Corporate Social responsibility, Brand Value, and Corporate Financial Performance: An empirical study from Vietnam commercial banking system

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### Abstract

The study uses data from balance sheets to analyze data of 27 commercial banks from 2009 to 2020 period to find out the role of brand value (BRV) in the relationship between Corporate Social Responsibility (CSR) and Corporate Financial Performance (CFP). The paper indicated from the Random Effect Model (REM) regression results and reinforcement tests that BRV is a mediator in the relationship between CSR and CFP. The empirical results also show that CSR implication helps improve BRV while there is no impact on improving CFP in state-owned commercial banks. Additionally, bank scale has a positive effect, while debt leverage negatively affects commercial banks' business performance. These findings explain the transmission mechanism between CSR and CFP. Management policies suggested enhancing the proactive implementation of CSR in pursuit of business goals in Vietnamese commercial banks.

*Key words:* mediation mechanism, brand value, corporate financial performance, corporate social responsibility.

JEL Classification Codes: M14, M54, J20.

### Introduction

Since the second half of the 20th century, when [1-3] wrote his "Corporate Social Responsibilities" book, this area has been developed significantly. It contains many theories, approaches, and academic terms integrated with certain aspects of organizational theory. The evolution history of the corporate social responsibility (CSR) concept is interesting because it occurs in an unsmooth process. Instead, endless debates have often reviewed CSR continuously when there has been no agreement among the researchers on a standard definition or set of core principles. Moreover, whether it is somehow beneficial for businesses to practice CSR is still a question to be further studied. It is such a complicated issue.

On the one hand, it is the main goal for any business activities in general and any commercial banks to seek profits for their shareholders. On the other hand, commercial banks can separate from social activities. They should be a component of societal activities like other individuals/organizations, creating a non-stop connection with other entities. Moreover, the customers have more strict requirements of ethical factors and social standards on the commercial banks. Therefore, CSR is an investment from an economic perspective, but whether it will be beneficial is still a question for managers.

In the context of preliminary studies on the relationship between CSR and corporate financial performance (CFP) in Vietnam, especially in the commercial banking system, a better understanding of this impact helps managers have more scientific information to practice CSR proactively. Thereby, this study contributes to changing managers' awareness of CSR practice from a passive, "giving" orientation under the spirit of philanthropy into an active direction to gain benefits from their customers. Doing this is very meaningful in planning effective marketing strategies to promote CFP from CSR activities. The main contribution of this study is in the following findings or arguments: Firstly, CSR activities generate added value to BRV, through which commercial bank CFP increased. Therefore, this study provides evidence that commercial banks should implement CSR proactively because they also directly benefit from this. Secondly, CSR's impact on CFP is not a direct relationship but a transmission one through BRV. It is a mechanism in which the commercial banks involving in CSR practice will increase their image, thereby their activities to serve customers increase (or increasing BRV), and ultimately their CFP increases. To our limited knowledge, this intermediary relationship has been tested on a sample of commercial banks for the first time. Thirdly, a set of measures of CSR index is formed with two large groups of indicators, namely "community activities" and "contribution to environmental protection." Besides, further research to complete the set of indicators suggested reflecting CSR practices at commercial banks.

In the next section, a review of previous studies is introduced, section 3 presents the steps of data measurement, empirical results, and discussion are presented in section 4. Finally, policy implications and conclusions will be given on the basis of the empirical results in Section 5.

## Overview of study topic and hypothesis Corporate Social Responsibility

The most common understanding of corporate social responsibility is that profit maximization is not the main objective of businesses but a contribution to social wellbeing through voluntary efforts [4]. One of the earliest definitions of CSR term is stated by [5-8]: "the obligations of businessmen to pursue those policies, make those decisions, or follow those lines of action which are desirable in terms of the objectives and values of our society." All other definitions of the early 1950s acknowledged the necessity for managers to assume social responsibilities, such as promoting public interests and promoting fundamental social beliefs to contribute to social stability, strength, and harmony [9]. Davis' definition of CSR [10-12] relates to business responses that go beyond legal, economic, technological, or in other words, profitseeking requirements. Job-providing is not enough with the implicit benefits of the businesses to society. In today's time, businesses have undergone more and more pressure to comply with regulations on environmental protection, transparency, and the market has been saturated with competitors. Therefore, CSR should be introduced as a strategy for businesses to survive [13]. Specifically, the businesses attach importance to different aspects of the overall picture of public expectations for their operations, including i) sustainable development, ii) transparency and accountability, iii) maintaining good management of relations with stakeholders, iv) advocating various aspects of human rights, justice, and democratic principles, v) complying with accepted international CSR standards, and vi) complying with ethical business practices. [14-16]expands the CSR definition by giving ten related characteristics, including obligations to the society; stakeholder involvement; improving the quality of life; economic development; ethical business practice; legal compliance; voluntariness; human rights; environmental protection; transparency & accountability. Thus, some CSR define that companies are expected to contribute to the development of society and improve their reputation. CSR, therefore, is not limited to charitable activities but includes economic, ethical, legal, and discretionary initiatives to pursue stakeholder expectations. In general, there have been some changes in the researchers' approaches to CSR definitions. In which, during the period of 1950-1960, the approach was mainly concerned with the association between CSR and ethical values and reputation, and since 1990, there has been an emphasis between CSR and corporate transparency and accountability to direct CSR activities toward the strategic concept of CSR [17-21].

