



Corporate Social Responsibility and Bank's Performance under the Mediating Role of Customer Satisfaction and Bank Reputation

Kim Quoc Trung Nguyen ^{1*}

¹ *University of Finance – Marketing, Ho Chi Minh City 700,000, Vietnam.*

Abstract

This paper aims to examine the indirect linkage between corporate social responsibility (CSR) and firm performance via the effects of customer satisfaction and bank reputation. The study applies Structural Equation Modelling (SEM) to a sample of top managers, finance managers, chief accountants, and employees in Vietnamese state-owned commercial banks. The findings explore the statistically significant effect of CSR on bank performance under the mediating role of customer satisfaction and bank reputation, which are not concerned by previous studies. Because CSR activities assist banks in maintaining their reputation by complying with a long-term commitment to stakeholders' interests and providing valuable customer benefits to increase their satisfaction. So, the research results show that customer satisfaction and the bank's reputation promote a positive relationship between CSR and bank performance.

Keywords:

Bank's Performance; Vietnam
Bank Reputation; Customer Satisfaction;
Corporate Social Responsibility; CSR.

Article History:

Received: 13 May 2022
Revised: 19 August 2022
Accepted: 03 September 2022
Available online: 20 September 2022

1- Introduction

Banks consider corporate social responsibility (CSR) as a long-term strategy to create their values and build the trust and respect of customers, partners, in particular, and the social community in general. Designing a business strategy based on the concept of CSR creates an essential opportunity for differentiation as it considers the benefits of many stakeholders and is dedicated to achieving social goals and environmental protection [1]. CSR and enterprises' financial performance have been studied by many researchers. Those studies have concluded CSR's positive or negative impact on financial performance. Concretely, studies highlight the positive impact of CSR on financial performance [2–9]. Other studies show the reverse effect of CSR on financial performance, with even no relation between the two above factors [10, 11].

The collapse of Lehman Brothers and Goldman Sachs in 2008 and 2010, respectively, is the most prominent case in American history, and this failure has had a massive impact on the entire banking system in the US and threatened the world financial order. Their bankruptcy affects other financial institutions and seriously impacts the system's bank reputation, decreasing bank performance [12, 13]. These issues create a crisis shock wave in the global economy and negatively affect widespread investors' and customers' decisions. Thus, implementing CSR commitments is crucial to building its reputation and customer trust. Meanwhile, the lack of CSR in the banking industry can cause serious long-term consequences for the country's sustainable development, economy, and society.

Based on the perspective of CSR, the following studies have explored the effect of CSR on financial performance by using secondary data, such as [6, 8, 14–16]. While the study by Mahmood et al. (2021) uses primary data to demonstrate the CSR-bank performance relationship, it can be seen that CSR is considered a strategic management mechanism to improve the bank's financial performance [9].

* **CONTACT:** nkq.trung@ufm.edu.vn

DOI: <http://dx.doi.org/10.28991/ESJ-2022-06-06-012>

© 2022 by the authors. Licensee ESJ, Italy. This is an open access article under the terms and conditions of the Creative Commons Attribution (CC-BY) license (<https://creativecommons.org/licenses/by/4.0/>).

Considering the previous empirical studies, besides the direct relationship between CSR and the enterprise's performance, the author also discovers the effect of CSR on enterprise financial performance in the presence of moderating or mediating factors. In particular, Ali et al. demonstrate the mediating role of corporate image and customer satisfaction in boosting the relationship between CSR and financial performance at firms [17]. In the banking sector, green credit has moderated the impact of CSR on bank performance, which was mentioned in the study by Zhou et al. [8]. Both studies highlight the important role of moderating or mediating factors in different industry sectors. As mentioned above, the Lehman Brothers and Goldman Sachs cases have raised concerns about banks' reputations and stakeholders, especially customers. Thus, to get back to normal banking system operations, they must implement a CSR that aims to protect and improve the stakeholders' interests, such as customer satisfaction, and promote bank performance.

In Vietnam, according to the annual report of the State bank of Vietnam (SBV) in 2021, when the Coronavirus disease continued to spread and mutate, although commercial banks account for high profits, their operations prioritize creating value for society and sharing responsibility with their customers. It means that SBV and the banks have continued to accompany and support the enterprises in reducing their burden on paying interests. Therefore, existing work studies the effect of CSR on banks' performance by examining the mediating factors, including bank reputation and customer satisfaction. The research question is formulated as "Do customer satisfaction and bank reputation intervene in the relationship between CSR and the bank's performance in Vietnamese state-owned commercial banks?"

Following the introduction, the remainder of the paper is organized as follows: The afterward section includes a literature review and the development of hypotheses. The data and the research design are presented in the upcoming sections. The analysis and key findings from the empirical studies are described in the subsequent section. Finally, there is a summary of the findings and some limitations.

2- Literature Review and Hypothesis Development

2-1- Stakeholder Theory

Stakeholder theory is a concept that highlights the interconnection of a firm's various stakeholders, such as investors, customers, employees, and suppliers [18]. The theory emphasizes that an organization should create value for all stakeholders involved in its business decisions, not just its shareholders. The theory also states that managers must be accountable to the related parties to protect their interests [19, 20]. Because stakeholders are critical in CSR practices' success, enterprises should imply strategies that appropriately engage with critical stakeholders to improve business operations efficiency. Stakeholder theory states that the essence of an organization is to build relationships and enhance value for all of its stakeholders. Though the number of stakeholders varies depending on the industry and business model of a company, the most important stakeholders are typically employees, customers, communities, suppliers, and financiers (owners and investors). These stakeholders are equally important to the company, and there should be no trade-offs between them. Instead, executives must figure out how to bring these disparate interests together [21].

CSR is aligned with stakeholder theory to generate the most benefits in terms of societal development and create a motivated workforce, better company branding, more extensive sales, and profitability, and satisfied customers [22]. As a result, CSR is an integral part of corporate responsibility because it assists different parties in being successful. Besides, stakeholder theory to confirm the CSR benefits when the company ignores the CSR role [23]. Stakeholder theory and CSR highlight the importance of a company's responsibility to its communities and society. Stakeholder theory focuses on building relationships and value between businesses and their various stakeholders, whereas CSR affirms the benefits to society.

2-2- Too Big to Fail Theory

The term "too big to fail" is associated with organizations, the financial banking system, and large businesses that significantly influence the economy. This influence takes a serious note for government awareness about strengthening their positions. Stern and Feldman discussed this issue in government policy and bankruptcy context that base on this theory in a report on banks that are considered too big to fail [24]. So, governments have to establish a defense policy to avoid the bank system failures.

The recent financial crisis has demonstrated the systematic risks posed to the capital markets when financial firms sell products that fuel economic instability and inflict negative social consequences. By designating financial firms as "too big to fail," the federal government has implicitly acknowledged that certain financial institutions produce products that are so intertwined with society's economic stability that their failure must be avoided or managed to limit the negative consequences to financial markets and the economy. Because of the federal government's intervention to stabilize financial markets for certain institutions, the call for improved corporate social responsibility differs from previous movements to push a corporate social responsibility agenda. Because "too big to fail" financial firms have the economic power to influence society, they must be obliged to minimize harm to it.

Systemic risks have severe consequences for capital markets, as illustrated by the recent financial crisis. The federal government has implicitly acknowledged that certain financial institutions provide financial services that are so intertwined with society's economic stability that their failure must be avoided or managed to limit the adverse consequences for financial markets and investors. It emphasizes the institutions' improvement of corporate social responsibility under the federal government's intervention to stabilize financial markets for specific institutions. This means the financial firms that are "too big to fail" have the economic power to influence society, so they must be held liable for any harm they cause. In practice, the federal government implements an overarching policy that embraces CSR as a morally responsible efficiency and the correct business decision by requiring "too big to fail" institutions to engage in CSR strategies. Corporations have adopted a corporate social responsibility agenda in their corporate governance to consider the risks of financial products or services to communities and customers.

2-3- Corporate Social Responsibility

There are currently many definitions of CSR. First, McGuire defined CSR as an enterprise having economic obligations, law enforcement duties, and other responsibilities towards society [25]. These responsibilities must be extended to and beyond other duties and obligations. In addition, it is considered as the commitment of an enterprise to comply with business ethics, contribute to sustainable economic development, and improve the quality of life for employees and their families, in particular, local communities and society. Furthermore, under a legal requirement, CSR is like a mechanism to protect the interests of the related parties and their institutions [26].

Theoretically, "CSR means enterprises integrate social and environmental concerns into their operations and their responses to stakeholders voluntarily" [27]. Besides, from shareholders' perspective, CSR is to increase business profits. As a result, each enterprise must operate to generate economic benefits while adhering to legal regulations; it must also practice friendly policies that benefit its employees, society, community, customers, and the environment; respect ethical values; and donate a portion of its profits to charitable organizations. In a broader sense, CSR includes four elements: economic, legal, ethical, and charitable responsibility [28, 29]. Those elements are summarized as (1) economic responsibility: a business has an obligation to make a profit, provide jobs, and create products that satisfy customer demand. (2) Legal responsibility: The business must comply with local, national, and international laws and regulations during its operation. (3) Ethical responsibility: The business has a responsibility to meet other social standards and expectations, which are not stated in the law the standards and expectations of all stakeholders, including customers, employees, shareholders, and the community. (4) Charitable/humanitarian responsibility: the business must meet social expectations. A business should act as a good citizen.

It is reasonable to assume that banks significantly impact society and perform an essential role in economic development in the banking sector. Banks can positively impact society by implementing corporate social responsibility on their own or through other businesses by providing credit to solving the major social, ethical, or environmental issues [30, 31].

Banks can combine their operational activities with CSR components, such as the environment [32]. By adopting CSR, the bank satisfies its legitimacy and sustainability in disclosing information that creates trustworthiness among its stakeholders [33]. Because CSR builds the sustainable business development by covering employee benefits, establishing a friendly working environment, protecting customer benefits from information transparency policies, and establishing funds to contribute to society. Thus, CSR improves the bank reputation that creates the credibility for banks in providing financial services and the good effect on society [34, 35].

2-4- Customer Satisfaction

Customer satisfaction is a measure of how well the products and services provided by a company meet or exceed customer expectations [36]. Whereas satisfaction defined as a consumer's emotional reaction to an experience with a product or service [37]. Furthermore, some studies indicate customer satisfaction refers to an individual's internal feelings, which may be satisfied or dissatisfied, because of an assessment of the services provided to an individual concerning what they expected from an organization [38, 39].

