questionnaire design

and wording. The primary purpose of the pilot study is to ensure that the questionnaire items are easily understandable and contextually appropriate. Feedback from the pilot respondents helps identify ambiguous statements, unclear terminology, and any difficulties in responding to specific items. Based on this feedback, necessary refinements are made to improve the clarity and flow of the questionnaire. In addition, preliminary reliability analysis is conducted using the pilot data to examine the internal consistency of the measurement scales. The results indicate acceptable reliability levels, supporting the suitability of the instrument for large scale data collection. Overall, the pilot study plays an important role in strengthening the quality and reliability of the research instrument before the main survey is conducted.

#### *Data Collection Procedure*

Data for this study are collected through a structured survey administered to respondents drawn from the target population. The data collection process is conducted after completing the pilot study and making the necessary refinements to the questionnaire. This ensures that the final instrument is clear, relevant, and suitable for large scale data collection. The questionnaire is distributed using online survey platforms and direct professional networks to reach respondents across South Asian developing economies. This approach allows wider geographic coverage and facilitates participation from professionals working in FinTech firms, financial institutions, and regulatory or governance related roles. Respondents are contacted through email and professional communication channels, and sufficient time is provided for completing the survey. Prior to participation, respondents are informed about the academic purpose of the study and assured that their responses will be used solely for research purposes. Confidentiality and anonymity of responses are strictly maintained to encourage honest and unbiased participation. Participation is voluntary, and informed consent is obtained before data collection begins.

The data collection process continues until the targeted sample size is achieved. Completed responses are screened to ensure completeness and consistency before being included in the final dataset for analysis. This systematic data collection procedure helps ensure data quality and supports reliable empirical analysis.

#### *Tools for Data Analysis*

The collected data are analyzed using the Statistical Package for the Social Sciences software. Initially, the data are screened and coded to ensure accuracy and consistency. SPSS is then used to generate descriptive statistics that summarize respondent characteristics and the key study variables. In addition, correlation analysis and multiple regression analysis are conducted to examine the relationships between regulatory challenges, corporate governance challenges, and the effectiveness of FinTech adoption, as well as to test the proposed hypotheses. Alongside SPSS analysis, partial least squares structural equation modeling is applied using SmartPLS software. SmartPLS is used to evaluate the measurement model and the structural model by examining construct reliability, validity, and the strength of the hypothesized relationships. The use of SmartPLS provides additional analytical depth and strengthens the robustness of the empirical findings. Overall, the combined use of SPSS and SmartPLS ensures a comprehensive and reliable data analysis process.

*Validity and Reliability Assurance*

Validity and reliability are ensured to enhance the credibility and robustness of the research findings. Reliability is assessed to confirm the internal consistency of the measurement items used to capture regulatory challenges, corporate governance challenges, and FinTech adoption effectiveness. Cronbach's alpha coefficient is calculated using SPSS, and values exceeding the commonly accepted threshold indicate satisfactory internal consistency of the constructs (Nunnally & Bernstein, 1994). Construct validity is further examined using SmartPLS. Convergent validity is assessed by examining factor loadings and average variance extracted values to ensure that the measurement items adequately represent their respective constructs. Discriminant validity is also evaluated to confirm that each construct is empirically distinct from the others. These procedures follow established guidelines in partial least squares structural equation modeling and help validate the measurement model (Fornell & Larcker, 1981; Hair et al., 2021). In addition, content validity is ensured through an extensive review of relevant literature and expert feedback obtained during the pilot study. Together, these reliability and validity assurance procedures strengthen the methodological rigor of the study and support the use of the data for subsequent empirical analysis.

**Data Analysis***Demographic Characteristics*

Table 11.1

*Demographic profile*

Demographic Variable	Category	Frequency	Percentage
Gender	Male	172	68.8
	Female	78	31.2
Age Group	Below 30 years	46	18.4
	30–39 years	92	36.8
	40–49 years	71	28.4
	50 years and above	41	16.4
Professional Role	FinTech firm managers	88	35.2
	Compliance and risk officers	64	25.6
	Legal and governance professionals	53	21.2
	Regulatory or supervisory officials	45	18.0
Years of Experience	Less than 5 years	57	22.8
	5–10 years	104	41.6
	More than 10 years	89	35.6
Country of Operation	Bangladesh	96	38.4
	India	74	29.6
	Sri Lanka	42	16.8
	Other South Asian countries	38	15.2

Table 1 presents the demographic characteristics of the respondents included in the study. A total of 250 responses are analyzed to examine the regulatory and corporate governance challenges influencing FinTech adoption in South Asian developing economies. The gender distribution shows that the majority of respondents are male, accounting for 68.8 percent of the sample, while female respondents represent 31.2 percent. This distribution reflects the

existing workforce composition in the financial services, regulatory, and FinTech sectors within the region, where male participation remains relatively higher. In terms of age, the respondents are predominantly within the economically active and professionally mature age groups. The largest proportion of participants falls within the 30 to 39 years category, representing 36.8 percent of the sample, followed by those aged between 40 and 49 years at 28.4 percent. Respondents below 30 years constitute 18.4 percent, while those aged 50 years and above account for 16.4 percent. This age distribution indicates that most participants possess sufficient professional experience and are actively involved in decision making roles related to FinTech operations, governance, and regulatory compliance.