There is a mutual interaction between the benefits for the businesses and those for society from the CSR concepts. The companies respond to CSR activities by obstacles and seek opportunities. Notably, in the current social and business environment, there is an increase of high demand of the public for organizational leaders to include social issues as part of their strategy. [22]. Conversely, when the business involves in CSR practice, that action also delivers a positive signal about the business leadership for the community, affecting the management ability of the company involving in CSR practice. Therefore, CSR activities are essentially both pressure and opportunity for the business in new business conditions.

## **Corporate Social Responsibility and Brand Value**

The definitions approaching Brand Value (BRV) seem diverse in terms of economic and marketing perspectives. For instance, with accounting approach, brand value is defined as the future incremental cash flows which may accrue to branded products relative to the cash flows resulting from the sale of unbranded products by [23-26] Under the marketing perspective, as defined by, BRV is "total added value of a brand to core products". Thus, whichever approach is taken, the brand that can be converted into a physical form has economic value in determining the corporate assets. To obtain such an outcome, the practice of CSR in the business is also a strategic approach that the businesses may consider in today's fast-spreading information age. The transmission mechanism of this connection is the practice of CSR will increase positive effects to the companies by enhancing reputation and growing differentiation from the competitors [27]. In addition, the practice of CSR and CSR accountability play a central role in building up a firm reputation through signaling theory [28, 29]. The companies with more CSR activities may get trusted by stakeholders because this indicates some positive indicators of quality management [30]. Specifically, by encouraging CSR related activities, the business sends out positive signals that may satisfy stakeholders like their employees [31], or their customers [32, 33], thereby increasing BRV [34]. In other words. CSR is a practical resource to improve the business's intangible competitive advantage [35] CSR is seen as a type of insurance that protects the company against market disadvantages [36].

Therefore, CSR is a crucial element of the business's overall strategy [37, 38]. In the finance-banking sector, empirical evidence of the relationship between CSR and BRV is found directly or indirectly through mediators. [39-41] indicate that in Thailand commercial banks, CSR commitment is one of the factors strongly contributing to brand preference. Moreover, with elderly customers, CSR may have a significant impact on their brand preferences. On researching customer samples in Iran commercial banks, a direct relation of CSR impact on brand identity and direct effects of brand identity and

BRV is found out by. Similarly, researched Bahrain banks' customers, showing that corporate image is strengthened when banks engage in CSR activities. Their customers consider such CSR activities a key factor when entering into transactions with banks.

Furthermore, [42, 43], when studying FMCGs in Kenva, suggests that CSR is not freebies but the efforts of commercial banks to deploy resources in a way that helps build sustainable and effective business relationships between commercial banks and the community in which they do business. The results show that being engaged in CSR means that the company fulfills its obligation to provide for the poor in society and promotes the image of a commercial bank. And CSR engagement brings benefits to the stakeholders in terms of improved education, better health, environmental preservation, business opportunities, and support to prevent disaster in the community. It is also beneficial for the Bank when considering customer brand loyalty. There is empirical evidence of the commercial banks' CSR practice through environmental protection initiatives, philanthropy activities to promote their reputation and brands found by at 162 commercial banks in 22 different countries. tested the impact of a specific aspect of CSRR, which is transparency in corporate governance and quality of sustainability disclosure, a significant variable representing the bank's reputation. The authors note that the clarity is particularly relevant in restoring a bank's reputation, which may explain why financial firms in general and commercial banks in particular report much more CSR information than other industries. The results show that there is a direct relation between CSR activities and bank brands.