According to Kotler et al. study, customer satisfaction is the level of an individual's sensory state as measured by the results obtained from consuming a product or service that meets the individual's expectations [40]. Customer satisfaction reflects expectations before and after a customer buys a product or service. The customer's expectations are based on previous shopping experiences, recommendations from friends and coworkers, information from the seller and its competitors, and information from the seller and its competitors. The level of satisfaction depends on the difference between the perceived outcome and the expected outcome. The customer is dissatisfied if the perceived outcome is less than the expectation; satisfied if the perceived outcome matches the expectations; and extremely satisfied if the perceived outcome exceeds the expectations.

Customer satisfaction is one of many businesses' vital concerns. In particular, a company's CSR activities can create a good impression on customers that improves the customers' attitude and evaluation toward the company. Thus, CSR

is a mechanism to support companies in understanding their customer satisfaction better. Moreover, the level of customer satisfaction is regularly evaluated through surveys or interviews to see how well the firm satisfies customers' demands compared to its competitors in the market. As a result, companies can update customer service policies on time to aim for business improvement.

2-5- Bank Performance

Commonly, to measure the firm's performance, financial ratios are the quantitative metrics used in most studies for all different business sectors, including banking. Bank performance is defined as the primary driver of profitability generated from its operations [41]. According to Howard and Upton indicates "profitability is the ability of an investment to earn a return from its use" [42]. Profitability is divided into book value (an accounting-based measurement - ROA, ROE) and market value (a market-based measurement-Tobin's Q, P/E). Furthermore, performance is the foundation and goal of all banking activity [43].

Balasundaram (2008) declared that profit is the primary aim of a business, which measures the success of a product and the development of the market for it [44]. Velnampy and Nimalathasan acknowledged that profitability would provide a more accurate view of the bank's performance [45]. Paramasivan (2008) emphasizes the importance of profitability as a criterion for efficient operation [46]. Weston and Brigham declared that profit is used to test efficiency and measure the net wealth of the investment for the owners, the margin of safety for the creditors, and the source of extreme benefits to the employees [47].

2-6- Bank Reputation

Some studies laid the groundwork for this school of thought with their reputational signaling theory [48, 49]. Reputation has been suggested as a general way to solve agency problems in contracting in many situations [50]. Clients' perception that a bank is credible, reliable, responsible, and worthy of their trust can be specified as the bank reputation [51]. The reputation is a significant factor for banks, as it enables them to safeguard their product portfolio, retain and attract clients, make a distinction in the market [52–55], and provide systemic value [52, 53]. Besides, reputation is defined as the sum of one's economic worth (reputation capital), image (representation), and quality [56]. There are four basic categories leading to reputation: corporate governance, environmental protection, employee rights, and product safety [57]. A positive reputation improves financial performance and provides a strategic advantage by reducing operating costs, encouraging loyalty, resulting in long-term relationships with customers, and attracting or retaining qualified employees. Reputation in the banking industry reveals a positive relationship between its reputation and the prices of its (financial) products.

2-7- Hypothesis Development

2-7-1- The Relationship between CSR and Customer Satisfaction

CSR drives customer satisfaction in large companies [58] and increases their market value [59]. Concretely, CSR has a positive effect on customer satisfaction [60, 61]. Furthermore, CSR refers to activities that benefit customers, such as ensuring the quality of products and services, affordable prices, an effective distribution system, paying attention to complaints and privacy rights of customers, and charitable and environmental protection activities [62]. So, CSR includes all strategies that focus on improving customer satisfaction. Based on this discussion, the following hypothesis is proposed:

H₁: CSR has a positive impact on customer satisfaction.

2-7-2- The Relationship between CSR and the Bank Reputation

The link between CSR and reputation in the banking sector has been demonstrated by previous studies [63–67]. Besides, some studies have analyzed the connections between CSR and reputation, satisfaction, and performance [68–70]. They conclude that banks take advantage of CSR to improve their reputation, reinforce customers' trust [67, 71] and regain the confidence that the crisis has destroyed.

Banks are increasingly concentrating on protecting their reputation [72]. A CSR program is one of the most effective ways for banks to improve their reputation and re-engage with communities [73]. Banks primarily use CSR to gain customer favor and improve their reputation [74]. CSR has a positive impact on customer perceptions and service evaluations in the financial sector, where customer involvement with the service is high [75].

To enhance banks' reputations, managers must consider CSR practice for a long-term strategy that matches various benefits. CSR can be incorporated into banking theories by linking it to bank reputation [76]. CSR contributes to and improves the public's perception of the bank [26], making it an essential part of its reputation. Improved reputation by the banks creates an economic effect because it attracts resources that can be used as competitive advantages or as a safe growth strategy in challenging circumstances [77–79]. From the above arguments, the hypothesis is proposed as follows:

H₂: CSR has a positive impact on bank reputation.

2-7-3- The Relationship between CSR and Bank's Performance

CSR has a positive association with bank financial performance [76, 80–85]. The nature of the linkage between CSR and bank performance may depend on (1) methods and data used in analyses and (2) the driving motives of banks to engage in social activities, as stated by [76, 86, 87]. CSR also improves banks' performance and reduces potential risks [88]. Several studies supporting the existence of a positive relationship between CSR and corporate performance in chronological order are [84, 85, 89, 90]. Pelozo confirmed that adopting CSR practices can give businesses a wide range of advantages and improve their performance [91].

Stakeholder theory supports the positive CSR-performance correlation [92] because CSR allows different stakeholders to be satisfied, improving the external trust of the business and its operation. In addition, putting in place CSR practices is thought to be a good idea for banks because it can enhance their customers and improve their performance [36, 93–95]. Investing in CSR can generate higher customer loyalty, new market opportunities, new capacity development, and improve firm performance [91]. So, CSR activities can affect performance positively [96, 97]. These arguments relate specifically to reducing costs and risks that come with adopting CSR activities as they reduce the threat of environmental regulations, avoid adverse reactions from society and provide tax advantages.

Chatterjee and Lefcovitch (2011) admitted that commercial banks strongly focus on assisting monetary funds to the economy to earn profit instead of balancing between CSR and corporate financial performance [98, 99]. These authors also highlighted ethical standards and control activities aim to protect the stakeholders' interests and mitigate the risks occurred in banking activities [100]. Thus, CSR improves relations with stakeholders, resulting in both performance and reputation [76]. As a result, CSR is considered as a vital mechanism to gain the corporate financial performance and avoid loss. From the points of view mentioned above, the following hypothesis is proposed:

H₃: CSR has a positive impact on bank's performance.

2-7-4- The Relationship between Customer Satisfaction and Bank Performance

Customer satisfaction is essential in building a marketing strategy because it directly affects customer attitudes and behaviors, such as generating new customers through repeat purchases and positive word of mouth [40]. Satisfaction with brands leads customers to repeat their selection by using services and products. Hence, its consequence is that firms can build and increase customer loyalty [61].

In the research models of customer satisfaction overviews under the viewpoints of Europe or the United States, there is one thing in common: satisfaction positively affects customer loyalty, thereby contributing to customer satisfaction and improving bank performance. Besides, customer satisfaction and loyalty have a significant positive impact on bank profitability that can be used as a predictor of future profitability because of the previous year's satisfaction index influences the next year's financial performance [101]. Based on these points of view, the following hypothesis is proposed:

H₄: Customer satisfaction has a positive impact on the bank's performance.

2-7-5- Relationship between Bank Reputation and Bank's Performance

Bank reputation positively affects the bank's performance [102]. Previous studies conducted in the banking sector of different economies indicate a direct linkage between reputation and a bank's financial or accounting performance [52, 55] and a negative relationship with leverage and riskiness profiles. Another thing that affects people's purchasing and repurchasing decisions is the reputation of enterprises, including banks. Because customers are more likely to consume or transact financial services of banks if they believe they have a good reputation [53]. Therefore, based on the viewpoints of reputation, the author proposes the following hypothesis:

H₅: The bank reputation has a positive impact on the bank's performance.

2-8- Empirical Studies

Simionescu and Gherghina (2014) demonstrated that CSR had a negative relationship with the accounting-based performance measured by return on sales but a positive relationship with the market-based performance measured by earnings per share [103]. However, the other indicators, which are indices of performance, are in-significant variables. In another study, Gherghina and Vintilă explored the impact of CSR on the firm's value, which is measured by Tobin's Q [104]. They find a positive influence of CSR activities on firm performance, employees, products, and services, except for the environment factor.

A study determined how corporate social responsibility affects the financial performance of European banks [16]. CSR engagement negatively relates to financial performance because of cost concerns based on the agency theory. From the perspective of stakeholders, however, CSR should have a positive impact on banks' financial performance from a resource-based view. The current study's econometric estimates confirm a positive effect of CSR engagement on banks'

financial performance over a six-year period (2009–2015) following the explosion of the subprime crisis. CSR affects Indian companies' financial performance [105]. Using multiple regressions, the research uses secondary data from 50 manufacturing firms from 2011 to 2017. The findings suggest that CSR increases social value and strengthens firms' performance.

There is a study that determined the direct impact of CSR on financial performance [17]. Their research focuses on corporate image and customer satisfaction as the mediating variables that impact the CSR-firm performance relationship. The research applies a quantitative method with collected data from 229 Pakistan-listed companies. The finding shows the impact of these mediating variables and confirms that corporate social responsibility significantly affects a firm financial performance by improving its image among stakeholders and lowering overall costs. In addition, the study also assists management in understanding the significance of CSR.

Another study looked at the impact of corporate social responsibility (CSR) on the banking sector's financial performance (FP), financial inclusion (FI), and financial stability (FS), using annual data from 20 Pakistani commercial banks from 2008 to 2017 [106]. According to the findings, CSR, along with age and size, appears to impact all three factors positively. Their findings confirm the impacts of CSR on FP, FI, and FS in the banking sector in Pakistan over the last ten years. They specifically suggest a significant positive relationship between bank CSR and FP, implying that CSR activities create a positive perception of potential customers, ultimately leading to an increase in the banks' financial performance.

Customer satisfaction and loyalty significantly influence banks' profitability [101]. In their study, these factors are considered predictors of profitability, as the preceding satisfaction index affects the following year's financial performance. There is a study confirmed a positive relationship between CSR and bank performance by using generalized method of moments (GMM) [107]. Besides, some studies confirm CSR has a direct impact into the stakeholder, especially the customer. In the current context of Vietnam, CSR is an important and urgent issue that needs to receive more attention from the government, society, and businesses. Therefore, the author believes that this research is an urgent requirement and has real significance in both theory and practice in the current period when CSR activities are gradually being observed by customers.

