Journal for Social Science Archives (JSSA)

Online ISSN: 3006-3310
Print ISSN: 3006-3302
Volume 2, Number 2, 2024, Pages 419 – 436
Journal Home Page
https://jssarchives.com/index.php/Journal/about

A Review of Studies Regarding the Impact of Financial Technology (Fintech) and Financial Stability: The Mediating Role of Corporate Social Responsibility

Muhammad Rizwan Kamran[1], Muhammad Sajid[2], Zafar Iqbal[3], Aisha Saleem[4], Muhammad Yaseen[5] 5 Muhammad Javid[6]

[1]*Assistant Professor, Lyallpur Business School, Government College University, Faisalabad-38000, Pakistan. Email: mrizwankamran@gcuf.edu.pk*
[2]*Associate Professor, Department of Commerce, Government Graduate College Gojra, Toba Tek Singh, Pakistan. Email: sajidhas9@gmail.com*
[3]*PhD Scholar, Lyallpur Business School, Government College University, Faisalabad-38000, Pakistan. Email: Zafariqbal@gcuf.edu.pk*
[4]*Assistant Professor, Lyallpur Business School, Government College University, Faisalabad-38000, Pakistan. Email: aishajawad786@hotmail.com*
[5]*Department of Economics, Government College University, Faisalabad-38000, Pakistan. Email: mhdyaseen241@gmail.com*
[6]*Assistant Professor, Department of Commerce, Government Graduate College Gojra, Toba Tek Singh, Pakistan. Email: javidmian400@gmail.com*

ARTICLE INFO

Keywords:

Fintech; Corporate social responsibility; Financial stability; Banking sector.

Corresponding Author:
Aisha Saleem
Email:
aishajawad786@hotmail.com

ABSTRACT

The determination of this review is to evaluate the existing studies on the link between fintech and the financial stability of the banking sector, as well as the mediating effects of corporate social responsibility. This study mainly analyses the most relevant contents of fifty existing studies that are retrieved from the Google Scholar database. The specific period is taken into account for the study (2015–2023). The PRISMA method was applied for this literature review. There are some limitations of this study; first, it is solely uses Google Scholar for articles. Second, only general articles are evaluated, not book chapters, review papers, working papers, reports, editorials, conference papers, graduate theses, or preprints. Thirdly, this review covers 2015–2023. Fourth, evaluate only one financial sector, which may be unsatisfactory. The results are in a mixed pattern because many studies reveal that the financial technology and financial stability of the banking sector have positive and significant results because the contribution of financial technology boosts their operation in many ways, like lending and borrowing, wealth management, asset management, insurance, and many other activities that a commercial bank performs. On the other hand, various studies have found a

negative and insignificant relationship between Fintech and financial stability. Because of that, there are some factors like risk and government laws and regulations that do not have enough management. Fintech and corporate social responsibility also have a positive impact on the financial stability of the banking sector. Because of the new potential and risks for the monetary segment, the present article contributes to our knowledge of how the expansion of fintech businesses affects the banking industry. The article also offers recommendations for future studies on the effects of fintech activities on economic and social prosperity.

Introduction

Technology advancements prompted financial improvements that changed several financial services, goods, operations, and administrative frameworks (Frame et al., 2019). The term (fintech) has recently gained admiration around the world in reference to financial services. Fintech, as defined by Gai et al. (2018), is a word frequently used to refer to innovative technology that financial institutions have implemented. Using the technology to develop and supply economic facilities for both consumers and businesses at a lower cost is generally referred to as fintech. Fintech companies are corporations that use technology to supply financial services (Knewtson & Rosenbaum, 2020). Fintech's beginnings may be seen in the eighteenth century (Thakor, 2020). The use of new technologies by banks and other financial organisations has a long history, although this adoption was mostly focused on back-office banking activities (Breidbach et al., 2020). Meanwhile, fintech businesses have swiftly grown in the monetary sector, presenting clients with financial facilities in novel ways that banks were not accustomed to (Breidbach et al., 2020). The introduction of digital wallets, crypto currencies, crowd sourcing, and peer-to-peer (P2P) funding are a few instances of these developments. The key distinction of fintech businesses is the use of innovative technology to carry out activities formerly handled by bank (Chen et al., 2021; Asghar et al., 2024). Fintech companies are utilising the chance to supply numerous crucial tasks of traditional banks, relying on technology and novelty as a source of modest advantage since some banks across the world endure to provide antiquated, expensive, and burdensome financial services (Brandl & Hornuf, 2020; Sibt-e-Ali et al., 2023; Ji et al., 2023; Ameer et al., 2024).

Fintechs are producing functioning solutions that might improve the monetary industry. Financial stability may be threatened by the rising interconnection of the digital asset ecosystem, run risks among major stable coins, value demands in crypto-assets, DeFi platform fragilities, and a general lack of regulation (Pablo et al., 2022; Asghar et al., 2024). Disruptive innovation theory and consumer theory has been used to describe the impact of fintech startups on traditional banks (Phan et al., 2020). Consumer hypothesis climaxes that a novel service may action as an ancillary if it can do so by gathering the same customer need as the preceding one(Aaker & Keller, 1990). According to the disruptive innovation idea, it needs a deep understanding of disruptive innovation to prevent confusion with other innovation methods. Because low-end and mainstream customers like disruptive innovation, it affects businesses and industries in diverse ways (Martínez & Valls, 2021).

People question the banking sector's contribution to sustainable development because it uses a share of natural resources, such as energy, paper, and products made of paper, and produces waste. As a result, companies are becoming more anxious about joining CSR activities. Especially in light of the recent economic crisis, the idea of how businesses and banks integrate environmental and social concerns into their procedures and dealings with participants is of great relevance (Employment 2001). All nations have progressively come to agree on "CSR," which is also a crucial strategic decision for all nations worldwide (Caiado et al., 2018).

As a result, the government, non-governmental organisations (NGOs), and customers want a more accountable and sustainable way of conducting business. However, whether "CSR" improves the economic performance of the banks is a crucial point that must be addressed for shareholders in the business climate. According to Shabir et al. (2020), who examined "CSR" with the financial performances of both the non-financial as well as financial segments in Pakistan from 2011 to 2018, only part of CSR has a positive and linear association with the financial production of the country's financial as well as non-financial sectors governance. Shabbir and Wisdom's (2020), research examines "CSR" regarding environmental investments and their effects on the financial results of Nigerian businesses. The findings are examined using panel regression. The environment's internal investment has a major impact on financial success. They come to the conclusion that variations in environmental investment also affect the financial performance of Nigerian businesses.