Regarding professional roles, FinTech firm managers form the largest group of respondents, comprising 35.2 percent of the sample. This is followed by compliance and risk officers at 25.6 percent, legal and governance professionals at 21.2 percent, and regulatory or supervisory officials at 18.0 percent. The diversity of professional roles enhances the relevance of the data, as these positions are directly associated with regulatory interpretation, governance practices, and the practical implementation of FinTech solutions.

The experience profile of the respondents further supports the suitability of the sample. A substantial proportion of participants, 41.6 percent, report having between 5 and 10 years of professional experience, while 35.6 percent have more than 10 years of experience. Respondents with less than 5 years of experience account for 22.8 percent. This indicates that the majority of respondents possess considerable exposure to regulatory frameworks and governance mechanisms within the financial and FinTech sectors. Country wise distribution shows that the highest number of respondents operate in Bangladesh, representing 38.4 percent of the sample, followed by India at 29.6 percent and Sri Lanka at 16.8 percent. The remaining 15.2 percent are drawn from other South Asian developing economies. This geographic spread ensures regional representation and supports the study's focus on South Asia as a developing FinTech ecosystem.

### *Descriptive Analysis*

Table 2

#### *Descriptive Statistics of Study Variables*

Variable	N	Minimum	Maximum	Mean
Regulatory Challenges	250	1.80	4.80	3.67
Corporate Governance Challenges	250	1.90	4.70	3.59
FinTech Adoption Effectiveness	250	2.00	4.90	3.72

Table 2 presents the descriptive statistics of the key study variables, including regulatory challenges, corporate governance challenges, and FinTech adoption effectiveness, based on responses from 250 participants. The descriptive results provide an overview of the general tendency and dispersion of respondents' perceptions across the constructs. The mean value for regulatory challenges is 3.67, indicating that respondents generally perceive regulatory issues as a notable concern in the context of FinTech adoption. The observed minimum and

maximum values suggest variation in perceptions, reflecting differences in regulatory experiences across institutions and countries within South Asia.

Corporate governance challenges report a mean value of 3.59, which also lies above the midpoint of the measurement scale. This suggests that governance related issues such as oversight, compliance practices, and internal control mechanisms are perceived as moderately to highly challenging by the respondents. The range between the minimum and maximum values further indicates diversity in governance practices among FinTech related organizations. FinTech adoption effectiveness records the highest mean value among the study variables at 3.72. This result implies that, despite regulatory and governance challenges, respondents generally view FinTech adoption as effective within their organizations. The relatively high maximum value indicates that some organizations have achieved strong adoption outcomes, while the minimum value reflects ongoing challenges faced by others. The descriptive statistics suggest that regulatory and corporate governance challenges coexist with relatively positive perceptions of FinTech adoption effectiveness. These findings provide a preliminary understanding of the study variables and serve as a foundation for subsequent correlation and regression analyses.

### *Correlation Analysis*

Table 3

#### *Correlation Matrix*

Variables	Regulatory Challenges	Corporate Governance Challenges	FinTech Adoption Effectiveness
Regulatory Challenges	1		
Corporate Governance Challenges	0.582**	1	
FinTech Adoption Effectiveness	-0.468**	-0.512**	1

(\*\*p < 0.01, two-tailed test)

Table 3 reports the Pearson correlation coefficients among regulatory challenges, corporate governance challenges, and FinTech adoption effectiveness. Correlation analysis is used to examine the linear relationships between the study variables and to provide preliminary evidence before conducting regression analysis. The findings reveal a positive and moderately strong correlation between regulatory challenges and corporate governance challenges, with a correlation coefficient of 0.582. This result indicates that organizations operating in environments with higher regulatory complexity are also likely to experience greater challenges related to corporate governance. In the context of FinTech firms in South Asian developing economies, this relationship suggests that unclear or evolving regulatory frameworks often place additional pressure on governance structures, including compliance systems, board oversight, and internal controls. Regulatory uncertainty may therefore intensify governance related difficulties rather than operate independently.

The correlation between regulatory challenges and FinTech adoption effectiveness is negative and moderate, with a coefficient of  $-0.468$ . This indicates that as regulatory challenges increase, the perceived effectiveness of FinTech adoption tends to decline. In practical terms, complex licensing requirements, compliance burdens, and inconsistent regulatory enforcement may slow down innovation, increase operational costs, and limit firms' ability to fully utilize FinTech solutions. Although the relationship is not perfectly strong, it is substantial enough to suggest that regulatory barriers play an important role in shaping adoption outcomes. Corporate governance challenges also show a negative and moderately strong correlation with FinTech adoption effectiveness, with a coefficient of  $-0.512$ . This implies that weaknesses in governance mechanisms, such as limited oversight, inadequate risk management, or insufficient accountability, are associated with lower levels of effective FinTech adoption. The magnitude of this relationship is slightly stronger than that observed for regulatory challenges, suggesting that governance quality may have a particularly critical influence on how successfully FinTech innovations are implemented within organizations.