Study by Anh and Nguyen (2021) discovers CSR's relationship to customer loyalty in Vietnam. The authors construct the structural model and show that the correlation between the relationships in the model is statistically significant [108]. In descending order, the following factors have an impact on customer loyalty: customer engagement with the company ($b = 0.282$), trust ($b = 0.255$), and satisfaction ($b = 0.209$). These three factors explain 36.6% of the variation in customer loyalty. Their findings claim the CSR factor strongly affects customer trust. Moreover, CSR, customer engagement, trust, and satisfaction all have interdependent and positive effects on customer loyalty.

In brief, the majority of empirical studies focus on CSR in listed companies and investigate the role of mediators or moderators in the CSR-performance relationship. However, few studies have been concerned about CSR's impact on the banking sector. Remarkably, there has been less focus on determining the extent to which CSR influences performance, which accounts for the mediating role of customer satisfaction and bank reputation. Based on literature reviews, the author clarifies the role of CSR in bank performance directly and determines the mediating role of bank reputation and customer satisfaction in Vietnamese state-owned commercial banks [109].

3- Methodology and Proposed Model

3-1- Sample

The survey method is considered as the most appropriate tool for data collection about CSR [109]. Thus, self-administrative, 5-point Likert scale questionnaires have been used to collect the data for this study. In order to maintain the confidentiality and privacy of the respondents, approval to conduct this study was taken from the concerned department of selected branches at state-owned commercial banks in Ho Chi Minh City, and detail was shared with the respondents as well. Data are collected only from top managers, finance managers, chief accountant, and employees' surveys.

The respondents were randomly ordered. The questions items were added; attention was paid to the wording of questions, and no preferred response was prepared in the question statement. To reduce biased results, questionnaires ensure simplicity and understandability. On the basis of the cross-sectional design, 320 questionnaires were distributed among the responders of State-owned commercial banks via simple random sampling. 305 questionnaires were received back, out of which 15 questionnaires were excluded because of incomplete record. Three hundred questionnaires have been used for analysis, with a response rate of 93.75%, which shows that the idea of CSR is not of much importance for research purpose. That is why this study is conducted in Ho Chi Minh City.

The sampling in this study satisfies the given condition to implement the exploratory factor analysis [110]. In this study, the total number of observed variables is 17 variables, the minimum number of samples needed for this study is: $17 \times 5 = 85$ samples. The surveys collection process was conducted in July to December 2021, the author directly sent the questionnaires to 320 customers through email (however, the number of valid questionnaires collected was 300) (Table 1).

Table 1. Customer survey results

Criteria	Number of survey questionnaires	Percentage
Number of forms distributed	320	100%
Number of forms collected	305	95.31%
Number of valid forms	300	93.75%

3-2- Proposed Model

Based on the stakeholder theory and too big to fail theory, combined with the empirical study [17], the proposed model is shown in Figure 1. The model is built based on the relationship between CSR and bank performance, under the role of mediating factors, such as customer satisfaction and bank reputation.

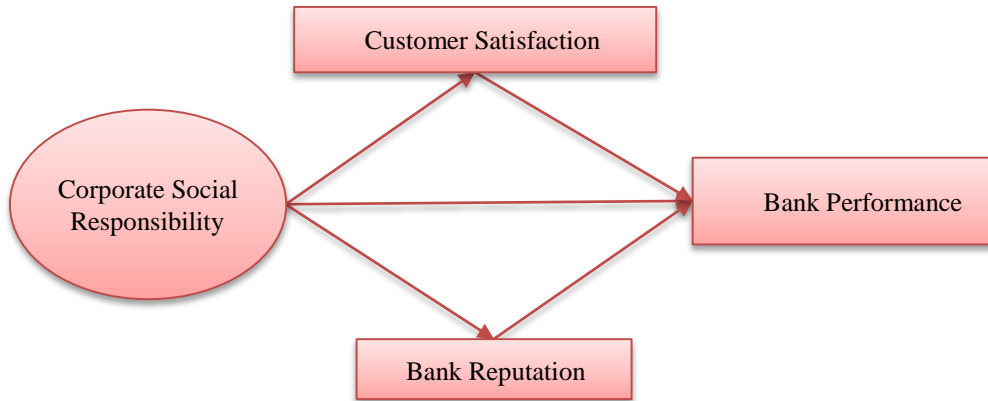


Figure 1. Proposed model

3-3- Research Methods and Procedures

The research process to determine the effect of CSR on a bank’s performance through the mediating factors, such as customer satisfaction and bank reputation, is structural equation modeling (SEM). SEM, a multivariate data analysis technique, is used for model measurement and hypotheses test. Concretely, the procedures of this study are presented in Figure 2.

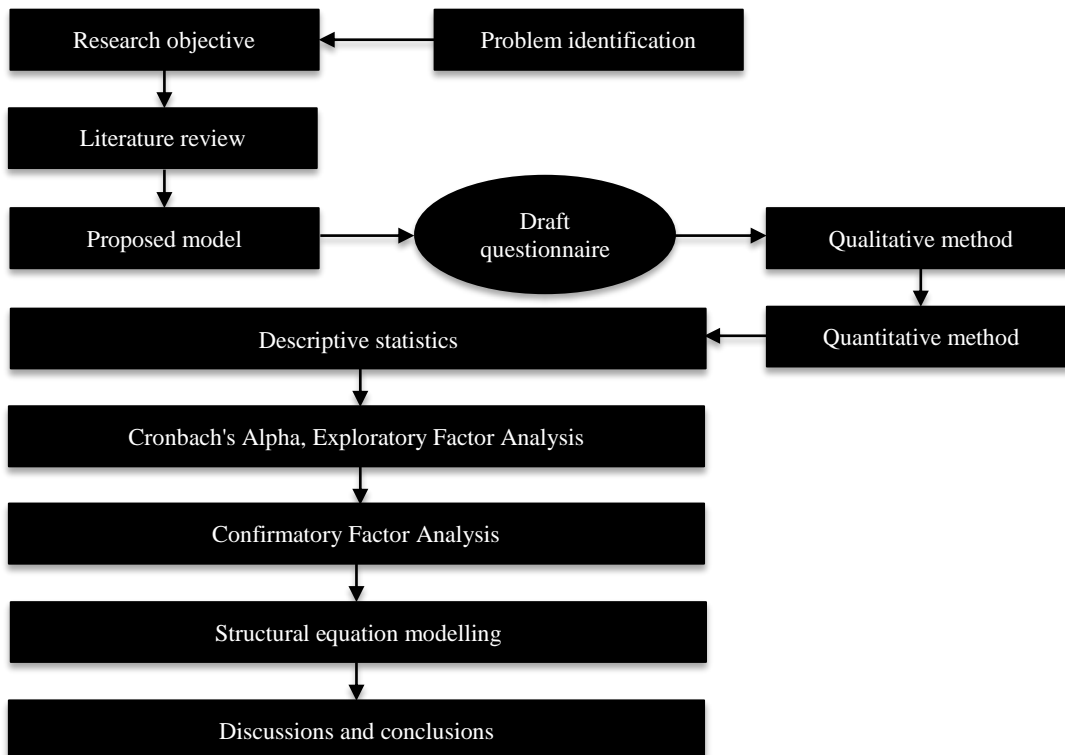


Figure 2. Flowchart of the study

Figure 2 shows the steps implemented in the study. First, the research objective is defined based on the problem identification. Second, literature reviews and previous studies are analyzed to build the proposed model. Third, the final questionnaire is completed after the pilot study. Following these steps, the author applies quantitative methods including Cronbach's Alpha, Exploratory Factor Analysis; Confirmatory Factor Analysis; and Structural equation modeling. Finally, according to the findings, the discussions and conclusions are drawn to achieve the research objective.

3-4- Descriptive Statistics

From the collected survey data, the author conducts descriptive statistical analysis based on the criteria of gender, age, and education level (Table 2).

Table 2. Characteristics of respondents

	Frequency	Percent (%)
1. Gender		
Female	120	40%
Male	180	60%
Total	300	100%
2. Age		
18 - 24	50	16.7%
25 - 40	160	53.3%
41 - 60	74	24.7%
Over 60	16	5.3%
Total	300	100%
3. Education level		
College	11	3.7%
Undergraduate	197	65.7%
Postgraduate	92	30.7%
Total	300	100%

According to Table 2, the survey collected information from 300 samples, with 60% male (180 people) and 40% female (120 people). For the age criteria, the surveyed staff aged 25 to 40 is the highest proportion, accounting for 53.5%, followed by the 41 to 60-year-old group, 24.7%. The third group is 18 to 24-year-old, which is 16.7%, while the remaining group, over 60-year-old, is just 5.3% of the survey samples. Regarding education level, 65.7% of the respondents (197 people) are undergraduates (Bachelor's degrees). The second crowded group is the postgraduate level, representing 30.7% (92 respondents) of the total sample. Only 11 people, 3.7%, are at college qualifications.

3-5- Survey Instrument

Based on the relevant literature, the surveyed items are designed and grouped into 17 observations that measure the four constructs in the research model (Appendix I), with a five-point Likert scale ranging from 1 ("strongly disagree") to 5 ("strongly agree"). The author uses a pilot test on a survey questionnaire aim to clarify each item. Especially, the survey items are adjusted to match the Vietnamese banking sectors under the experts' test.

3-5-1- Evaluation of Scales

The usage of Cronbach alpha reliability coefficient is used for each scale. The result of Cronbach's alpha coefficient is greater than or equal 0.6 that reflects internal consistency. In addition, Corrected Item – Total Correlation is greater than or equal 0.3 is accepted. In case, Cronbach's Alpha if Item Deleted is higher than Cronbach's alpha, there is a consideration about eliminating observation from scales. In this paper, the scales' reliability is determined and presented in Table 3. The scales include corporate social responsibility (CSR), customer satisfaction (SHL), bank reputation (UT), bank's performance (HQNH).