According to Long et al. (2019), CSR in China is being investigated in the framework of the appeal of the government and market rivalry as an association with financial success. This relationship shows that CSR is absolutely positive and relevant in Chinese industries. Governmental interference also reduces the correlation between CSR and the financial success of the companies, and rivalry between organizations is a key factor in enhancing CSR investment by Chinese companies.

The phrase "financial technology," also spelt FinTech, Fin-Tech, or Fintech, is a coinage that combines the terms "finance" and "technology" and broadly refers to the mixing of contemporary, primarily Internet-based tools and techniques with long-standing business operations in the sector of financial services (like money borrowing and lending, transactions of banking). Fintech often refers to financial business visionaries who utilise Internet technologies and automated information processing (AIP) to take advantage of the approachability of ubiquitous communication. Compared to traditional financial services, these businesses' innovative business models have the potential for greater flexibility, opportunity, security, and efficiency (Lee, 2015).

The Financial Stability Board defines fintech as "significantly technology-driven financial innovation that may result in new economic systems, software, processes, or products with a substantial impact on financial markets and institutions, along with the provision of financial services" (FSB). The Basel Committee on Banking Supervision (BCBS) has adopted this term partly because "this broad interpretation is deemed appropriate given the current volatility of fintech developments."

The business has a responsibility to reflect how its actions and decisions will affect society, the community, and the environment through translucent and moral behavior that maintains social well-being and sustainable development, takes stakeholder anticipations into account, complies with applicable laws, and adheres to international norms of behavior. This responsibility is integrated throughout the organization (ISO 26000).

Concepts like "corporate social responsibility," or CSR, go by a lot of different names. Some examples of these are corporate responsibility, accountability, ethics in business, the "triple bottom line," and corporate stewardship or citizenship. More and more, "corporate sustainability" or "responsible competitiveness" describes how CSR is becoming an integral part of contemporary company operations.

It can be challenging to define and much harder to assess for financial stability. A financial system is formally considered stable when there isn't an excessive amount of volatility, stress, or crisis. This constrained definition, albeit quite simple to state, falls short of reflecting the beneficial effects that a sound financial system has on the functioning of the whole economy. A complex network of interrelated financial markets, infrastructures, and organisations operating under legal, fiscal, and accounting frameworks is considered by larger definitions of financial stability. While more abstract, these definitions encompass the macroeconomic aspect of financial stability and the financial-real sector links. Financial stability is "a situation in which the financial system, including financial intermediaries, markets, and market infrastructure, can withstand shocks and unwind financial imbalances, reducing the possibility of financial intermediation interruptions that seriously hinder the allocation of funds to profitable investment opportunities (ECB, 2007).

So, the main goal of this study is to analyze previous research that has focused on the influence of fintech on the financial stability of the banking sector as well as the mediating role played by CSR between fintech and the financial stability of the banking sector. The review awards the following contributions to the body of knowledge: Since it examines the research from a wide variety of general articles that were published in several fields, including financial technology, information technology, finance, accounting, economics, and management, these study first supplements presumed previous works on this issue. Second, this review mainly focuses on the key variables of fintech and, more importantly, the mediating effect of corporate social responsibility. This study enhances the reader's understanding of how fintech affects the financial stability of the banking sector.

The determination of this attempt is to carefully review the existing literature on fintech, the financial performance of the banking sector, and the mediating role of CSR by predominantly addressing the following research questions:

RQ1: Fintech is acknowledged as a crucial component of banking operations, particularly with regard to corporate social responsibility initiatives. The query about that is how fintech affects corporate social responsibility.
RQ2: The banking sector may now instantaneously connect with its customers because of CSR. Corporate entities are becoming increasingly aware of social initiatives. Is there any relationship between CSR and fintech?
RQ3: CSR is a business choice with sharp ends. Is it beneficial for the banking business, or can it affect the financial stability of the banking sector?
RQ4: CSR impacts fintech and corporate social responsibility also impacts banking financial stability. Is CSR impacting fintech and banking financial stability as a mediator?
The remaining contents of this paper are ordered as follows: In the subsequent part, I describe the methodology in detail used in this literature review. In Section Three, I describe in detail the results of existing studies. In Section 4, the results are summarized and critically debated. Finally, the conclusion and limitations of this study are disclosed as well, and directions for future research are suggested.

Methodology

This paper provides a literature review of the influence of fintech on the financial stability of the banking sector and also reviews the mediating effect of corporate social responsibility. For that purpose, the author selected the Google Scholar database for journal articles. Four different keywords are used for searching research articles, such as fintech, CSR, financial stability, and the banking sector. When the author applied the first keyword (fintech), the results showed 18,3000 articles within 0.03 seconds. When the author applied the second keyword (corporate social responsibility), the results showed 20,100 articles within 0.10 seconds.