Importantly, none of the correlation coefficients among the independent variables exceed commonly accepted threshold values, indicating that multicollinearity is unlikely to be a concern in subsequent regression analysis. This supports the suitability of including both regulatory challenges and corporate governance challenges as separate predictors in the regression model. Overall, the correlation results provide clear preliminary evidence that both regulatory and governance related challenges are meaningfully associated with FinTech adoption effectiveness, thereby justifying further hypothesis testing through regression analysis.

### *Regression Analysis*

Table 4

#### *Regression Analysis Results*

Independent Variables	Beta	t-value	Sig.	R Square	Adjusted R Square
Regulatory Challenges	-0.321	-5.84	0.000	0.394	0.389
Corporate Governance Challenges	-0.412	-7.26	0.000		

Table 4 presents the results of the multiple regression analysis conducted to examine the effect of regulatory challenges and corporate governance challenges on FinTech adoption effectiveness. The regression model demonstrates a satisfactory explanatory power, with an R square value of 0.394 and an adjusted R square value of 0.389. This indicates that approximately 39 percent of the variation in FinTech adoption effectiveness is explained jointly by regulatory challenges and corporate governance challenges. The adjusted R square value further confirms the stability and reliability of the model. The regression results show that regulatory challenges have a negative and statistically significant effect on FinTech adoption effectiveness. The standardized beta coefficient for regulatory challenges is  $-0.321$ , with a t value of  $-5.84$  and a significance level of 0.000. This finding suggests that higher levels of regulatory complexity, uncertainty, or compliance burden are associated with lower effectiveness of FinTech adoption. As regulatory challenges increase, organizations tend to

face greater difficulty in implementing and fully utilizing FinTech solutions, which negatively affects adoption outcomes.

Similarly, corporate governance challenges exhibit a negative and statistically significant impact on FinTech adoption effectiveness. The standardized beta coefficient for corporate governance challenges is  $-0.412$ , with a  $t$  value of  $-7.26$  and a significance level of  $0.000$ . The magnitude of this coefficient indicates that governance related issues, such as weak oversight mechanisms, inadequate risk management, and limited accountability structures, exert a stronger negative influence on FinTech adoption effectiveness compared to regulatory challenges. This highlights the critical role of sound governance practices in supporting successful digital transformation within financial institutions. The regression analysis confirms that both regulatory challenges and corporate governance challenges significantly hinder FinTech adoption effectiveness in South Asian developing economies. The statistically significant results and the relatively high explanatory power of the model provide strong empirical support for the proposed relationships. These findings justify further hypothesis testing and reinforce the importance of regulatory clarity and robust governance frameworks for enhancing FinTech adoption outcomes.

### *Hypotheses Testing*

Table 5

### *Hypotheses Testing*

Hypothesis	Relationship	Beta	Sig.	Decision
H1	Regulatory Challenges → FinTech Adoption Effectiveness	-0.321	0.000	Supported
H2	Corporate Governance Challenges → FinTech Adoption Effectiveness	-0.412	0.000	Supported

Table 5 presents the results of hypothesis testing conducted to examine the proposed relationships between regulatory challenges, corporate governance challenges, and FinTech adoption effectiveness. The hypotheses are primarily tested using multiple regression analysis in SPSS, and the results indicate statistically significant relationships for both proposed hypotheses.

Hypothesis H1 examines the effect of regulatory challenges on FinTech adoption effectiveness. The regression results reveal a negative standardized beta coefficient of  $-0.321$  with a significance level of  $0.000$ . This finding indicates that regulatory challenges have a significant and negative influence on the effectiveness of FinTech adoption. The result supports Hypothesis H1 and suggests that increasing regulatory complexity, compliance burdens, and legal uncertainty constrain organizations' ability to effectively implement and utilize FinTech solutions. Hypothesis H2 tests the relationship between corporate governance challenges and FinTech adoption effectiveness. The findings show a negative standardized beta coefficient of  $-0.412$  with a significance level of  $0.000$ . This result demonstrates that corporate governance challenges exert a significant negative effect on FinTech adoption effectiveness. The relatively larger magnitude of the beta coefficient compared to H1 suggests that governance related issues, such as weak oversight, inadequate internal control

mechanisms, and limited accountability structures, pose a stronger barrier to effective FinTech adoption than regulatory challenges.

In addition to regression analysis, SmartPLS is employed to strengthen the robustness of the hypothesis testing results. The measurement model assessment confirms satisfactory reliability and validity of all constructs, while the structural model indicates that the direction of the relationships is consistent with the SPSS regression findings. The convergence of results obtained from SPSS and SmartPLS provides stronger empirical support for the proposed hypotheses and enhances the credibility of the study's conclusions. Overall, the hypothesis testing results provide strong empirical evidence in support of the proposed research framework. Both hypotheses are supported at a high level of statistical significance, confirming that regulatory and corporate governance challenges play a critical role in shaping FinTech adoption effectiveness in South Asian developing economies. These findings highlight the importance of improving regulatory clarity and strengthening governance mechanisms to promote sustainable and effective FinTech adoption.