Table 3. Summary of scales

No.	Factors	Number of Observations	Cronbach's Alpha	Evaluation
1	Corporate social responsibility (CSR)	5	0.924	Satisfied
2	Customer satisfaction (SHL)	4	0.939	Satisfied
3	Bank reputation (UT)	4	0.957	Satisfied
4	Bank's performance (HQNH)	4	0.885	Satisfied

Applying Cronbach's alpha tests to define the reliability of multiple-question Likert scale surveys as presented in Table 3, the criteria in the test are satisfied, so the values of 0.924, 0.939, 0.957, and 0.885 belong to corporate social responsibility (CSR), customer satisfaction (SHL), bank reputation (UT), and bank's performance (HQN). These findings confirm the internal consistency of the constructs because all the Cronbach's alphas were higher than 0.7 [111].

3-5-2- Evaluation of Scales with Exploratory Factor Analysis (EFA)

EFA is performed after Cronbach's alpha reliability test. EFA is required to determine whether the data is suitable for the factor analysis method by using Bartlett's test of sphericity. The null hypothesis (H0) is that "the variables in the population correlation matrix are uncorrelated." Rejecting the null hypothesis indicates that factor analysis is likely to be valid as a rule of thumb.

Table 4 reveals that the p-value of Bartlett's test of sphericity is less than 5%, hence the null hypothesis is rejected. As a result, the variables in the population correlation matrix are correlated. Besides, the KMO index = 0.900 > 0.5 that shows observed variables are not correlated with each other (Table 4).

Table 4. KMO and Bartlett's test of sphericity

KMO measure of sampling adequacy		0.900
	Approx. Chi-square	6464.271
Bartlett's test of sphericity	df	231
	Sig.	0.000

The following section presents the results involving the total variance explained and the rotated component matrix table. The total variance explained by 17 factors is indicated in Appendix II. Only the first four factors, which account for 79.818% of the total variance, are important. This figure satisfied the acceptable threshold, which is higher than 50%. Therefore, variables can be organized by four group factors by assessing the sample matrix. Besides, the rotated component matrix (Appendix III) shows that 17 observed variables are classified into four factors; all observed variables have factor loading coefficients greater than 0.5; there are no poor loadings. Hence, the criteria of exploratory factor analysis are satisfied.

3-6- Confirmatory Factor Analysis (CFA)

In Figure 3, to assess the overall model fit without the sample size' sensitive impact, GOF index (GFI), adjusted GFI (AGFI), comparative fit index (CFI), and the root-mean-square error of approximation (RMSEA) are applied to create a good model's fit [111]. In detail, the GFI is nearly 0.9, the AGFI is greater than 0.8, the CFI is more over than 0.9, the RMSR is less than 0.05 and the RMSEA is lower than 0.1 [111]. For SEM analysis, Kline suggested that at a minimum the following indices should be reported: The model chi-square, the RMSEA, the CFI [112].

One should not be overly concerned regarding the χ^2 test because it is very sensitive to the sample size and not comparable among different SEMs [113–116].

First, root mean square error of approximation (RMSEA) is a "badness of fit" index where 0 indicates the perfect fit and higher values indicate the lack of fit [115, 117, 118]. The acceptable RMSEA must lower than 0.10 [111].

Second, comparative fit index (CFI): It ranges from 0.0 to 1.0. The CFI should be close to 0.95 or higher to ensure a better model fit [115]. CFI is less affected by sample size than the χ^2 test [119, 120].

Third, Tucker-Lewis index (TLI): TLI, a non-normed fit index (NNFI), is not only overcoming the disadvantages of NFI but also proposes a fit index independent of sample size [113, 121]. The TLI index is over 0.9 which is acceptable in the test [115].

From the Figure 3, the findings show all RMSEA, CFI and TLI criteria are satisfied, hence it is confirmed that a good-fitting model. Concretely, the results are described as follows:

+ *RMSEA = 0.087 is less than 0.10* [111].

+ *CFI = 0.944 which is closed to 0.95* [115].

+ *TLI = 0.932 is larger than 0.9* [115].

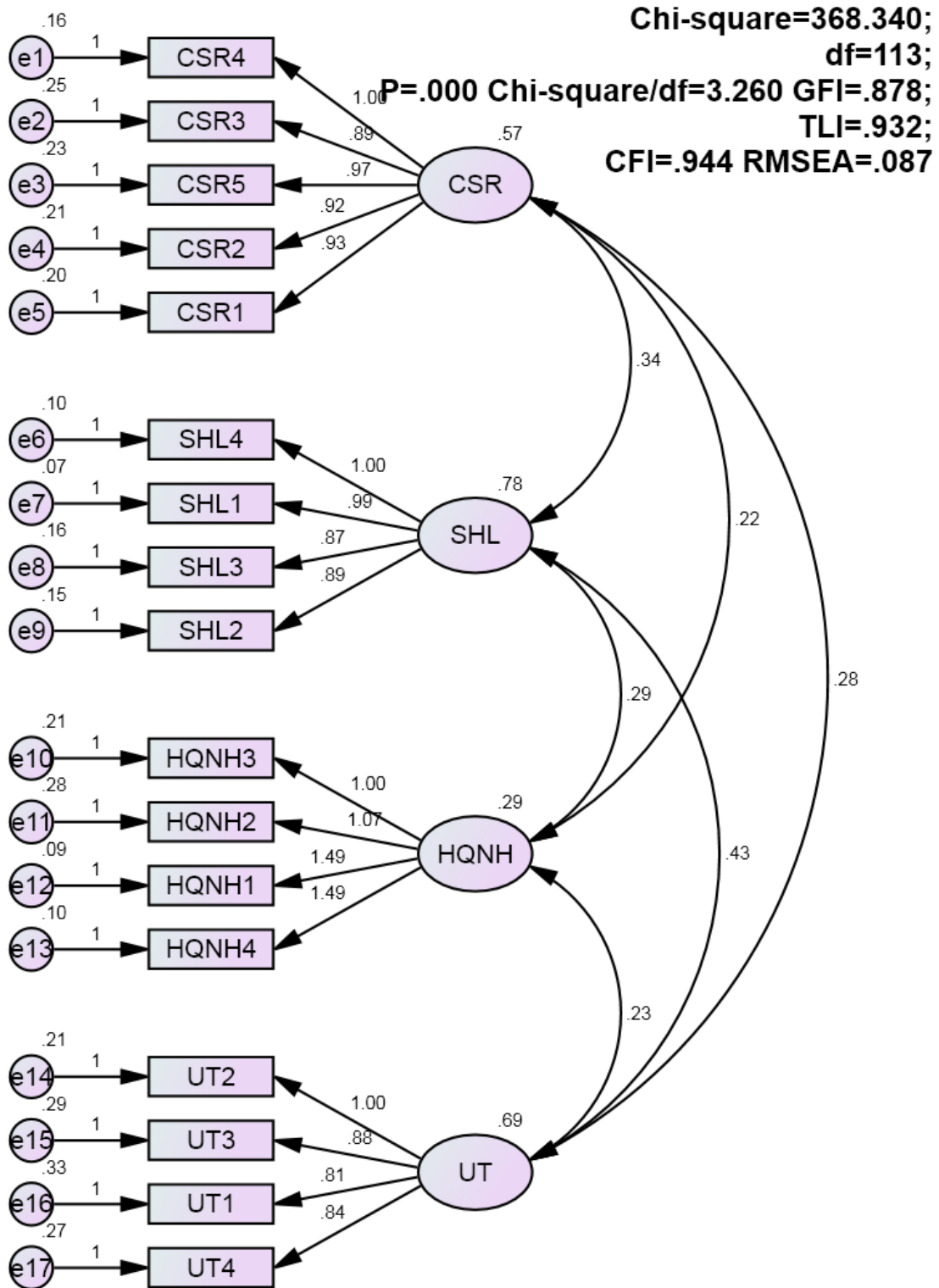


Figure 3. Results of model fit assessment through CFA

3-7- Structural Equation Modeling and Hypotheses Testing

After figuring out the compatibility test in the entire model, SEM is applied to ensure the model is adequate or not (Figure 4).

- + $Chi-square/df = 2.369 \leq 3$
- + $GFI = 0.909, TLI = 0.959$ and $CFI = 0.966$
- + $RMSEA = 0.068 < 0.1$

Chi-square=265.274;
 df=112;
 P=.000 Chi-square/df=2.369 GFI=.909;
 TLI=.959;
 CFI=.966 RMSEA=.068

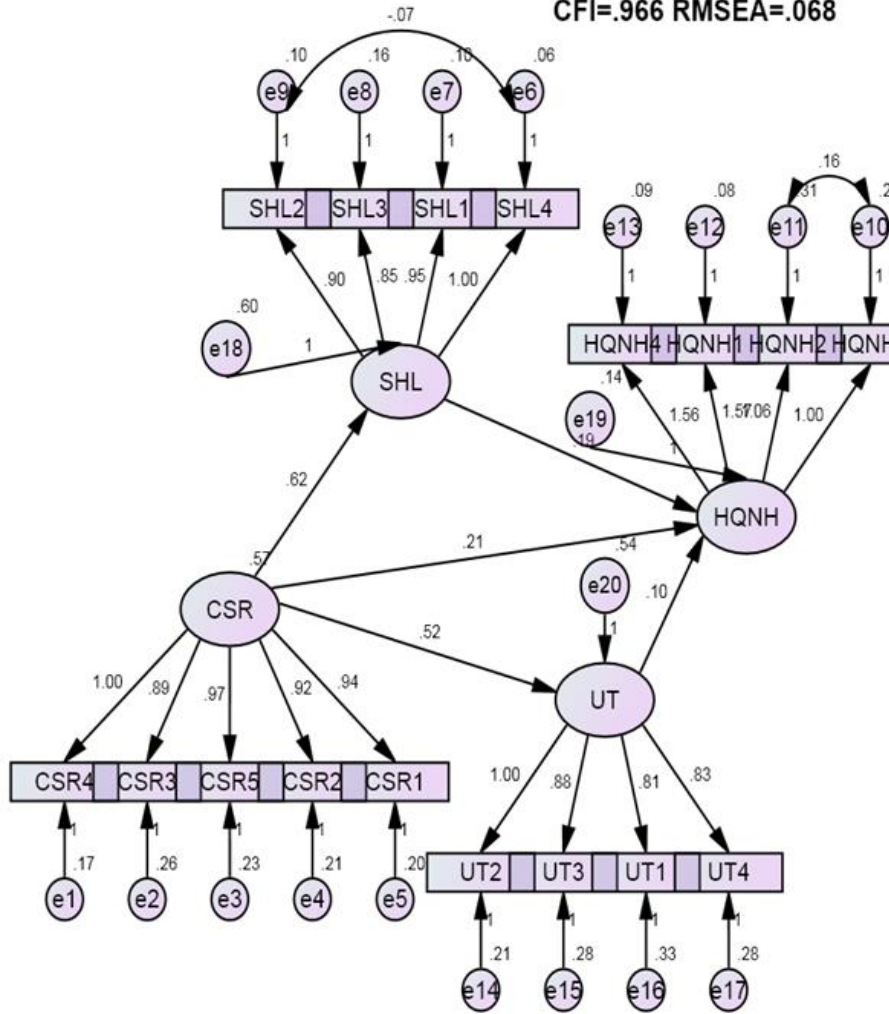


Figure 4. Hypothesis testing

Following the Hypothesis testing, the author performs the results of Model fit summary, which includes Root Mean Square Residual (RMSR) and Goodness of Fit Index (GFI). The findings are presented in Table 5.