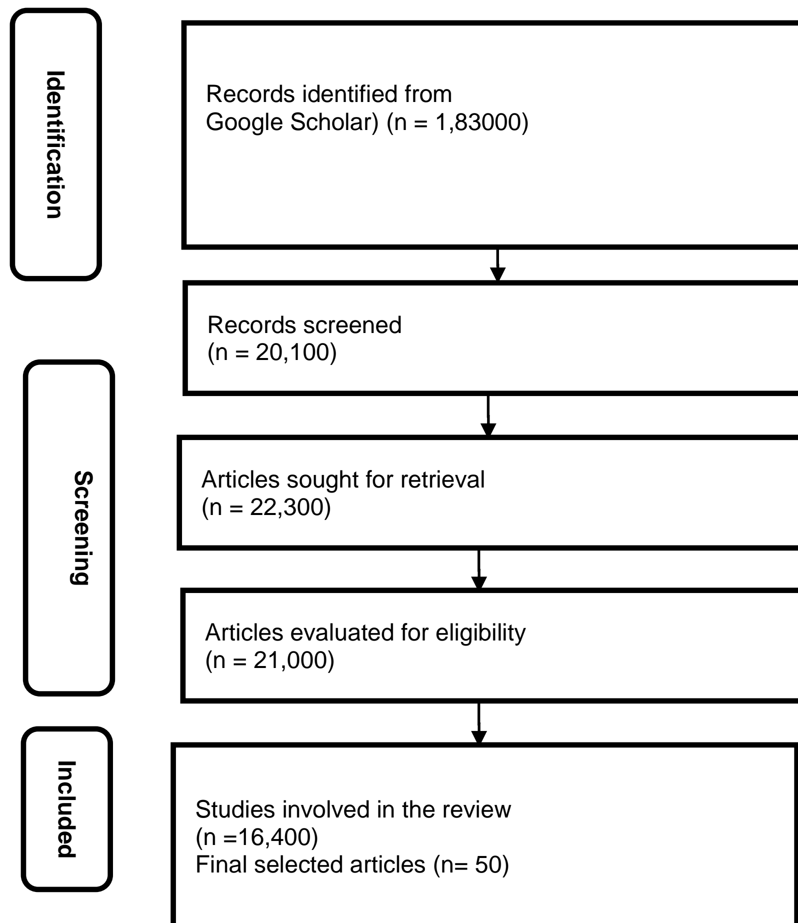
Similarly, the third keyword (financial stability) was applied, and the result showed 22,300 articles within 0.27 seconds. After that last keyword (banking sector) was applied, the result was reduced to 21,000 articles within 0.27 seconds. When all keywords are applied, the author chooses the time span from 2015 to 2022 and presses the search button, and the result shows 16,400 within 0.23 seconds. The author chose only 50 highly cited journal articles from 16,400 results. Book chapters, review papers, working papers, reports, editorials, conference papers, graduate theses, and preprints are excluded from this review. Articles that are considered suitable for evaluation after subjecting the articles to valuation procedures via the preferred reporting items for systematic reviews and meta-analysis (PRISMA) (David Moher, 2009).

This study covers research papers published from 2015 to 2022, a total of 7 years. A search turned up 50 papers that were found in 46 journals. The majority of the publications are published in finance-related journals, as can be seen in the table. The main academic journals used in this paper are the following:

Serial	Academic journals	No. of paper	Percentage
1	International Journal of Law and Management	1	
2	Asia-Pacific Journal of Information Systems	1	
3	The European Journal of Finance	1	
4	Marketing and innovation	1	
5	European Business Organisation Law Review	1	
6	Review of Corporate Finance	1	
7	Heliyon	1	
8	Qualitative Research in Financial Markets	2	
9	VierteljahrsheftezurWirtschaftsforschung	1	
10	Foundations of management	1	
11	Economics of Agriculture,	1	
12	Saudi Journal of Economics and Finance	2	
13	International Journal of Economics and Business Administration	1	
14	Economic Research	1	
15	Small Business Economics	1	
16	Emerging Markets Review	1	
17	Journal of Financial Stability	1	
18	Journal of Economics and Business	1	
19	Executive Journal	1	

20	Business horizons	1	
21	European Research Studies Journal	1	
22	Northwestern Journal of International Law & Business	1	
23	Financial Innovation	1	
24	Foundations of management	1	
25	International Journal of Banking, Finance and Insurance Technologies	1	
26	International Journal of Law and Management	1	
27	International Journal of Multicultural and Multireligious Understanding	1	
28	International Review of Economics and Finance	1	
29	Journal of Central Banking Theory and Practice	1	
30	Journal of Economic Cooperation and Development	1	
31	Journal of Economics and Business	1	
32	Journal of International Money and Finance	1	
33	Journal of Open Innovation: Technology, Market, and Complexity	1	
34	Journal of Risk and Financial Management	1	
35	Marketing and Management of Innovations	1	
36	World Scientific News	1	
37	Opportunities and Risks for the Financial Industry in the Digital Age	1	
38	Risks	1	
39	Sustainability, Digital Transformation and Fintech	1	
40	Sustainability	2	
41	Environmental Science and Pollution Research	2	
42	International Journal of Entrepreneurial Behavior & Research	1	
43	Technological Forecasting and Social Change	1	
44	Public Finance Quarterly	1	
45	Research in International Business and Finance	1	
46	Managerial Finance	1	

Prisma flow chart



Source: (David Moher, 2009)

Results

Corporate Social Responsibility and Fintech

The connection between CSR and fintech has been the subject of a great deal of research. This study carries out its social responsibility purpose while providing fintech business owners with high-growth areas (Loo, 2019). Drawing on information gathered from Chinese banks between 2009 and 2018, this research looks at the correlations between CSP and banking performance, both linear and non-linear. The findings suggest that the interaction CSR variable has little bearing on the dependent variable's returns on assets, nominal interest margin profit, and returns on equity. Additionally, ROA and ROE are highly favourably influenced by another CSR variable. The governance sharing scores exhibit a minimal effect on ROA and ROE, as indicated by their squared values. The study's non-linear and linear models indicate that fintech has a favourable and significant positive impact on ROE and NIMP, while its effect on ROA is insignificant (Liu et al., 2021).

Using the KBW and Nasdaq fintech indices, in addition to the Nasdaq Insurance Index, and other economic-financial variables, Merello et al. (2022) compiled a panel of 95 organisations covering the years 2010–2019. The panel also included information about green certificates and

sustainability indices. The method that was used was based on dynamic (GMM-SYS) and static (PCSE) panel data models. Their research shows that fintech company market value is positively affected by factors such as CSR report publication, firm size, board makeup, and ranking in the CSR RepTrak.

Similarly, one more study defines the relationship between CSR and fintech. The findings demonstrate that to be financially successful, projects must co-create with their investors, invite feedback, and engage in CSR activities that affect governance, consumers, and staff. These CSR initiatives include following legal requirements, defending consumer rights by giving appropriate information and implementing collaborator-focused policies. It appears that financial success may also be attained if the crowd funding initiative concentrates on socially conscious behaviours like those that promote the environment and societal well-being rather than the employee-centric aspect of CSR (Mastrangelo et al., 2020).

Corporate Social Responsibility and Financial Stability

The impact of CSR on the financial stability of the banking sector constitutes the second research question. Research has examined the connection between corporate social responsibility and financial stability. A study analysed the effects of CSR on the financial performance, stability, and inclusion within the banking sector from 2008 to 2017. The findings indicate that CSR, in conjunction with size and age, positively influences all three metrics. The physical characteristics of assets negatively correlate with financial inclusion, while elevated borrowing levels undermine both financial stability and inclusion (Ramzan et al., 2021).