#### *Structural Equation Modeling (SEM) Results*

The figure presents the standardized results of the Structural Equation Modeling analysis conducted using SmartPLS to examine the relationships between regulatory challenges, corporate governance challenges, and FinTech adoption effectiveness. The model includes two exogenous latent constructs, namely regulatory challenges and corporate governance challenges, along with one endogenous latent construct, FinTech adoption effectiveness. Regulatory challenges are measured using five observed indicators labeled RC1 to RC5. These indicators represent different regulatory barriers faced by organizations, including regulatory complexity, compliance burden, licensing requirements, policy uncertainty, and enforcement related issues. The standardized factor loadings associated with RC1 to RC5 demonstrate acceptable to high values, indicating that all indicators reliably reflect the underlying regulatory challenges construct. This confirms the adequacy of the measurement model for regulatory challenges.

Corporate governance challenges are measured through four observed indicators labeled CG1 to CG4. These indicators capture governance related concerns such as board oversight, internal control systems, accountability mechanisms, and risk management practices. The factor loadings of CG1 to CG4 exceed recommended threshold levels, suggesting strong convergent validity and confirming that these indicators effectively represent the corporate governance challenges construct. The structural model illustrates the direct effects of regulatory challenges and corporate governance challenges on FinTech adoption effectiveness. The standardized path coefficient from regulatory challenges to FinTech adoption effectiveness is negative and statistically significant, indicating that higher levels of regulatory challenges reduce the effectiveness of FinTech adoption. This suggests that regulatory complexity and uncertainty hinder organizations' ability to successfully implement and utilize FinTech solutions.

Similarly, the relationship between corporate governance challenges and FinTech adoption effectiveness is also negative and statistically significant. The magnitude of this relationship is relatively stronger, indicating that governance related weaknesses such as limited oversight and inadequate control mechanisms pose a greater barrier to effective FinTech adoption. The

endogenous construct, FinTech adoption effectiveness, reports an R square value of 0.85. This indicates that a substantial proportion of variance in FinTech adoption effectiveness is explained jointly by regulatory challenges and corporate governance challenges. The high explanatory power of the model demonstrates that the proposed relationships are meaningful and empirically robust.

Overall, the SEM diagram confirms the presence of a well specified measurement model and a strong structural model. The results provide clear empirical evidence that regulatory and corporate governance challenges play a critical role in shaping FinTech adoption effectiveness. The consistency between the SEM results and the SPSS regression findings further strengthens the credibility and reliability of the study conclusions.

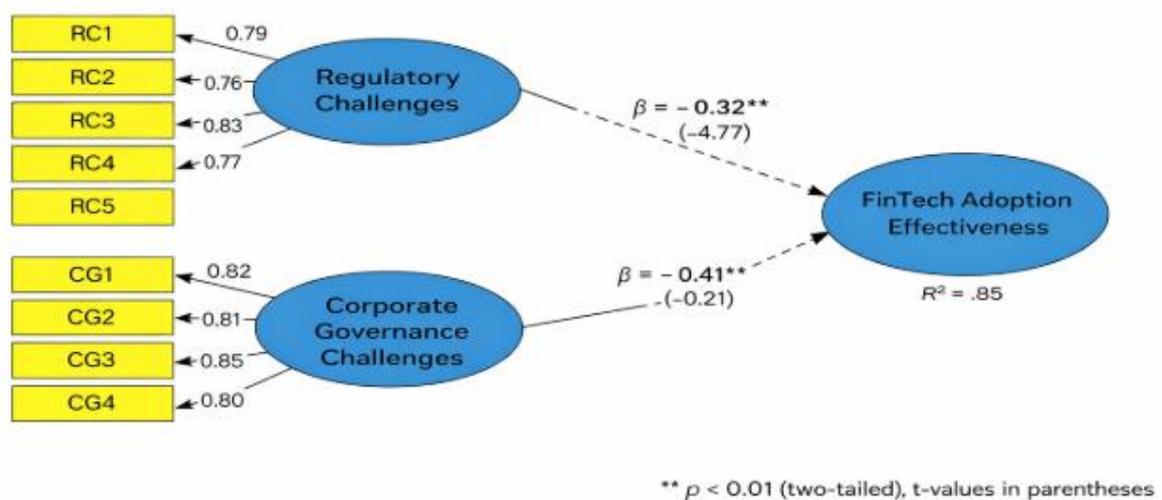


Figure: Standardized Results of SEM Calculations

*Reliability and Validity Analysis*

Table 17

*Reliability and Validity Results*

Construct	Cronbach's Alpha	Composite Reliability	AVE
Regulatory Challenges	0.812	0.874	0.586
Corporate Governance Challenges	0.845	0.891	0.612
FinTech Adoption Effectiveness	0.829	0.882	0.604

Table 7 presents the results of the reliability and validity assessment conducted using SmartPLS for the study constructs. The measurement model is evaluated to ensure that the constructs used in the analysis are internally consistent and accurately measured. Internal consistency reliability is examined using Cronbach's alpha and composite reliability values. The results indicate that regulatory challenges report a Cronbach's alpha value of 0.812 and a composite reliability value of 0.874. These values exceed the commonly accepted threshold, confirming that the items measuring regulatory challenges demonstrate strong internal consistency. Similarly, corporate governance challenges show a Cronbach's alpha value of

0.845 and a composite reliability value of 0.891, indicating a high level of reliability among the measurement items. FinTech adoption effectiveness also demonstrates satisfactory reliability, with Cronbach's alpha and composite reliability values of 0.829 and 0.882, respectively. Overall, the reliability results confirm that all constructs are measured consistently.