Table 5. Model fit summary

Model	RMSR	GFI	AGFI	PGFI
Default model	0.048	0.909	0.876	0.666
Saturated model	0.000	1.000	-	-
Independence model	0.346	0.206	0.107	0.183

The RMSR is $0.048 \leq 0.05$, that shows the model is appropriate in Table 5. In addition, the AVE of each construct in Table 6 is higher than 0.5, which points out adequate convergence [111].

Table 6. AVE

No.	Factors	AVE
1	HQNH	0.692
2	UT	0.658
3	CSR	0.703
4	SHL	0.857

Hypothesis Testing

After confirming the appropriate test model, Tables 7 and 8 express the results of the hypothesis testing.

Table 7. Regression weights

			Estimate	S.E.	C.R.	P
SHL	←	CSR	0.625	0.066	9.460	***
UT	←	CSR	0.517	0.067	7.729	***
HQNH	←	CSR	0.205	0.045	4.580	***
HQNH	←	SHL	0.191	0.033	5.838	***
HQNH	←	UT	0.104	0.035	2.959	0.003
CSR4	←	CSR	1.000			
CSR3	←	CSR	0.893	0.051	17.626	***
CSR5	←	CSR	0.971	0.051	19.167	***
CSR2	←	CSR	0.922	0.048	19.171	***
CSR1	←	CSR	0.935	0.048	19.572	***
SHL4	←	SHL	1.000			
SHL1	←	SHL	0.950	0.027	34.751	***
SHL3	←	SHL	0.846	0.030	27.814	***
SHL2	←	SHL	0.903	0.035	25.851	***
HQNH3	←	HQNH	1.000			
HQNH2	←	HQNH	1.061	0.058	18.227	***
HQNH1	←	HQNH	1.568	0.098	15.966	***
HQNH4	←	HQNH	1.565	0.099	15.881	***
UT2	←	UT	1.000			
UT3	←	UT	0.883	0.052	16.874	***
UT1	←	UT	0.809	0.053	15.384	***
UT4	←	UT	0.833	0.051	16.478	***

Note: ***p < 0.001

Table 8. Standardized regression weights

			Estimate
SHL	←	CSR	0.520
UT	←	CSR	0.468
HQNH	←	CSR	0.308
HQNH	←	SHL	0.344
HQNH	←	UT	0.171
CSR4	←	CSR	0.879
CSR3	←	CSR	0.799
CSR5	←	CSR	0.838
CSR2	←	CSR	0.838
CSR1	←	CSR	0.847
SHL4	←	SHL	0.968
SHL1	←	SHL	0.936
SHL3	←	SHL	0.884
SHL2	←	SHL	0.932
HQNH3	←	HQNH	0.719
HQNH2	←	HQNH	0.692
HQNH1	←	HQNH	0.943
HQNH4	←	HQNH	0.934
UT2	←	UT	0.878
UT3	←	UT	0.811
UT1	←	UT	0.761
UT4	←	UT	0.798

From Tables 7 and 8 the results of the regression weights showed the following evidence:

- Corporate social responsibility affects customer satisfaction ($p = 0.000$);
- Corporate social responsibility affects the bank reputation ($p = 0.000$);
- Corporate social responsibility affects the bank's performance ($p = 0,000$);
- Customer satisfaction affects the bank's performance ($p = 0.000$).
- Bank reputation affects the bank's performance ($p = 0.000$).

In Table 9, the author uses standardized regression weights to clarify the impact level of independent on the dependent variables.

According to Table 9, the following was observed:

- CSR of banks has a positive impact on customer satisfaction, with an estimated impact of 0.520.
- CSR of banks has a positive impact on the bank reputation, with an estimated impact of 0.468.
- CSR of banks has a positive impact on the bank's performance, with an estimated impact of 0.308.
- Customer satisfaction has a positive impact on the bank's performance, with an estimated impact of 0.344.
- The bank reputation positively impacts the bank's performance, with an estimated effect of 0.171.

Table 9. Summary of hypothesis testing results

No.	Hypothesis	Path Coefficient	p-value	Study Results
1	CSR → Bank's performance	0.308	0.000***	Accepted
2	CSR → Customer satisfaction	0.520	0.000***	Accepted
3	CSR → Bank reputation	0.468	0.000***	Accepted
4	Bank reputation → Bank's performance	0.117	0.000***	Accepted
5	Customer satisfaction → Bank's performance	0.344	0.000***	Accepted

Note: * $p < 0.05$, ** $p < 0.01$ and *** $p < 0.001$

This study determined that CSR significantly influenced customer satisfaction, bank reputation, and bank's performance. Especially, the findings investigate the intervening role of bank reputation and customer satisfaction on the relationship between corporate social responsibility and bank's performance at state-owned commercial banks in Vietnam. Hence, the study concludes that corporate social responsibility significantly affects the bank's performance by developing a positive its reputation in the market and increasing the customer satisfaction. Through the obtained evidence in those banks, this study assists the managers of organizations to realize the importance of corporate social responsibility and how to apply it to increase their performance in practical.

4- Discussions

The hypothesis testing revealed that a bank's CSR has a positive impact on customer satisfaction, the bank reputation, and its performance. Furthermore, the bank reputation has a positive influence on its performance [52, 5, 122]. In addition, customer satisfaction has a positive effect on the performance of banks [61, 101].

CSR is a broad category that can be understood and expressed in differential ways. However, at its core, it is the self-made activities of banks that provide good benefits to customers while also creating value for themselves. CSR in the banking sector, like all other business sectors, contributes to the long-term development of the community [8, 9].

Because of the importance of CSR, many businesses, including banks and credit institutions, have realized that implementing CSR is essential for their growth, as customers are becoming increasingly aware of and appreciative of businesses' role in the development of society/community. When consuming products and services, especially intangible financial services, customers are very vulnerable to problems they encounter, such as prices, quality of banking products and services, policies, and promotions for customers. Businesses, on the other hand, need to make strong promises by incorporating CSR into their business strategies in order to gain customer satisfaction and a long-term competitive advantage [59, 61].

In Covid-19 pandemic, some Vietnamese banks like the Joint Stock Commercial Bank for Investment and Development of Vietnam (BIDV), Vietnam Maritime Commercial Joint-Stock Bank (MSB), Vietnam International Commercial Joint-Stock Bank (VIB), An Binh Commercial Joint-Stock Bank (ABBank) have policies about restructuring loans to support customers in order to balance business efficiency and share the burden with customers. These actions, one of typical CSR activities, enhance the customer satisfaction and the bank reputation with commitment promptly.

As all mentioned above, by joining CSR activities, banks cover the customers' benefits, creating a good impression on customers, especially for the service industry, when customers pay attention to customer service as same as price and quality of financial services. Hence, the more banks focus on CSR programs, such as social activities and charitable works, the more customer satisfaction they will have, because CSR creates benefits for both the banks and the community.

5- Conclusions and Limitations

Any organization must engage in significant CSR to attain its financial goals. Although many studies have examined the impact of CSR on performance, few have looked at whether mediator or moderator factors play a role in the relationship between CSR and performance. The majority of the available CSR literature is from developed countries. To fill this gap, this study investigated the relationship between CSR and performance in the Vietnamese context through the mediating role of bank reputation and customer satisfaction. According to the findings, CSR significantly impacts banks' performance by promoting a good reputation and enhancing customer satisfaction. The research result formulates the theoretical model which is suggested to be applied in other sectors to highlight the mediating role of customer satisfaction and bank reputation in the CSR-performance relationship. CSR activities help maintain the bank's reputation by demonstrating a long-term commitment to stakeholders' interests. Because the bank's consequences meet the goals of its stakeholders, it may have the resources to promote CSR, thereby increasing public confidence and improving its performance over time. Besides, CSR activities can assist in retaining and attracting highly qualified customers who value social benefits. The paper has determined that the mediating role significantly impacts CSR and the bank's performance relationships. Specifically, the examination of that consequence was conducted at state-owned commercial banks in Vietnam, based on stakeholder theory and the too big to fail theory.

As well as identifying the specific results, the study has limitations, such as a small sample size, because the study was only implemented within state-owned commercial banks in Ho Chi Minh City. Therefore, future research should cover the Vietnamese banking system, namely state-owned commercial banks and joint-stock commercial banks, to highlight the CSR role between the two groups. Besides, the research should modify the model by applying the mediating role of the state bank in examining the CSR-bank's performance relationship.

6- Declarations

6-1- Data Availability Statement

The data presented in this study are available in the article.

6-2- Funding

The author received no financial support for the research, authorship, and/or publication of this article.

6-3- Institutional Review Board Statement

Not applicable.

6-4- Informed Consent Statement

Not applicable.

6-5- Conflicts of Interest

The author declares that there is no conflict of interest regarding the publication of this manuscript. In addition, the ethical issues, including plagiarism, informed consent, misconduct, data fabrication and/or falsification, double publication and/or submission, and redundancy, have been completely observed by the author.

7- References

- [1] Stanisavljević, M. (2017). The analysis of CSR reports of Serbian companies. *ENTRENOVA*, 7-9 September 2017, Dubrovnik, Croatia, 284-291.
- [2] Abu Bakar, A. S., & Ameer, R. (2011). Readability of Corporate Social Responsibility communication in Malaysia. *Corporate Social Responsibility and Environmental Management*, 18(1), 50-60. doi:10.1002/csr.240.
- [3] Van Beurden, P., & Gössling, T. (2008). The worth of values - A literature review on the relation between corporate social and financial performance. *Journal of Business Ethics*, 82(2), 407-424. doi:10.1007/s10551-008-9894-x.
- [4] Wu, W.-Y., Tsai, H.-J., Cheng, K.-Y., & Lai, M. (2006). Assessment of intellectual capital management in Taiwanese IC design companies: using DEA and the Malmquist productivity index. *R&D Management*, 36(5), 531-545. <https://doi.org/10.1111/j.1467-9310.2006.00452.x>.