This research examines CSR disclosures' financial effect on Pakistan's Islamic banking business. The sample companies' financial performance was negatively correlated (Zia Ur Rehman, 2020). CSR is essential for company profit and sustainable economic development, yet many companies have other financial obligations. CSR impacts financial performance. To study CSR and CFP moderating effects, ownership structure is divided into concentration, balance, and type. Ownership concentration diminishes CSR's positive effect on CFP, whereas ownership balance increases it. SOEs promote CFP less than non-SOEs. Middle and Western China promote CFP more than Eastern China, according to heterogeneity testing. Technology- and labour-intensive firms have the same impact. They inform CSR management and CFP improvement theory and practice. Companies should optimise ownership and CSR for better CFP (Ang et al., 2022).

The core principles of ethical Islamic banking have close links to monetary stability and CSR within the broader context of business, according to another research. Fintech has provided the Islamic banking sector with the much-needed boost it needs to compete on an equal level with its conventional counterpart and showcase its principles. A rapid, trustworthy, and long-term solution has been sought by the financial sector via open innovation, according to the study's findings (M. R. Rabbani et al., 2021), while the social and open innovation sectors have been presented with an opportunity for expansion by the COVID-19 pandemic.

Another study demonstrates that corporate social responsibility is important, vital, and economically beneficial, and reduces financial risks for businesses during times of crisis. It is also remarkably important during times of stability. Based on this, a different strategy for managing financial risk is created, one that increases the management's efficacy during economic crises like the COVID-19 crisis by incorporating the SDGs into company plans and demonstrating a high level of social responsibility (Alexey et al., 2022).

Fintech and Corporate Social Responsibility

How fintech affects CSR is the focus of this section of the research. This research empirically explores the influence of the growth of digital finance on CSR in various regions of China, as well as the processes by which it does so. The literature offers some evidence in current studies about this connection. Evidence from this study shows that digital business is helping to advance CSR, and that digital finance is helping to advance CSR by improving and lowering the cost of debt financing. Private companies have a larger role in the positive correlation between CSR and digital finance, according to further research. However, in areas where the market is more unstable, the effect is more pronounced. The aforementioned statistics suggest that the expansion of digital banking will significantly improve CSR standards (Zhang et al., 2022).

In another study, the findings demonstrate a favourable relationship between the CSR of industries that produce large amounts of pollution and digital finance. The mechanism test demonstrates that digital finance successfully reduces information irregularities in the financial market and makes it straightforward for businesses to contact the financial market, which then enables them to invest more money in corporate social responsibility. Furthermore, they also discovered that the effects of digital finance on various types of firms' performance in terms of corporate social responsibility are varied. Smaller businesses, those based in China's eastern provinces, those with a strong concentration of ownership, and those with high rates of marketization will all benefit more (Xin et al., 2022). Researchers, journalists, and legislators have focused on the fast growth of digital technology, but its effects on corporate social responsibility (CSR) are uncertain. This study examines how digital technologies affect CSR for listed Chinese enterprises from 2009 to 2019. They found that digital transformation boosts CSR. Digital technology improves pollution management and internal control efficiency, enhancing CSR performance, according to mechanistic study. The aforesaid promotion impact is stronger cross-sectionally in enterprises with fewer finance restrictions and more regulatory pressure. Overall, this study illuminates digital corporations' social responsibility (Kong, D., & Liu, B. (2023).

Fintech CSR and Financial Stability

The results show that fintech diminishes banks' financial stability but increases their CSR participation. Fintech moderates the CSR-financial stability link, according to the research. The financial stability impact of CSR is positively moderated. Fintech and CSR reinforce one other to improve bank financial stability, according to robustness research. Thus, fintech might boost bank financial stability by encouraging community and product accountability (Mahdi et al., 2023).

According to Wu et al. (2022), the financial system is changing due to the fintech industry's fast expansion, but how will this affect financial efficiency? The findings indicate that the growth of fintech and financial efficiency are related in a nonlinear U-shape. Fintech has a more pronounced effect on financial proficiency in regions with better financial autonomy. The research recommends that, for the time being, we aggressively embrace fintech, continue to deepen the integration of technology and finance, support development in financial efficiency, and strengthen local governments' advantageous roles in technological innovation. In another study Vučinić (2020), consumer habits and expectations have evolved as a result of fintech, and more customers now anticipate quick and simple services. The study demonstrates that while new technology allows for the expansion of financial services, it also increases the micro- and macro-financial risks to the financial system.

The influence of financial technology on the stock market has attracted more academic attention in recent years. To further the topic, this paper researches the potential effects of FinTech expansion on CSR and the danger of stock market crashes in a new financial sector. Researchers in Vietnam used the fixed-effect and System GMM estimation techniques to study 662 companies listed on the stock market between 2011 and 2020. They found that the growth of FinTech increased the likelihood of stock price crashes. Corporate social responsibility disclosures may mitigate this impact. Also, they prove that small businesses' CSR disclosure is becoming more important and that the advent of FinTech raises the collapse risk. According to Nguyen and Dang (2023), the findings have significant ramifications for shareholders, investors, and regulators in terms of management and investment.

This study examines the association between female board representation and financial success using data from Chinese fintech businesses that use cutting-edge technology. Regression analyses by SPSS v26 were performed to examine the study hypotheses utilising fintech businesses listed on the Shanghai and Shenzen Stock Exchange from 2010 to 2019. According to the statistics, the Blau index negatively impacts Tobin's Q, showing that gender diversity hurts Chinese businesses. Corporate social responsibility (CSR) also moderates Tobin's Q positively, meaning that CSR turns a negative into a positive. Diversity on the board helps increase oversight and monitoring, and female directors can participate in CSR initiatives that boost performance. A study on gender diversity found that women on boards improve business performance and that CSR moderates the connection between female board membership and financial success (Ghafoor et al., 2022).