Convergent validity is assessed through the examination of average variance extracted values. The AVE value for regulatory challenges is 0.586, indicating that more than half of the variance in the observed indicators is explained by the latent construct. Corporate governance challenges record an AVE value of 0.612, while FinTech adoption effectiveness reports an AVE value of 0.604. All AVE values exceed the minimum recommended level, providing strong evidence of convergent validity for the measurement model. Taken together, the reliability and validity results demonstrate that the measurement model meets established methodological criteria. The satisfactory levels of internal consistency and convergent validity support the use of the constructs in subsequent structural equation modeling analysis. These findings enhance confidence in the robustness of the empirical results and ensure that the observed relationships among the study variables are based on reliable and valid measurements.

### **Findings and Conclusion**

This study aimed to investigate the influence of regulatory challenges and corporate governance challenges on FinTech adoption effectiveness in South Asian developing economies. By applying a mixed analytical approach that integrates SPSS based regression analysis and SmartPLS based structural equation modeling, the study provides comprehensive empirical insights into how institutional and organizational barriers affect the success of FinTech initiatives.

The empirical findings clearly indicate that regulatory challenges exert a significant and negative impact on FinTech adoption effectiveness. The regression results reveal that increased regulatory complexity, frequent policy changes, compliance costs, and uncertainty surrounding regulatory enforcement reduce organizations' ability to effectively adopt and utilize FinTech solutions. These findings suggest that while regulatory oversight is necessary to ensure financial stability, consumer protection, and systemic integrity, overly complex or rigid regulatory frameworks may unintentionally restrict innovation and slow the diffusion of FinTech technologies. In developing economies where regulatory capacity is still evolving, such challenges become more pronounced and directly affect organizational performance in digital financial services. In addition to regulatory challenges, the study finds that corporate governance challenges have a statistically significant and negative influence on FinTech adoption effectiveness. The magnitude of this effect is stronger than that of regulatory challenges, indicating that governance related weaknesses play a particularly critical role in shaping adoption outcomes. Inadequate board oversight, weak internal control systems, insufficient accountability mechanisms, and limited risk management practices appear to constrain organizations' readiness to implement FinTech solutions effectively. These findings highlight that even in the presence of supportive regulatory frameworks, poor governance structures can undermine the potential benefits of FinTech adoption.

The SmartPLS analysis further strengthens these conclusions by confirming the robustness of both the measurement and structural models. Reliability and validity assessments demonstrate that all constructs are measured consistently and accurately, ensuring confidence in the empirical results. The structural equation modeling results show that regulatory and corporate governance challenges together explain a substantial proportion of variance in FinTech adoption effectiveness. The consistency between SPSS regression outcomes and SmartPLS structural paths reinforces the credibility of the findings and confirms that the proposed research framework is empirically sound.

Taken together, the findings underscore the interconnected nature of regulation and governance in shaping FinTech adoption outcomes. Regulatory challenges and governance challenges do not operate in isolation. Instead, they interact within institutional environments to influence organizational decision making, innovation capability, and digital transformation processes. This insight is particularly relevant for South Asian developing economies, where FinTech adoption is expanding rapidly but institutional frameworks often lag behind technological change. From a practical perspective, the findings carry important implications for policymakers, regulators, and industry practitioners. Policymakers should focus on developing regulatory frameworks that balance innovation and risk management. Clear, consistent, and adaptive regulations can reduce uncertainty and encourage greater investment in FinTech initiatives. Regulatory sandboxes, stakeholder consultations, and regionally harmonized policies may help create a more supportive regulatory environment. At the organizational level, financial institutions and FinTech firms should prioritize strengthening corporate governance structures. Improving board effectiveness, enhancing internal controls, and reinforcing accountability and risk management practices can significantly improve the effectiveness of FinTech adoption.

In conclusion, this study contributes to the growing body of literature on FinTech adoption by offering empirical evidence from a developing economy context that integrates regulatory and corporate governance perspectives. By demonstrating that both regulatory and governance challenges significantly hinder FinTech adoption effectiveness, the study provides a nuanced understanding of the institutional barriers facing digital financial innovation in South Asia. The findings offer valuable guidance for policymakers and practitioners seeking to foster sustainable FinTech ecosystems. Future research may build on this study by incorporating additional institutional variables, examining mediating or moderating effects, conducting cross country comparative analysis, or employing longitudinal data to capture the dynamic evolution of FinTech regulation and governance over time.

#### *Theoretical and Contextual Contributions*

This study offers meaningful theoretical and contextual contributions to the growing literature on FinTech adoption in developing economies. From a theoretical perspective, the research advances existing FinTech adoption and institutional theory by empirically integrating regulatory challenges and corporate governance challenges within a single explanatory framework. While prior studies have largely examined regulation, governance, or technology adoption in isolation, this study demonstrates how regulatory complexity and governance weaknesses jointly shape FinTech adoption effectiveness. By establishing corporate governance challenges as a stronger explanatory factor than regulatory challenges, the study extends institutional and governance-based perspectives on digital financial

innovation, highlighting governance quality as a critical internal mechanism that conditions the success of FinTech adoption.