- [5] Islam, Z. M., Ahmed, S. U., & Hasan, I. (2012). Corporate social responsibility and financial performance linkage: Evidence from the banking sector of Bangladesh. *Journal of Organizational Management*, 1(1), 14-21.
- [6] Bolton, B. J. (2013). Corporate Social Responsibility and Bank Performance. *SSRN Electronic Journal*. doi:10.2139/ssrn.2277912.
- [7] Maqbool, S., & Zameer, M. N. (2018). Corporate social responsibility and financial performance: An empirical analysis of Indian banks. *Future Business Journal*, 4(1), 84–93. Doi:10.1016/j.fbj.2017.12.002.
- [8] Zhou, G., Sun, Y., Luo, S., & Liao, J. (2021). Corporate social responsibility and bank financial performance in China: The moderating role of green credit. *Energy Economics*, 97, 105190. doi:10.1016/j.eneco.2021.105190.
- [9] Mahmood, F., Qadeer, F., Saleem, M., Han, H., & Ariza-Montes, A. (2021). Corporate social responsibility and firms' financial performance: a multi-level serial analysis underpinning social identity theory. *Economic Research-Ekonomska Istrazivanja*, 34(1), 2447–2468. doi:10.1080/1331677X.2020.1865181.
- [10] Smith, M., Yahya, K., & Marzuki Amiruddin, A. (2007). Environmental disclosure and performance reporting in Malaysia. *Asian Review of Accounting*, 15(2), 185–199. doi:10.1108/13217340710823387.
- [11] Crisóstomo, V. L., De Souza Freire, F., & De Vasconcellos, F. C. (2011). Corporate social responsibility, firm value and financial performance in Brazil. *Social Responsibility Journal*, 7(2), 295–309. doi:10.1108/17471111111141549.
- [12] Ivashina, V., & Scharfstein, D. (2010). Bank lending during the financial crisis of 2008. *Journal of Financial Economics*, 97(3), 319–338. doi:10.1016/j.jfineco.2009.12.001.
- [13] Johnson, M. A., & Mamun, A. (2012). The failure of Lehman Brothers and its impact on other financial institutions. *Applied Financial Economics*, 22(5), 375–385. doi:10.1080/09603107.2011.613762.
- [14] Cornett, M. M., Erhemjamts, O., & Tehranian, H. (2013). Corporate Social Responsibility and Its Impact on Financial Performance: Investigation of the U.S. Commercial Banks. *SSRN Electronic Journal*. doi:10.2139/ssrn.2333878.
- [15] Djalilov, K., Vasylieva, T., Lyeonov, S., & Lasukova, A. (2015). Corporate social responsibility and bank performance in transition countries. *Corporate Ownership and Control*, 13(1), 879–888. Portico. doi:10.22495/cocv13i1c8p7.
- [16] Gangi, F., Mustilli, M., Varrone, N., & Daniele, L. M. (2018). Corporate Social Responsibility and Banks' Financial Performance. *International Business Research*, 11(10), 42. doi:10.5539/ibr.v11n10p42.
- [17] Ali, H. Y., Danish, R. Q., & Asrar-ul-Haq, M. (2020). How corporate social responsibility boosts firm financial performance: The mediating role of corporate image and customer satisfaction. *Corporate Social Responsibility and Environmental Management*, 27(1), 166–177. doi:10.1002/csr.1781.
- [18] Jansson, E. (2005). The stakeholder model: The influence of the ownership and governance structures. *Journal of Business Ethics*, 56(1), 1–13. doi:10.1007/s10551-004-2168-3.
- [19] Kakabadse, N. K., Rozuel, écile, & Lee-Davies, L. (2008). Corporate social responsibility and stakeholder approach: a conceptual review. *International Journal of Business Governance and Ethics*, 1(4), 277–302. doi:10.1504/ijbge.2005.006733.
- [20] Bonnafous-Boucher, M., Rendtorff, J.D. (2016). Stakeholder Theory as a Theory of Organizations. *Stakeholder Theory*. SpringerBriefs in Ethics, Springer, Cham, Switzerland. doi:10.1007/978-3-319-44356-0_3.
- [21] Freeman, R. E., & Dmytryev, S. (2020). Corporate Social Responsibility and Stakeholder Theory: Learning From Each Other. *Symphonya. Emerging Issues in Management*, 1(1), 7–15. doi:10.4468/2017.1.02freeman.dmytryev.
- [22] Nikolova, V., & Arsić, S. (2017). The stakeholder approach in corporate social responsibility. *Engineering management*, 3(1), 24-35.
- [23] Harrison, J. S., Barney, J. B., Freeman, R. E., & Phillips, R. A. (2019). *The Cambridge handbook of stakeholder theory*. Cambridge University Press, Cambridge, United Kingdom. doi:10.1017/9781108123495.
- [24] Stern, G. H., & Feldman, R. J. (2004). *Too big to fail: The hazards of bank bailouts*. Brookings Institution Press, Washington, United States.
- [25] McGuire, J. W. (1963). *Business and Society*. McGraw-Hill. New York, United States.
- [26] McWilliams, A., & Siegel, D. (2001). Corporate Social Responsibility: a Theory of the Firm Perspective. *Academy of Management Review*, 26(1), 117–127. doi:10.5465/amr.2001.4011987.
- [27] Zu, L. (2009). *Corporate Social Responsibility, Corporate Restructuring and Firm's Performance*. Springer, berlin, Germany. doi:10.1007/978-3-540-70896-4.
- [28] Carroll, A. B. (1979). A Three-Dimensional Conceptual Model of Corporate Performance. *Academy of Management Review*, 4(4), 497–505. doi:10.5465/amr.1979.4498296.

- [29] Carroll, A. B. (1991). The pyramid of corporate social responsibility: Toward the moral management of organizational stakeholders. *Business Horizons*, 34(4), 39–48. doi:10.1016/0007-6813(91)90005-G.
- [30] Levine, R. (2005). Chapter 12 Finance and Growth: Theory and Evidence. *Handbook of Economic Growth*, 865–934, Elsevier, Amsterdam, Netherlands. doi:10.1016/s1574-0684(05)01012-9.
- [31] Djalilov, K., & Piesse, J. (2011). Financial development and growth in transition countries: A study of central Asia. *Emerging Markets Finance and Trade*, 47(6), 4–23. doi:10.2753/REE1540-496X470601.
- [32] Tran, Y. T. H. (2014). CSR in banking sector a literature review and new research directions. *International Journal of Economics, Commerce and Management*, 2(11).
- [33] Długopolska-Mikonowicz, A., Przytuła, S., & Stehr, C. (Eds.). (2019). *Corporate Social Responsibility in Poland. CSR, Sustainability, Ethics & Governance*, Springer, Switzerland. doi:10.1007/978-3-030-00440-8.
- [34] Przytuła, S., Ryszawska, B., Formánková, S., Dunay, A., & Ubreziová, I. (2019). *Corporate Social Responsibility in Poland Strategies, Opportunities and Challenges* Eds. Przytuła, S., Stehr C., Długopolska-Mikonowicz Springer 2019. Przytuła, S., Stehr C., Długopolska-Mikonowicz Springer.
- [35] Koning, C. De. (2018). Reputation, Corporate Social Responsibility, and Financial Performance of Banks. *MaRBLe, Research in Business and Economics*, 1-25. doi:10.26481/marble.2018.v1.617.
- [36] Fornell, C. (1992). A National Customer Satisfaction Barometer: The Swedish Experience. *Journal of Marketing*, 56(1), 6. doi:10.2307/1252129.
- [37] Brookes, R. (1995). *Customer satisfaction research*. ESOMAR, Amsterdam, Netherlands.
- [38] Oliver, R. L. (1980). A Cognitive Model of the Antecedents and Consequences of Satisfaction Decisions. *Journal of Marketing Research*, 17(4), 460. doi:10.2307/3150499.
- [39] Leisen, B., & Vance, C. (2001). Cross-national assessment of service quality in the telecommunication industry: Evidence from the USA and Germany. *Managing Service Quality: An International Journal*, 11(5), 307–317. doi:10.1108/EUM000000005904.
- [40] Kotler, P., Keller, K. L., Ang, S. H., Tan, C. T., & Leong, S. M. (2022). *Marketing management: an Asian perspective*. Research Collection Lee Kong Chian School of Business, Singapore.
- [41] Quoc Trung, N. K. (2021). Determinants of bank performance in Vietnamese commercial banks: an application of the camels model. *Cogent Business and Management*, 8(1), 1979443. doi:10.1080/23311975.2021.1979443.
- [42] Howard, B. B., & Upton, M. (1953). *Introduction to business finance*. McGraw-Hill, New York, United States.
- [43] Ferrouhi, E. M. (2018). Determinants of banks' profitability and performance: an overview. *Contemporary Research in Commerce and Management*, 4, 61-74.
- [44] Balasundaram, N. (2008). A comparative study of financial performance of banking sector in Bangladesh-An application of CAMELS rating system. *Annals of University of Bucharest, Economic and Administrative Series*, (2), 141-152.
- [45] Velnamby, T., & Nimalathasan, B. (2007). Organizational growth and profitability: a case study analysis of bank of Ceylon. *Journal of Business Studies*, 3, 224-235.
- [46] Paramasivan, C. (2008). *Financial Management*. New Age International, New Delhi, India.
- [47] Weston, J. F., & Brigham, E. F. (1978). *Managerial finance*. Dryden Press, New York, United States.
- [48] Klein, B., & Leffler, K. B. (1981). The Role of Market Forces in Assuring Contractual Performance. *Journal of Political Economy*, 89(4), 615–641. doi:10.1086/260996.
- [49] Shapiro, C. (1983). Premiums for High Quality Products as Returns to Reputations. *The Quarterly Journal of Economics*, 98(4), 659. doi:10.2307/1881782.
- [50] Dennis, S. A., & Mullineaux, D. J. (2000). Syndicated Loans. *Journal of Financial Intermediation*, 9(4), 404–426. doi:10.1006/jfin.2000.0298.
- [51] Ponzi, L. J., Fombrun, C. J., & Gardberg, N. A. (2011). RepTrak pulse: Conceptualizing and validating a short-form measure of corporate reputation. *Corporate Reputation Review*, 14(1), 15–35. doi:10.1057/crr.2011.5.
- [52] Roberts, P. W., & Dowling, G. R. (2002). Corporate reputation and sustained superior financial performance. *Strategic Management Journal*, 23(12), 1077–1093. doi:10.1002/smj.274.
- [53] Wang, Y., Lo, H. P., & Hui, Y. V. (2003). The antecedents of service quality and product quality and their influences on bank reputation: Evidence from the banking industry in China. *Managing Service Quality: An International Journal*, 13(1), 72–83. doi:10.1108/09604520310456726.