These fintech services (cyber security, blockchain, and cyber security), according to the results of this study, are seeing a surge in private investment, which raises the assets of Islamic banks. Islamic banking makes use of the ongoing advancements in technology by just integrating better methods and applications that protect clients' digital security and make digital transactions simple to access (Dr Kavita Panjwani, 2020). The COVID-19 pandemic has prompted the expectation of an increase in digital fintech-based activities. The post-COVID recovery will be greatly aided by Islamic Fintech and the adoption of Fintech by Islamic finance customers (Hassan et al., 2020).

The evolution of traditional finance has been accelerated by advancements in information technology. For businesses to adapt in a sustainable way, digital finance needs to maximise the allocation of credit resources. The impact of digital banking on this procedure, if any, remains unknown. This study investigates the relationship between digital finance and green business innovation as well as corporate sustainability performance using a two-way fixed effects model and a mediating effects model. What this research implies is that: (i) digital finance could hinder business sustainability at first, but it can ultimately help it thrive. (ii) By reducing financial volatility and enhancing long-term performance growth, digital finance enhances sustainability. Companies in cities with a lower GDP per capita, smaller organisations, and non-state-owned enterprises all benefited more from digital finance in terms of sustainability performance. According to these results, China may increase its chances of long-term development by speeding up the digitisation of its financial markets (Hu et al., 2023).

Fintech and financial development are positively correlated. The results show that fintech helps Chinese banks increase their depth (deposits), access (loans), and savings capacity. According to Tadiwanashe et al. (2022), they further show how fintech's arrival in Regtech might improve financial development outcomes significantly.

The US stock market, there were not many differences between fintech and non-fintech companies. The results were a surprise, given how quickly the fintech industry has grown and how quickly financial innovations have changed. This has created big risks that don't seem to be covered by the market- and firm-specific data sets that were looked at. Results of the study show that there is a big hole in the national and international regulatory framework that needs to be filled for fintech to continue to be well governed and develop in the right way, even though growth prospects are very high (Lucía Morales, 2022).

Only environmental measures hurt banks' CSR scores. Social and political factors did not affect this variable. The authors also argue that financial stability, especially capital adequacy and liquidity risk management, greatly affects bank financial performance. CSR and social, governance, and environmental CSR's impacts on bank financial performance are experimentally examined, using financial stability as a moderator. In a 2010–2018 sample of 23 French banks, overall CSR score negatively impacted bank performance. Unlike most previous research, this analysis illustrates how financial stability moderates CSR disclosure benefits (Saadaoui & Salah, 2023).

The QISMUT+3 countries' (Bahrain, Indonesia, Saudi Arabia, Malaysia, United Arab Emirates, Turkey, Pakistan, and Kuwait) social and governmental responsibility (SGR) factors that contribute to their financial stability. Each commercial bank and Islamic bank separately test the model, in addition to the whole sample. We use panel data at the bank level across countries from 2011 to 2018. Three models were used to test robustness: feasible generalised least squares, two-step system generalised methods of moments, and panel-corrected standard error. Regardless of the kind of bank, the two most important variables impacting banking profitability in the sample are capital adequacy and corruption control. Profitability, efficient management, inflation, and government performance were among factors that drove financial susceptibility risk (Kanapiyanova et al., 2023).

To monitor the expansion of the whole fintech industry and its four subsectors—services for credit, deposits, and capital-raising; services for disbursement, clearing, and settlement; services for investment management; and services for market support—fintech industry development indices are created using data collected from fintech enterprises. The findings reveal that commercial banks controlled by the state are the least efficient in terms of cost and technology. Banks are able to improve their technical capabilities and cost-effectiveness by taking fintech development into account. This two-pronged benefit is especially noteworthy for enhancements to market support services (Chi at al., 2021).

Defendants had a strong interest in Islamic finance and Islamic fintech, especially during and after COVID-19, and they held the opinion that Islamic banks shouldn't be viewed as profit-oriented businesses. Instead, their contribution to society goes well beyond maximising profits. The respondents identified a number of reasons to concentrate on initiatives that encourage sustainable development, community involvement, and national poverty reduction. According to the report, Islamic banks must implement Islamic fintech and financial innovation methods to match society's social objectives. In addition, the COVID-19 crisis made it easier for societies to integrate Islamic fintech into the Islamic banking system (Sitara Karim, 2022).

Many institutions work with startup businesses that provide technologically innovative and financial services packages to address the complications of digitalization. The author demonstrates that when banks follow a clear digital approach and hire a chief digital officer, they considerably

increase their likelihood of forming partnerships with fintech's. Additionally, in keeping with imperfect contract theory, they discover that banks typically form product-related partnerships with larger fintechs while investing more frequently in smaller fintechs (Hornuf et al., 2021). The effects of financial technology on Saudi Arabia's economic sector and the relationship between publicly listed financial companies' boards of directors and their performance have been the subject of another research. Independent directors, larger boards, more experienced directors, board meeting attendance, and Fintech all have significant correlations with company profitability, according to the results. According to further studies, this research found a strong relationship between performance and the score of the board of directors. Additionally, the research found that the relationship between the (BOD) performance and business outcomes was unaffected by Fintech (Panjwani & Shili, 2020).

There is uncertainty about the effect of digital finance on green investment, although it may alleviate organisations' funding constraints. Further trials demonstrate that businesses' financial investment is boosted by digital finance, leading to a decline in green investment. This limiting influence differs according to the location of the firm, the sector, and the application of the new Environmental Protection Law. Offering new perspectives, this research demonstrates how digital finance damages corporate green environments. According to Jiang et al. (2022), it is also recommended to improve regulations and guidelines for digital finance, reduce monopolies in the financial industry, and create environmentally diverse policies. The expansion of digital finance has an effect on CSR initiatives in different regions of China, say Zhang et al. (2022). Reducing the costs of debt financing and boosting corporate social responsibility are two ways digital finance helps promote CSR. Research shows that private enterprises get the most out of CSR and digital finance. In markets that aren't doing well, the effect is worse. The aforementioned studies imply that CSR is enhanced by the growth of digital money.