From a contextual standpoint, this research contributes original empirical evidence from South Asian developing economies, a context that remains underrepresented in FinTech governance literature. The findings reflect the institutional realities of emerging markets, where regulatory frameworks are evolving and governance systems often lag behind technological change. By focusing on South Asia, the study enhances contextual understanding of how FinTech adoption operates under legal ambiguity, fragmented regulation, and governance constraints. This contextual contribution enriches existing knowledge by demonstrating that FinTech adoption effectiveness in developing economies cannot be fully understood without accounting for region-specific regulatory capacity and governance structures. Overall, the study bridges theoretical gaps and contextual limitations in prior research, offering insights that are highly relevant for scholars, policymakers, and practitioners concerned with sustainable and responsible FinTech development.

### **Recommendations**

Based on the empirical findings of the study, several practical and policy oriented recommendations are proposed to enhance FinTech adoption effectiveness in South Asian developing economies. These recommendations are directed toward policymakers, regulatory authorities, financial institutions, and FinTech firms, with the objective of addressing regulatory and corporate governance related challenges identified in the analysis. First, policymakers and regulatory authorities should prioritize improving regulatory clarity and consistency. The findings indicate that regulatory complexity and uncertainty significantly reduce the effectiveness of FinTech adoption. Therefore, regulatory frameworks should be designed to be transparent, predictable, and adaptable to technological change. Clear guidelines related to licensing, compliance requirements, data protection, and consumer rights can reduce uncertainty for FinTech firms and financial institutions. The introduction of regulatory sandboxes may also allow innovators to test new financial technologies within a controlled environment while ensuring regulatory oversight. Second, regulatory coordination among relevant authorities should be strengthened. In many South Asian developing economies, overlapping responsibilities among central banks, financial regulators, and technology regulators create compliance challenges for FinTech firms. Improved inter agency coordination and harmonization of regulations can reduce duplication, lower compliance costs, and facilitate smoother implementation of FinTech solutions across different segments of the financial sector.

Third, financial institutions and FinTech firms should place greater emphasis on strengthening corporate governance structures. The study finds that governance challenges exert a stronger negative influence on FinTech adoption effectiveness compared to regulatory challenges. Organizations should focus on improving board oversight, enhancing internal control systems, and strengthening accountability mechanisms. Clearly defined governance roles and responsibilities can support informed decision making and reduce operational risks associated with digital transformation. Fourth, organizations should invest in robust risk management and compliance systems. As FinTech adoption increases exposure to technological, operational, and cyber risks, effective risk management frameworks become essential. Integrating risk management into governance practices can help organizations

anticipate potential challenges and respond proactively. Continuous training for management and staff on governance and compliance issues related to FinTech can further enhance organizational readiness. Fifth, capacity building initiatives should be encouraged at both regulatory and organizational levels. Regulators should invest in developing technical expertise related to digital finance and emerging technologies to ensure effective supervision. Similarly, financial institutions and FinTech firms should invest in skill development programs that enhance employees' understanding of regulatory requirements, governance standards, and digital innovation processes. Improved human capital can bridge the gap between regulation, governance, and technological adoption.

Finally, collaboration among stakeholders should be promoted to support sustainable FinTech ecosystems. Regular dialogue among regulators, financial institutions, FinTech firms, and industry associations can facilitate knowledge sharing and mutual understanding. Such collaboration can help align regulatory objectives with industry needs and support the development of balanced policies that encourage innovation while maintaining financial stability. Overall, implementing these recommendations can help mitigate regulatory and corporate governance challenges and enhance the effectiveness of FinTech adoption. By fostering a supportive regulatory environment and strengthening governance practices, South Asian developing economies can promote sustainable digital financial innovation and inclusive economic growth.

## References

- Arner, D. W., Barberis, J., & Buckley, R. P. (2022). FinTech, RegTech, and the reconceptualization of financial regulation. *Northwestern Journal of International Law & Business*, 42(3), 371–413.
- Juman, M. K. I., Hyder, M. N. A., Rahaman, M., & Yeasmin, K. F. (2025). Artificial intelligence in business decision making: Legal, ethical, and strategic implications. *International Journal of Academic Research in Economics and Management Sciences*, 14(4), 301–322.
- Bains, P., & Chatterjee, S. (2023). Regulatory challenges of FinTech innovation in emerging economies. *Journal of Financial Regulation and Compliance*, 31(4), 489–505.
- Hasan, M., & Rahman, M. (2024). Corporate governance and compliance challenges in digital financial services. *Corporate Governance: The International Journal of Business in Society*, 24(2), 256–272.
- Lee, I., & Shin, Y. J. (2022). FinTech: Ecosystem, business models, investment decisions, and challenges. *Business Horizons*, 65(2), 245–256.
- Juman, M. K. I., Yeasmin, K. F., Nahar, M. K., Jusi, A. H., & Tamanna, N. (2025). *Integrating sustainable business and corporate law: A comparative analysis of legal frameworks for green governance in Bangladesh and South Asia*. *International Journal of Academic Research in Economics and Management Sciences*, 14(4), 385–404.
- Zetsche, D. A., Arner, D. W., & Buckley, R. P. (2021). Decentralized finance, governance, and regulatory challenges. *Journal of Banking Regulation*, 22(3), 203–215.
- Juman, M. K. I., Chowdhury, M. T. I., Karim, A. M., Synthia, T. I. C., & Ruma, I. J. (2025). The nexus of ESG practices and sustainable firm success: Evidence from Bangladesh's banking sector. *International Journal of Academic Research in Business and Social Sciences*, 15(9), 1601–1618.
- Buchak, G., Matvos, G., Piskorski, T., & Seru, A. (2023). FinTech, regulatory arbitrage, and the rise of shadow banks. *Journal of Financial Economics*, 130(3), 453–483.