- [54] Ruiz, B., García, J. A., & Revilla, A. J. (2016). Antecedents and consequences of bank reputation: a comparison of the United Kingdom and Spain. *International Marketing Review*, 33(6), 781–805. doi:10.1108/IMR-06-2015-0147.
- [55] Dell'Atti, S., Trotta, A., Iannuzzi, A. P., & Demaria, F. (2017). Corporate Social Responsibility Engagement as a Determinant of Bank Reputation: An Empirical Analysis. *Corporate Social Responsibility and Environmental Management*, 24(6), 589–605. doi:10.1002/csr.1430.
- [56] Krzakiewicz, K., & Cyfert, S. (2015). Organizational reputation risk management as a component of the dynamic capabilities management process¹. *Management*, 19(1), 6–18. doi:10.1515/manment-2015-0001.
- [57] Neef, D. (2012). *Managing Corporate Reputation and Risk*. Routledge, London, United Kingdom. doi:10.4324/9780080491769.
- [58] Luo, X., & Bhattacharya, C. B. (2006). Corporate social responsibility, customer Satisfaction, and market value. *Journal of Marketing*, 70(4), 1–18. doi:10.1509/jmkg.70.4.1.
- [59] Rhou, Y., Singal, M., & Koh, Y. (2016). CSR and financial performance: The role of CSR awareness in the restaurant industry. *International Journal of Hospitality Management*, 57, 30–39. doi:10.1016/j.ijhm.2016.05.007.
- [60] He, H., & Li, Y. (2011). CSR and Service Brand: The Mediating Effect of Brand Identification and Moderating Effect of Service Quality. *Journal of Business Ethics*, 100(4), 673–688. doi:10.1007/s10551-010-0703-y.
- [61] Martínez, P., & Rodríguez del Bosque, I. (2013). CSR and customer loyalty: The roles of trust, customer identification with the company and satisfaction. *International Journal of Hospitality Management*, 35, 89–99. doi:10.1016/j.ijhm.2013.05.009.
- [62] Rashid, M., Abdeljawad, I., Ngali, S. M., & Hassan, M. K. (2013). Customer-centric corporate social responsibility: A framework for Islamic banks on ethical efficiency. *Management Research Review*, 36(4), 359–378. doi:10.1108/01409171311314978.
- [63] Rahman, M. M., & Iqbal, M. F. (2013). Corporate social responsibility practices and private commercial banks: a case study on Bangladesh. *International Journal of Science and Research (IJSR)*, 2(1), 270-275.
- [64] Burianova, L., & Paulik, J. (2014). Corporate Social Responsibility in Commercial Banking - A Case Study from the Czech Republic. *Journal of Competitiveness*, 6(1), 50–70. doi:10.7441/joc.2014.01.04.
- [65] Dorasamy, N. (2013). Corporate Social Responsibility and Ethical Banking for Developing Economies. *Journal of Economics and Behavioral Studies*, 5(11), 777–785. doi:10.22610/jeb.v5i11.450.
- [66] Pérez, A., & Rodríguez del Bosque, I. (2015). An Integrative Framework to Understand How CSR Affects Customer Loyalty through Identification, Emotions and Satisfaction. *Journal of Business Ethics*, 129(3), 571–584. doi:10.1007/s10551-014-2177-9.
- [67] Bugandwa, T. C., Kanyurhi, E. B., Bugandwa Mungu Akonkwa, D., & Haguma Mushigo, B. (2020). Linking corporate social responsibility to trust in the banking sector: exploring disaggregated relations. *International Journal of Bank Marketing*, 39(4), 592–617. doi:10.1108/IJBM-04-2020-0209.
- [68] McDonald, L. M., & Rundle-Thiele, S. (2008). Corporate social responsibility and bank customer satisfaction: A research agenda. *International Journal of Bank Marketing*, 26(3), 170–182. doi:10.1108/02652320810864643.
- [69] Trotta, A., & Cavallaro, G. (2012). Measuring corporate reputation: A framework for Italian banks. *International Journal of Economics and Finance Studies*, 4(1), 21-30.
- [70] Odetayo, T.A., Adeyemi, A.Z., Sajuyigbe, A.S. (2014). Impact of Corporate Social Responsibility on Profitability of Nigeria Banks. *International Journal of Academic Research in Business and Social Sciences*, 4(8), 252. doi:10.6007/ijarbs/v4-i8/1094.
- [71] Fatma, M., Rahman, Z., & Khan, I. (2015). Building company reputation and brand equity through CSR: the mediating role of trust. *International Journal of Bank Marketing*, 33(6), 840–856. doi:10.1108/IJBM-11-2014-0166.
- [72] Bravo, R., Matute, J., & Pina, J. M. (2012). Corporate Social Responsibility as a Vehicle to Reveal the Corporate Identity: A Study Focused on the Websites of Spanish Financial Entities. *Journal of Business Ethics*, 107(2), 129–146. doi:10.1007/s10551-011-1027-2.
- [73] Pomeroy, A., & Dolnicar, S. (2008). Assessing the Prerequisite of Successful CSR Implementation: Are Consumers Aware of CSR Initiatives? *Journal of Business Ethics*, 85(S2), 285–301. doi:10.1007/s10551-008-9729-9.
- [74] Marin, L., & Ruiz, S. (2007). “I need you too!” Corporate identity attractiveness for consumers and the role of social responsibility. *Journal of Business Ethics*, 71(3), 245–260. doi:10.1007/s10551-006-9137-y.
- [75] Matute-Vallejo, J., Bravo, R., & Pina, J. M. (2011). The influence of corporate social responsibility and price fairness on customer behaviour: Evidence from the financial sector. *Corporate Social Responsibility and Environmental Management*, 18(6), 317–331. doi:10.1002/csr.247.
- [76] Wu, M.-W., & Shen, C.-H. (2013). Corporate social responsibility in the banking industry: Motives and financial performance. *Journal of Banking & Finance*, 37(9), 3529–3547. doi:10.1016/j.jbankfin.2013.04.023.

- [77] Fombrun, C. J., Gardberg, N. A., & Barnett, M. L. (2000). Opportunity platforms and safety nets: Corporate citizenship and reputational risk. *Business and society review*, 105(1), 85-106.
- [78] Pelozo, J. (2006). Using corporate social responsibility as insurance for financial performance. *California Management Review*, 48(2), 52–72. doi:10.2307/41166338.
- [79] El Ghoul, S., Guedhami, O., Kwok, C. C. Y., & Mishra, D. R. (2011). Does corporate social responsibility affect the cost of capital? *Journal of Banking and Finance*, 35(9), 2388–2406. doi:10.1016/j.jbankfin.2011.02.007.
- [80] Shen, C.-H., Wu, M.-W., Chen, T.-H., & Fang, H. (2016). To engage or not to engage in corporate social responsibility: Empirical evidence from global banking sector. *Economic Modelling*, 55, 207–225. doi:10.1016/j.econmod.2016.02.007.
- [81] Esteban-Sanchez, P., de la Cuesta-Gonzalez, M., & Paredes-Gazquez, J. D. (2017). Corporate social performance and its relation with corporate financial performance: International evidence in the banking industry. *Journal of Cleaner Production*, 162, 1102–1110. doi:10.1016/j.jclepro.2017.06.127.
- [82] Wu, M. W., Shen, C. H., & Chen, T. H. (2017). Application of multi-level matching between financial performance and corporate social responsibility in the banking industry. *Review of Quantitative Finance and Accounting*, 49(1), 29–63. doi:10.1007/s11156-016-0582-0.
- [83] Nizam, E., Ng, A., Dewandaru, G., Nagayev, R., & Nkoba, M. A. (2019). The impact of social and environmental sustainability on financial performance: A global analysis of the banking sector. *Journal of Multinational Financial Management*, 49, 35–53. doi:10.1016/j.mulfin.2019.01.002.
- [84] Waddock, S. A., & Graves, S. B. (1997). The corporate social performance-financial performance link. *Strategic Management Journal*, 18(4), 303–319. doi:10.1002/(SICI)1097-0266(199704)18:4<303::AID-SMJ869>3.0.CO;2-G.
- [85] Cochran, P. L., & Wood, R. A. (1984). Corporate Social Responsibility and Financial Performance. *Academy of Management Journal*, 27(1), 42–56. doi:10.5465/255956.
- [86] Husted, B. W., & De Jesus Salazar, J. (2006). Taking friedman seriously: Maximizing profits and social performance. *Journal of Management Studies*, 43(1), 75–91. doi:10.1111/j.1467-6486.2006.00583.x.
- [87] Soana, M. G. (2011). The Relationship between Corporate Social Performance and Corporate Financial Performance in the Banking Sector. *Journal of Business Ethics*, 104(1), 133–148. doi:10.1007/s10551-011-0894-x.
- [88] De La Cuesta-González, M., Muñoz-Torres, M. J., & Fernández-Izquierdo, M. Á. (2006). Analysis of social performance in the Spanish financial industry through public data. A proposal. *Journal of Business Ethics*, 69(3), 289–304. doi:10.1007/s10551-006-9091-8.
- [89] Moskowitz, M. (1972). Choosing socially responsible stocks. *Business and Society Review*, 71-75.
- [90] Simpson, W. G., & Kohers, T. (2002). The link between corporate social and financial performance: Evidence from the banking industry. *Journal of Business Ethics*, 35(2), 97–109. doi:10.1023/A:1013082525900.
- [91] Pelozo, J. (2009). The challenge of measuring financial impacts from investments in corporate social performance. *Journal of Management*, 35(6), 1518–1541. doi:10.1177/0149206309335188.
- [92] Freeman, R. E. (2015). *Strategic management: A stakeholder approach*. Cambridge University Press, Cambridge, United Kingdom. doi:10.1017/CBO9781139192675.
- [93] Baron, D. P. (2001). Private politics, corporate social responsibility, and integrated strategy. *Journal of Economics and Management Strategy*, 10(1), 7–45. doi:10.1162/105864001300122548.
- [94] Fornell, C., Mithas, S., Morgeson, F. V., & Krishnan, M. S. (2006). Customer satisfaction and stock prices: High returns, low risk. *Journal of Marketing*, 70(1), 3–14. doi:10.1509/jmkg.2006.70.1.3.
- [95] Gruca, T. S., & Rego, L. L. (2005). Customer Satisfaction, Cash Flow, and Shareholder Value. *Journal of Marketing*, 69(3), 115–130. doi:10.1509/jmkg.69.3.115.66364.
- [96] Carroll, A. B., & Shabana, K. M. (2010). The business case for corporate social responsibility: A review of concepts, research and practice. *International Journal of Management Reviews*, 12(1), 85–105. doi:10.1111/j.1468-2370.2009.00275.x.
- [97] Kurucz, E. C., Colbert, B. A., & Wheeler, D. (2009). *The Business Case for Corporate Social Responsibility*. The Oxford Handbook of Corporate Social Responsibility, 83–112, Oxford University Press, Oxford, United Kingdom. doi:10.1093/oxfordhb/9780199211593.003.0004.
- [98] Khan, M. M., & Fasih, M. (2014). Impact of service quality on customer satisfaction and customer loyalty: Evidence from banking sector. *Pakistan Journal of Commerce and Social Sciences (PJCSS)*, 8(2), 331-354.
- [99] Chatterjee, C., & Lefcovitch, A. (2011). Corporate social responsibility and banks. *Amicus Curiae*, 2009(78), 24-28. doi:10.14296/ac.v2009i78.1198.