Whether fintech worsens the precarious financial situation of banks is an open question. This research leverages the advent of fintech regulatory frameworks as an economic shock to examine the varied implications of fintech on the fragility of financial institutions. It employs a panel of listed banks from 84 different countries. First, they discover that, after accounting for market considerations, the fragility of financial institutions is unaffected by a shock to fintech developments. Second, they discover that the promotion of fintech in developing financial markets has an effect on the fragility of banking institutions, either making them stronger or weaker. and last, affects the stability of financial institutions via the profitability pathway (Fung et al., 2020). With the advancement of digital finance, people are increasingly able to invest tiny sums of money because of basic technologies like those mentioned below that make client acquisition expenses manageable. This offers fresh money to fund the SDGs, potentially when billions more individuals enter the financial system and have the ability to invest in broader social goals (Arner et al., 2020). There have been more recent developments, such as digital platform creation and the integration of AI with massive amounts of data. According to our theory, new communication channels may cause the previous bank business model to become vertically and horizontally dissolved (Boot et al., 2021). The first point is that there should be regulation of all financial activities. Many financial operations that do not fit within the conventional categories of financial institutions are frequently excluded from regulation under the industry-specific approach. Fintech and shadow banking were highly significant new financial operations in China, yet they were either uncontrolled or inadequately regulated. Financial activities need to be tightly controlled since financial risks frequently alter swiftly, magnifying their effects on the whole economy (Hua & Huang, 2021).

Research shows fintech increases banks' risk-taking. The heterogeneity research also demonstrates that larger, less efficient, shadow banking, and higher-interest banks are more vulnerable to fintech's impact on asset quality deterioration. Fintech increases and then decreases banks' risk-taking in a U-shaped relationship. Different banks respond differently to the U-shaped effect depending on ownership. City, rural, and international banks respond more sensitively than state- and jointly-owned banks (Wang et al., 2021).

Sustainability reports from listed banks in Indonesia are influenced by ownership structure and corporate governance (CG). Additional topics covered in the article include transparency in sustainability reports. Balanced panel data with 155 observations spanning 2012–2016 is analyzed using panel data regression.The findings demonstrate that listed banks in Indonesia still do not provide sustainability reports. Improved sustainability reporting is a result of CG, foreign, and family ownership. The effect of CG is diminished by family ownership, but it is unaffected by foreign ownership. According to Amidjaya and Widagdo (2020), neither the OJK sustainable finance roadmap nor digital banking have any effect on the intention of banks to report on sustainability.
The research shows that traditional financial intermediaries can't compete with the new offerings made possible by FinTech. It is becoming more difficult to prove that FinTech companies are operating illegally, and evidence suggests that their capacity to evade financial rules and regulations is growing. Banks and FinTech companies' main interactions are examined by the writers. According to Zveryakov et al., 2019) the engagement of banks in the creation of FinTech enterprises is backed by basic ideas.

Fintech first strengthens banks and then weakens them, according to Wang (2021) study on the willingness to take risks between fintech and banks. Effective fintech may have a greater impact on the deterioration of asset quality at bigger, less efficient, and more involved shadow banks, the study found. In the midst of the COVID-19 epidemic, environmental and social (ES) initiatives have an impact on world financial stability. Using data from 244 commercial banks across 52 countries between 2002 and 2020, they demonstrate that throughout the global health crisis, banks with bigger ES activities were more financially secure, with fewer exposures to credit and liquidity risk. They use theories of social capital and stakeholders to conclude that ES initiatives increase stakeholder trust and confidence in risk supervision by strengthening stakeholder-centered bank cultures and increasing firm-level social capital. In times of short-term market volatility, excessive risk-taking by banks is curbed by ES operations. Investors value ES activities' advantages, according to our further research. Li et al. (2023) found that in order for banks to stay afloat financially, stakeholder-centered cultures and social capital development are becoming more important. There is a strong correlation between fintech company performance and the independence, size, experience, and meetings of the board. This study discovered a strong correlation between the BOD scores and performance. Additionally, this research demonstrated that Fintech had no effect on the correlation between company success and the board of directors' score (Al-Matari et al., 2022). Fintech companies are not singled out by legislation in most countries; rather, traditional service providers and fintech operators face similar rules, according to the study's authors. According to them, fintech companies do not require specific laws since all of a tech company's activities are already subject to those laws and regulations. This is especially true when it comes to the goods and services offered as investments, insurance, and payment processing (Rupeika-Apog & Thalassinos, 2020).

Discussion

Financial technologies are expected to play a substantial role in the financial services sector and are recognized as innovation drivers in the financial services sector. Electronic transformation and technological developments have allowed many banking businesses to efficiently and affordably meet their customers' demands. Since fintech businesses are said to be growing faster, making more money, and having a higher chance of success, traditional banks are said to need to innovate at the same rate to stay competitive. More and more, people believe that in order for banks to stay in business and compete in the long run, they need to adopt cutting-edge technology. The first limitation of this study is that it only uses the Google Scholar database for articles. Second, only general articles are taken into account; this evaluation does not take into account book chapters, review papers, working papers, reports, editorials, conference papers, graduate theses, or preprints. Thirdly, only seven years are taken from 2015 to 2022 for this review. Fourth, just four keywords are employed, which might not be sufficient. Fifth, specific financial technology-related factors are the subject of this study. Sixth, choose only a specific banking sector for this review, which might not be satisfactory.

Conclusion

This study reveals a mixed pattern of outcomes because many studies reveal that the financial technology and banking sectors have positive and significant results because the contribution of financial technology boosts their operations in many ways, like lending and borrowing, wealth management, asset management, insurance, and many other activities that commercial banks perform. On the other hand, various studies have found a negative and insignificant relationship between fintech and financial stability. Because of that, there are some factors like risk and government laws and regulations that do not have enough management. Financial technology and corporate social responsibility have a positive impact on each other. There are some limitations associated with this study, such as the fact that it only uses the Google Scholar database for articles, and this evaluation does not take into account book chapters, review papers, working papers, reports, editorials, conference papers, graduate theses, or preprints. Just eight years are to be taken for study from 2015 to 2023, and specific financial technology-related and related factors are the subject of this study, which might not be satisfactory.