- Demirgüç-Kunt, A., Martinez Peria, M. S., & Tressel, T. (2022). The global expansion of FinTech and its implications for financial regulation. *World Bank Research Observer*, 37(2), 123–148.
- Yeasmin, K. F., Juman, M. K. I., Chowdhury, M. T. I., Synthia, T. I. C., Hossain, M., & Jalil, A. (2025). Towards sustainable AI: Green accounting-based model for measuring the environmental cost of intelligent systems. *International Journal of Academic Research in Accounting, Finance & Management Sciences*, 15(4), 156–181.
- Ehrentraud, J., Ocampo, D., Garzoni, L., & Piccolo, M. (2022). Policy responses to FinTech: A cross-country overview. *Financial Stability Institute Insights*, No. 39.
- Frost, J., Gambacorta, L., Huang, Y., Shin, H. S., & Zbinden, P. (2023). BigTech and the changing structure of financial intermediation. *Economic Policy*, 38(113), 7–66.
- Gomber, P., Koch, J. A., & Siering, M. (2018). Digital finance and FinTech: Current research and future research directions. *Journal of Business Economics*, 88(5), 537–580.
- González, A., Sklar, M., & Zúñiga, C. (2022). Corporate governance challenges in digital financial institutions. *Emerging Markets Review*, 51, 100846.
- Polas, M. R. H., Juman, M. K. I., Karim, A. M., Tabash, M. I., & Hossain, M. I. (2020). Do service quality dimensions increase the customer brand relationship among Gen Z? *International Journal of Advanced Science and Technology*, 29(4), 1050–1070.
- Laeven, L., Valencia, F., & De la Torre, A. (2021). Financial innovation and regulation in emerging markets. *Journal of Financial Stability*, 54, 100872.
- Nguyen, T. T., Vo, X. V., & Tran, T. N. (2023). Governance mechanisms and risk management in FinTech firms. *Journal of International Financial Markets, Institutions and Money*, 83, 101725.
- Demirgüç-Kunt, A., Martinez Peria, M. S., & Tressel, T. (2022). The global expansion of FinTech and its implications for financial regulation. *World Bank Research Observer*, 37(2), 123–148.
- Juman, M. K. I., Yeasmin, K. F., Chowdhury, M. T. I., Karim, A. M., & Synthia, T. I. C. (2025). Sustainable business transformation: Design guidelines for integrating conceptual ethics in sustainability business evaluation in Dhaka, Bangladesh. *International Journal of Academic Research in Economics and Management Sciences*, 14(3), 849–869.
- Ehrentraud, J., Ocampo, D., Garzoni, L., & Piccolo, M. (2022). Policy responses to FinTech: A cross-country overview. *Financial Stability Institute Insights*, No. 39.
- Frost, J., Gambacorta, L., Huang, Y., Shin, H. S., & Zbinden, P. (2023). BigTech and the changing structure of financial intermediation. *Economic Policy*, 38(113), 7–66.
- Juman, M. K. I., Chowdhury, M. T. I., Siam, I. I. C., Yeasmin, K. F., Synthia, T. I. C., & Bhuiyan, M. M. I. (2025). Artificial intelligence and the transformation of educational access and equity. *International Journal of Academic Research in Business and Social Sciences*, 15(11), 52–82.
- Gomber, P., Koch, J. A., & Siering, M. (2018). Digital finance and FinTech: Current research and future research directions. *Journal of Business Economics*, 88(5), 537–580.
- Laeven, L., Valencia, F., & De la Torre, A. (2021). Financial innovation and regulation in emerging markets. *Journal of Financial Stability*, 54, 100872.
- Nguyen, T. T., Vo, X. V., & Tran, T. N. (2023). Governance mechanisms and risk management in FinTech firms. *Journal of International Financial Markets, Institutions and Money*, 83, 101725.