- [100] Birindelli, G., Ferretti, P., Intonti, M., & Iannuzzi, A. P. (2015). On the drivers of corporate social responsibility in banks: evidence from an ethical rating model. *Journal of Management and Governance*, 19(2), 303–340. doi:10.1007/s10997-013-9262-9.
- [101] Eklof, J., Podkorytova, O., & Malova, A. (2020). Linking customer satisfaction with financial performance: an empirical study of Scandinavian banks. *Total Quality Management and Business Excellence*, 31(15–16), 1684–1702. doi:10.1080/14783363.2018.1504621.
- [102] Stanaland, A. J. S., Lwin, M. O., & Murphy, P. E. (2011). Consumer Perceptions of the Antecedents and Consequences of Corporate Social Responsibility. *Journal of Business Ethics*, 102(1), 47–55. doi:10.1007/s10551-011-0904-z.
- [103] Simionescu, L. N., & Gherghina, A. C. (2014). Corporate social responsibility and corporate performance: empirical evidence from a panel of the Bucharest Stock Exchange listed companies. *Management & Marketing*, 9(4), 439–458.
- [104] Gherghina, S. C., & Vintilă, G. (2016). Exploring the impact of corporate social responsibility policies on firm value: The case of listed companies in Romania. *Economics and Sociology*, 9(1), 23–42. doi:10.14254/2071-789X.2016/9-1/2.
- [105] Cherian, J., Umar, M., Thu, P. A., Nguyen-Trang, T., Sial, M. S., & Khuong, N. V. (2019). Does corporate social responsibility affect the financial performance of the manufacturing sector? Evidence from an emerging economy. *Sustainability (Switzerland)*, 11(4). doi:10.3390/su11041182.
- [106] Ramzan, M., Amin, M., & Abbas, M. (2021). How does corporate social responsibility affect financial performance, financial stability, and financial inclusion in the banking sector? Evidence from Pakistan. *Research in International Business and Finance*, 55, 101314. doi:10.1016/j.ribaf.2020.101314.
- [107] Vo, D. H., Van, L. T. H., Dinh, L. T. H., & Ho, C. M. (2020). Financial inclusion, corporate social responsibility and customer loyalty in the banking sector in Vietnam. *Journal of International Studies*, 13(4), 9–23. doi:10.14254/2071-8330.2020/13-4/1.
- [108] Anh, N. V., & Nguyễn, T. T. P. (2021). The relationship of corporate social responsibility to customer loyalty - A study in Vietnam market. *Science & Technology Development Journal - Economics - Law and Management*, 5(1), 1299-1312. doi:10.32508/stdjelm.v5i1.723.
- [109] Saeidi, S. P., Sofian, S., Saeidi, P., Saeidi, S. P., & Saeidi, S. A. (2015). How does corporate social responsibility contribute to firm financial performance? The mediating role of competitive advantage, reputation, and customer satisfaction. *Journal of Business Research*, 68(2), 341–350. doi:10.1016/j.jbusres.2014.06.024.
- [110] Hair Jr, J. F., Anderson, R. E., Tatham, R. L., & Black, W. C. (1995). *Multivariate Data Analysis (4th Ed.)* Pearson College Div., New York, United States.
- [111] Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2009). *Multivariate data analysis (7th Ed.)*. Pearson, New York, United States.
- [112] Kline, R. B. (2015). *Principles and practice of structural equation modeling*. Guilford Publications, New York, United States.
- [113] Bentler, P. M., & Bonett, D. G. (1980). Significance tests and goodness of fit in the analysis of covariance structures. *Psychological Bulletin*, 88(3), 588–606. doi:10.1037/0033-2909.88.3.588.
- [114] Jöreskog, K. G., & Sörbom, D. (1993). *Structural Equation Modeling with the Simplex Command Language*. Scientific Software International, Lincolnwood, United States.
- [115] Hu, L., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling: A Multidisciplinary Journal*, 6(1), 1–55. doi:10.1080/10705519909540118.
- [116] Curran, P. J., West, S. G., & Finch, J. F. (1996). The Robustness of Test Statistics to Nonnormality and Specification Error in Confirmatory Factor Analysis. *Psychological Methods*, 1(1), 16–29. doi:10.1037/1082-989X.1.1.16.
- [117] Cudeck, R. (1993). *Alternative Ways of Assessing Model Fit*. Testing structural equation models, SAGE Publications, Newbury Park, United States.
- [118] Chen, F., Curran, P. J., Bollen, K. A., Kirby, J., & Paxton, P. (2008). An empirical evaluation of the use of fixed cutoff points in RMSEA test statistic in structural equation models. *Sociological Methods and Research*, 36(4), 462–494. doi:10.1177/0049124108314720.
- [119] Fan, X., Thompson, B., & Wang, L. (1999). Effects of sample size, estimation methods, and model specification on structural equation modeling fit indexes. *Structural Equation Modeling: A Multidisciplinary Journal*, 6(1), 56–83. doi:10.1080/10705519909540119.
- [120] Tabachnick, B. G., & Fidell, L. S. (2001). *Using multivariate statistics (4th Ed.)*. Allyn & Bacon, Boston, United States.
- [121] Bentler, P. M. (1990). Comparative fit indexes in structural models. *Psychological Bulletin*, 107(2), 238–246. doi:10.1037/0033-2909.107.2.238.
- [122] Stanaland, A. J. S., Lwin, M. O., & Murphy, P. E. (2011). Consumer Perceptions of the Antecedents and Consequences of Corporate Social Responsibility. *Journal of Business Ethics*, 102(1), 47–55. doi:10.1007/s10551-011-0904-z.

Appendix I: The Questionnaire

No.	Factors/ Observed variables	Code	Source
Corporate social responsibility			
1	Bank's corporate social responsibility is closely linked with economic responsibility	CSR1	Du, Bhattacharya, and Sen (2007)
2	Bank's corporate social responsibility is closely linked with the legal responsibility	CSR2	
3	Bank's corporate social responsibility is closely linked to its ethical responsibility	CSR3	Carroll (1979, 1991)
4	Bank's corporate social responsibility is associated with charity issues	CSR4	
5	Bank's corporate social responsibility is associated with humanitarian issues	CSR5	
Bank reputation			
6	Bank reputation is well known	UT1	Rashid (2010)
7	The bank provides financial services to customers as committed	UT2	Dlugopolska-Mikonowickz et al. (2019)
8	Customers are secured when using the bank's financial services	UT3	
9	The bank always cares and supports customers in a timely manner	UT4	
Customer satisfaction			
10	The bank proceeds financial transactions on time and accurate.	SHL1	Dlugopolska-Mikonowickz et al. (2019)
11	Customers are completely satisfied with the products, services, and other utilities that the bank brings	SHL2	
12	The number of customers use the bank's financial products tends to increase	SHL3	
13	Customers are completely satisfied with the bank's program/policies	SHL4	
Bank's performance			
14	The bank's performance is improved thanks to social responsibility activities	HQNH1	Dlugopolska-Mikonowickz et al. (2019)
15	Customers are willing to refer friends and relatives to use banking services	HQNH2	
16	The bank reputation will increase the bank's operational efficiency	HQNH3	
17	The bank has a policy of maintaining relationships with traditional customers and attracting potential customers	HQNH4	

Appendix II: Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	8.517	50.101	50.101	8.517	50.101	50.101	3.884	22.845	22.845
2	2.100	12.351	62.451	2.100	12.351	62.451	3.465	20.381	43.226
3	1.574	9.257	71.709	1.574	9.257	71.709	3.160	18.586	61.812
4	1.379	8.110	79.818	1.379	8.110	79.818	3.061	18.007	79.818
5	0.561	3.299	83.117						
6	0.470	2.762	85.879						
7	0.379	2.227	88.106						
8	0.304	1.788	89.894						
9	0.290	1.706	91.600						
10	0.275	1.616	93.217						
11	0.247	1.451	94.668						
12	0.237	1.392	96.060						
13	0.200	1.178	97.238						
14	0.169	.994	98.232						
15	0.137	.808	99.040						
16	0.096	.567	99.608						
17	0.067	.392	100.000						

Extraction Method: Principal Component Analysis.

Appendix III: Rotated Component Matrix ^a

	Component			
	1	2	3	4
CSR4	0.861			
CSR3	0.833			
CSR5	0.825			
CSR2	0.816			
CSR1	0.783			
SHL4		0.880		
SHL1		0.867		
SHL3		0.839		
SHL2		0.819		
HQNH3			0.836	
HQNH2			0.811	
HQNH1			0.800	
HQNH4			0.792	
UT2				0.849
UT3				0.818
UT1				0.786
UT4				0.764

Extraction Method: Principal Component Analysis; Rotation Method; Varimax with Kaiser Normalization.

a. Rotation converged in 6 iterations.