References

1. Aaker, D. A., & Keller, K. L. (1990). Consumer evaluations of brand extensions. *Journal of Marketing, 54*(1), 27–41.
2. Al-Matari, E. M., Mgammal, M. H., Alosaimi, M. H., Alruwaili, T. F., & Al-Bogami, S. (2022). Fintech, board of directors, and corporate performance in the Saudi Arabian financial sector: an empirical study. *Sustainability, 14*(17), 10750.
3. Alexey S. Kharlanov, Y. V. B., Teimuraz A. Kemkhashvili, and Natalia G. Sapozhnikova. (2022). The Case Experience of Integrating the SDGs into Corporate Strategies for Financial Risk Management Based on Social Responsibility (with the Example of Russian TNCs). *Risks*, 01-12.
4. Asghar, M. M., Arshad, Z., Yousaf, S., e Ali, M. S., & Tariq, M. (2024). Environmental Degradation in BRI Countries: Navigating the Role of Natural Resources, Green Energy and Green Finance. *Pakistan Journal of Humanities and Social Sciences*, *12*(3), 2705-2716.
5. Asghar, M. M., Safdar, R., Zubair, M., & Hanif, M. (2024). Exploring the Influence of Financial Development, Institutional Quality and Trade Openness on Inclusive Growth in SAARC Countries. *Pakistan Journal of Humanities and Social Sciences*, *12*(2), 1450-1461.
6. Ang, R., Shao, Z., Liu, C., Yang, C., & Zheng, Q. (2022). The relationship between CSR and financial performance and the moderating effect of ownership structure: Evidence from

Chinese heavily polluting listed enterprises. *Sustainable Production and Consumption*, *30*, 117-129.
7. Arner, D. W., Buckley, R. P., Zetzsche, D. A., & Veidt, R. (2020). Sustainability, FinTech, and financial inclusion. *European Business Organisation Law Review, 21*(1), 7–35.
8. Azar, P. D., Baughman, G., Carapella, F., Gerszten, J., Lubis, A., Perez-Sangimino, J. P., ... & Rappoport W, D. E. (2022). The financial stability implications of digital assets. *FRB of New York Staff Report*, (1034).
9. Boot, A., Hoffmann, P., Laeven, L., & Ratnovski, L. (2021). Fintech: what's old, what's new? *Journal of Financial Stability, 53*, 100836.
10. Brandl, B., & Hornuf, L. (2020). Where did FinTechs come from, and where do they go? The transformation of the financial industry in Germany after digitalization. *Frontiers in Artificial Intelligence, 3*, 8.
11. Breidbach, C. F., Keating, B. W., & Lim, C. (2020). Fintech: research directions to explore the digital transformation of financial service systems. *Journal of Service Theory and Practice, 30*(1), 79–102.
12. Chen, X., You, X., & Chang, V. (2021). FinTech and commercial banks' performance in China: a leap forward or survival of the fittest? *Technological Forecasting and Social Change, 166*, 120645.
13. Chi-Chuan Lee, X. L. B., Chin-Hsien Yu, and Jinsong Zhao. (2021). Does fintech innovation improve bank efficiency? Evidence from China's banking industry. *International Review of Economics & Finance*, 468–483.
14. Choi, H., Jung, Y., & Choi, Y. (2019). Understanding of the fintech phenomenon in the beholder's eyes in South Korea. *Asia Pacific Journal of Information Systems, 29*(1), 117-143.
15. David Moher, A. L., Jennifer Tetzlaff, and Douglas G. Altman. (2009). Preferred reporting items for systematic reviews and meta-analyses: the PRISMA statement. *British Medical Journal*, 332–336.
16. Dr. Kavita Panjwani, D. N. S. (2020). The Impact of Fintech on the Development of the Islamic Banking Sector in the Contemporary World. *Saudi Journal of Economics and Finance*, 346-350.
17. Fung, D. W., Lee, W. Y., Yeh, J. J., & Yuen, F. L. (2020). Friend or foe: The divergent effects of FinTech on financial stability. *Emerging Markets Review, 45*, 100727.
18. Gai, K., Qiu, M., & Sun, X. (2018). A survey on FinTech. *Journal of Network and Computer Applications, 103*, 262-273.
19. Ghafoor, S., Duffour, K. A., Khan, U. F., & Khan, M. K. (2022). Social wellbeing, board-gender diversity, and financial performance: evidence from Chinese Fintech companies. *Frontiers in Psychology*, *13*, 862897.
20. Hassan, M. K., Rabbani, M. R., & Ali, M. A. M. (2020). Challenges for Islamic Finance and Banking in the Post-COVID Era and the Role of Fintech. *Journal of Economic Cooperation and Development, 41*(3), 93–116.
21. Hornuf, L., Klus, M. F., Lohwasser, T. S., & Schwienbacher, A. (2021). How do banks interact with fintech startups? *Small Business Economics, 57*(3), 1505–1526.
22. Hua, X., & Huang, Y. (2021). Understanding China's fintech sector: development, impacts, and risks. *The European Journal of Finance, 27*(4-5), 321-333.
23. Hu, S., Zhu, Q., Zhao, X., & Xu, Z. (2023). Digital Finance and Corporate Sustainability Performance: Promoting or Restricting? Evidence from China's Listed Companies. *Sustainability*, *15*(13), 9855.