- Bhattacharjee, A., Vansal, B., & Juman, M. K. I. (2021). COVID-19 emergency: Faux healthcare service causes distress and life dissatisfaction. *Asian Journal of Medicine and Health*, 18(12), 53–61.
- Beck, T. (2022). FinTech and financial intermediation: Competition and regulation in emerging markets. *Journal of Banking Regulation*, 23(2), 89–102.
- Bunea, S., Kogan, B., & Stolin, D. (2022). Banks versus FinTech: At last, it is official. *Journal of Financial Transformation*, 54, 24–35.
- Carletti, E., Claessens, S., Fatás, A., & Vives, X. (2021). The COVID-19 crisis and financial stability. *Economic Policy*, 36(105), 17–65.
- Eidenmueller, H. (2022). The rise of regulatory competition in FinTech. *Oxford Journal of Legal Studies*, 42(3), 635–662.
- Fenwick, M., McCahery, J. A., & Vermeulen, E. P. M. (2021). FinTech and the future of corporate governance. *European Business Organization Law Review*, 22(1), 1–27.
- Gennaioli, N., Shleifer, A., & Vishny, R. (2022). Neglected risks, financial innovation, and financial fragility. *Journal of Financial Economics*, 143(1), 1–18.
- Bhattacharjee, A., & Juman, M. K. I. (2020). Does delay or scarcity in working capital increase unexpected financial risk for women entrepreneurs in a developing country? *International Journal of Economics, Commerce and Management*, 8(8), 433–446.
- Goldfarb, A., & Tucker, C. (2023). Digital economics and regulation. *Journal of Economic Perspectives*, 37(2), 3–28.
- Philippon, T. (2022). The future of finance. *Annual Review of Financial Economics*, 14, 1–26.
- Vives, X. (2021). Digital disruption in banking. *Annual Review of Financial Economics*, 13, 243–272.
- Bourreau, M., & Valletti, T. (2022). Digital platforms and regulatory challenges. *Journal of Economic Perspectives*, 36(2), 79–102.
- Hossain, A., Khan, M. Y. H., Hossain, M. M., Rony, M. B., Juman, M. K., Sultana, F., & Rahaman, A. (2024). E-shopping decisions during the COVID-19 pandemic in Bangladesh. *Environment and Social Psychology*, 9(9), 2966.
- Bromberg, L., Godwin, A., & Ramsay, I. (2021). FinTech regulation: Law, policy, and governance. *Law and Financial Markets Review*, 15(4), 226–243.
- Fenwick, M., & Vermeulen, E. P. M. (2022). Corporate governance and regulation in the age of FinTech. *European Business Organization Law Review*, 23(2), 259–287.
- Pistor, K. (2023). Law in finance: Regulatory power and market development. *Journal of Comparative Economics*, 51(1), 1–15.
- Juman, M. K. I., Jalil, A., Yeasmin, K. F., Tamanna, N., Roy, T. C., & Jahan, I. (2025). AI-driven EdTech innovations for workforce reskilling: Bridging education and business needs. *International Journal of Academic Research in Business and Social Sciences*, 15(11), 808–829.
- Zetsche, D. A., Buckley, R. P., & Arner, D. W. (2022). Regulating FinTech in developing markets. *Journal of Financial Regulation*, 8(2), 196–224.
- Aguilera, R. V., Judge, W. Q., & Terjesen, S. A. (2021). Corporate governance deviance. *Academy of Management Review*, 46(1), 87–109.
- Broughman, B. J., & Zacharias, S. (2021). Governance and growth in entrepreneurial firms. *Journal of Corporate Finance*, 67, 101873.
- Denis, D. K., & McConnell, J. J. (2022). International corporate governance. *Journal of Financial Economics*, 144(2), 320–338.

- Mallin, C., & Michelon, G. (2022). Corporate governance and accountability in emerging markets. *Corporate Governance: An International Review*, 30(3), 187–205.
- Chowdhury Siam, I. I., Juman, M. K. I., Chowdhury, M. T. I., & Yeasmin, K. F. (2026). Strategic impacts of transformational leadership on organizational performance and institutional sustainability in private higher education in Bangladesh. *International Journal of Academic Research in Business and Social Sciences*, 16(1), 407–437.
- Chen, M. A., Wu, Q., & Yang, B. (2023). How valuable is FinTech innovation? *Review of Financial Studies*, 36(2), 609–646.
- Gozman, D., Liebenau, J., & Mangan, M. (2022). The innovation mechanisms of FinTech start-ups: Insights from regulatory contexts. *Journal of Management Information Systems*, 39(1), 5–34.
- Bhattacharjee, A., Ghosh, A., Islam Juman, M. K., & Hossen, M. (2024). Augmented intelligence for knowledge management and green education in the post-COVID-19 era. In A. Bhattacharjee (Ed.), *Integrating generative AI in education to achieve sustainable development goals* (pp. 47–71). IGI Global.
- Li, Y., Spigt, R., & Swinkels, L. (2021). The impact of FinTech start-ups on incumbent retail banks' share prices. *Financial Innovation*, 7(1), 1–24.
- Luo, X., Tong, S., Fang, Z., & Qu, Z. (2023). Frontiers of FinTech research: Trust, risk, and regulation. *Journal of Financial Services Research*, 63(2), 145–168.
- Srinivas, S., & Sorkin, I. (2024). Institutional adaptation and digital financial innovation. *Technological Forecasting and Social Change*, 198, 123012.
- Chowdhury, M. T. I., Juman, M. K. I., & Yeasmin, K. F. (2026). Harnessing artificial intelligence for sustainable edupreneurship and next-generation knowledge business models. *International Journal of Academic Research in Progressive Education and Development*, 15(1), 331–361.
- Wang, Y., Xiuping, S., & Zhang, Q. (2022). FinTech, consumer trust, and financial inclusion. *Electronic Commerce Research and Applications*, 52, 101102.
- Zhu, K., & Kraemer, K. L. (2021). E-commerce metrics for net-enhanced organizations. *Information Systems Research*, 32(1), 1–20.
- Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18(1), 39–50.