24. Jiang, Y., Guo, C., & Wu, Y. (2022). Does digital finance improve the green investment of Chinese listed heavily polluting companies? The perspective of corporate financialization. *Environmental Science and Pollution Research*, *29*(47), 71047-71063.
25. Kanapiyanova, K., Faizulayev, A., Ruzanov, R., Ejdys, J., Kulumbetova, D., & Elbadri, M. (2023). Does social and governmental responsibility matter for financial stability and bank profitability? Evidence from commercial and Islamic banks. *Journal of Islamic Accounting and Business Research*, *14*(3), 451-472.
26. Karim, S., Rabbani, M. R., Rashid, M., & Anwer, Z. (2022). COVID-19 Challenges and the Role of Islamic Fintech. In *FinTech in Islamic Financial Institutions: Scope, Challenges, and Implications in Islamic Finance* (pp. 341-356). Cham: Springer International Publishing.
27. Kong, D., & Liu, B. (2023). Digital technology and corporate social responsibility: evidence from China. *Emerging Markets Finance and Trade*, *59*(9), 2967-2993.
28. Knewtson, H. S., & Rosenbaum, Z. A. (2020). Towards understanding FinTech and its industry. *Managerial Finance, 46*(8), 1043–1060.
29. Li, T., Trinh, V. Q., & Elnahass, M. (2023). Drivers of global banking stability in times of crisis: the role of corporate social responsibility. *British Journal of Management*, *34*(2), 595-622.
30. Liu, Y., Saleem, S., Shabbir, R., Shabbir, M. S., Irshad, A., & Khan, S. (2021). The relationship between corporate social responsibility and financial performance: A moderate role of fintech technology. *Environmental Science and Pollution Research, 28*, 20174-20187.
31. Loo, M. K. L. (2019). Enhancing financial inclusion in ASEAN: Identifying the best growth markets for fintech. *Journal of Risk and Financial Management* 01–21
32. Lucía Morales, G. G., and Daniel Rajmil. (2022). Emerging Risks in the FinTech Industry: Insights from Data Science and Financial Econometrics Analysis. *Economics, Management, and Financial Markets*, 09-36.
33. M. R. Rabbani, A. B., N. Nawaz, S. Karim, M. A. M. Ali, H. U. Rahiman, et al. (2021). Exploring the role of Islamic fintech in combating the aftershocks of COVID-19: The open social innovation of the Islamic financial system. *Journal of Open Innovation: Technology, Market, and Complexity*, 01–36.
34. Martínez-Vergara, S. J., & Valls-Pasola, J. (2021). Clarifying the disruptive innovation puzzle: a critical review. *European Journal of Innovation Management*, *24*(3), 893-918.
35. Mastrangelo, L., Cruz-Ros, S., & Miquel-Romero, M.-J. (2020). Crowdfunding success: the role of co-creation, feedback, and corporate social responsibility. *International Journal of Entrepreneurial Behaviour & Research, 26*(3), 449–466.
36. Merello, P., Barberá, A., & De la Poza, E. (2022). Is the sustainability profile of fintech companies a key driver of their value? *Technological Forecasting and Social Change, 174*, 121290.
37. Nguyen, Q. K., & Dang, V. C. (2023). The impact of FinTech development on stock price crash risk and the role of corporate social responsibility: Evidence from Vietnam. *Business Strategy & Development*, *6*(4), 557-570.
38. Panjwani, D., & Shili, D. (2020). The Impact of Fintech on the Development of the Islamic Banking Sector in the Contemporary World. *Saudi Journal of Economics and Finance, 4*(7), 346-350.
39. Rupeika-Apoga, R., & Thalassinos, E. I. (2020). Ideas for a regulatory definition of FinTech.Saadaoui, A., & Ben Salah, O. (2023). The moderating effect of financial stability on the CSR and bank performance. *EuroMed Journal of Business*, *18*(4), 621-642.

40. Salah Mahdi, I. B., Bouaziz, M., & Boujelbène Abbes, M. (2023). The moderating effect of fintech on the relationship between CSR and banks' financial stability: Baron and Kenny's approach analysis. *EuroMed Journal of Business*.
41. Shabbir, M. S., Aslam, E., Irshad, A., Bilal, K., Aziz, S., Abbasi, B. A., & Zia, S. (2020). Nexus between corporate social responsibility and financial and non-financial sectors' performance: a non-linear and disaggregated approach. *Environmental Science and Pollution Research, 27*, 39164-39179.
42. Shabbir, M. S., & Wisdom, O. (2020). The relationship between corporate social responsibility, environmental investments and financial performance: evidence from manufacturing companies. *Environmental Science and Pollution Research, 27*, 39946-39957.
43. Sibt-e-Ali, M., Weimin, Z., Javaid, M. Q., & Khan, M. K. (2023). How natural resources depletion, technological innovation, and globalization impact the environmental degradation in East and South Asian regions. *Environmental Science and Pollution Research*, *30*(37), 87768-87782.
44. Ji, D., Sibt-e-Ali, M., Amin, A., & Ayub, B. (2023). The determinants of carbon emissions in Belt and Road Initiative countries: analyzing the interactive role of information and communication technologies. *Environmental Science and Pollution Research*, *30*(46), 103198-103211.
45. Ameer, W., Ali, M. S. E., Farooq, F., Ayub, B., & Waqas, M. (2024). Renewable energy electricity, environmental taxes, and sustainable development: empirical evidence from E7 economies. *Environmental Science and Pollution Research*, *31*(34), 46178-46193.
46. Sitara Karim a, M. A. N. b., c,, Emad Eddin Abaji. (2022). Is Islamic FinTech coherent with Islamic banking? A stakeholder's perspective during COVID-19. *Heliyon*, 01-06.
47. Tadiwanashe Muganyi, L. Y., Yingkai Yin, Huaping Sun, Xiangbin Gong, Farhad Taghizadeh-Hesary. (2022). Fintech, regtech, and financial development: evidence from China. *Financial innovation* 01-20.
48. Thakor, A. V. (2020). Fintech and banking: What do we know? *Journal of Financial Intermediation, 41*, 100833.
49. Vučinić, M. (2020). Fintech and Financial Stability Potential Influence of FinTech on Financial Stability, Risks, and Benefits. *Journal of Central Banking Theory and Practice*, 43–66.
50. Wang, R., Liu, J., & Luo, H. (2021). Fintech development and bank risk-taking in China. *The European Journal of Finance, 27*(4-5), 397–418.
51. X. Y. Zhang, X. Y. Y. a. W. Y. (2022). Digital Finance and Corporate Social Responsibility. 1-30.
52. Xin, D., Yi, Y., & Du, J. (2022). Does digital finance promote the corporate social responsibility of pollution-intensive industries? Evidence from Chinese-listed companies. *Environmental Science and Pollution Research, 29*(56), 85143–85159.
53. Y. H. Wu, L. B. a. X. C. (2022). How does the development of fintech affect financial efficiency? Evidence from China. *Economic Research-Ekonomska Istraživanja*, 1-19.
54. Zia Ur Rehman, M. Z., Haseeb Ur Rahman, Muhammad Asif, Majed Alharthi, Muhammad Irfan, and Adam Glowacz. (2020). Do corporate social responsibility disclosures improve financial performance? A Perspective of the Islamic Banking Industry in Pakistan*'s Sustainability*, 297–320
55. Zhang, X. Y., Yang, X. Y., & Yan, W. (2022). Digital finance and corporate social responsibility.

56. Zveryakov, M., Kovalenko, V., Sheludko, S., & Sharah, E. (2019). FinTech sector and banking business: competition or symbiosis? *Економічний часопис-XXI, 175*(1-2), 53-57.