## **Corporate Social Responsibility and Financial Performance**

Corporate Financial Performance (CFP) is the most critical measure to evaluate the effectiveness of corporate governance because the business is responsible for adding value to their shareholders [44]. Therefore, paving attention to CSR so that the companies can meet common standards of the society and sustainable development should also be considered an investment targeting at improving the modern strategic management model, increasing benefits to the shareholder [45]. In other words, the direct relationship between CSR and CFP is still a matter of concern among the business. Empirical evidence of such a relationship is entirely dispersed. Some studies do not find a relation between CSR - CFP, even opposite effect [46-48]. Specifically, the relationship between CSR and CFP of 31 commercial banks in Italy as of December 31, 2005, is studied by using the linear pairwise correlation method. The results show no statistically significant relationship between CSR and CFP, which may be caused by management involving in higher costs than benefits for commercial banks of the sample. There is no evidence of the relationship between CSR and CFP (measured by ROA), or even negative effect between CSR and CFP (measured by ROE) found by on his study conducted on a sample of 137 businesses in India in the period of 2008-2017. However, some studies indicate the positive relationship between CSR and CFP (Erhemjamts, 2013; Rodgers, 2013). Using data from 113 listed American software companies between 2000 and 2005, [49-51] realize that CSR activities positively enhanced their financial performance when they encountered increasing competition. In other words, the more competitive the business environment is, the more evident the positive relationship between CSR and financial results is. Empirical evidence of a direct connection between CSR and CFP was found out by when he studied high-tech companies in Taiwan from 2010 to 2013. When analyzing European businesses in 10 different industries (consumption, energy, finance, health, information technology, materials, etc.) for the period 2000-2003, found out that investors were willing to pay high prices for the businesses that manage their relationships well with shareholders, customers, and suppliers. In other words, the share market price of the companies with good practices of CSR may be more attractive in the investors' eyes.

A positive correlation between CSR and profitability indicators like earnings before interest, tax, and depreciation, and amortization (EBITDA), earnings per shares (EPS) is also shown when [7, 52-54] analyzed the 50 largest Indonesian businesses in the period 2003-2007.

In the banking sector, found out the statistically significant positive relationship between CSR and CFP by their study on a sample of 28 commercial banks in India in 2007-2016 in which CFP was measured by both earnings and share price concepts. At the same time, the authors also gave suggestions on integrating CSR into the long-term strategies of commercial banks instead of just discrete spontaneous activities. found evidence to support this relationship in 18 commercial banks in Europe from 2003 to 2013. CSR positively impacted return on average assets (ROAA) specifically before the economic crisis (2003-2007). By using data of a sample of 60 commercial banks in Nigeria between 2010 and 2014 to find out the relationship between CSR and CFP, came to results showing that the commercial banks may obtain both financial and non-financial benefits from its CSR strategy.

Moreover, unlike other industries that may cause harm to the environment, commercial banks' activities are pretty unique, so the motivation for their practice of CSR may be very different from other industries. Accordingly, it is recommended by the authors that the practice of CSR should be provided for the parties for their financial benefits in the future. Using a study sample on 184 commercial banks in 41 countries between 2009 and 2015, Belasri, Gomes, and Pijourlet (2020) showed that CSR and CFP only existed in developed countries, in countries where investor protection is high.

### **Corporate Brand Value and Financial Performance**

If a business has a good BRV, it is able to: i) improve its image in the market [55] nly negotiate for the lowest price with suppliers [55] but also have the advantage to set high prices for their products [56], generate higher profit margin than other competitors. In the same point of view, , consider that high BRV is the reason why customers pay higher prices for products or services and interact in a way that is beneficial and relevant to the company and products, thus enhancing the company's business performance. In addition to the direct effect, evidence of an indirect result of BRV in the relationship between CSR and CFP is found by. In other words, the presence of BRV is emphasized as a "catalyst" for the impact of CSR is stronger on the CFP of the business.

In the banking sector, banking products are invisible and very easy to copy, so investing in BRV is an excellent strategy to be different from the competitors [57, 58]. The ultimate result is that BRV brings CFP and helps reduce the operational risk of a commercial bank with a positive awareness of the market [59]. It is indicated from a study conducted on a sample of 163 commercial banks in Europe and the US between 1994 and 2008 by Fiordelisi et al. (2014) that operational loss (lower CFP) causes reputational loss (brand value). Evidence shows that "fraud" is a type of risk resulting in the most considerable reputational damage. By analyzing data of 72 commercial banks from 20 countries in Europe between 2009 and 2015, Gangi (2018) realized a positive effect of BRV in predicting CFP of commercial banks, in the same direction with earlier findings of (Margolis et al., 2009; Bushman and Wittenberg-Moerman, 2012). The relationship between CSR, BRV, and CFP was assessed by Stefano (2017) with a sample of 75 large commercial banks in the world in the period 2008-2012 used. The results showed a positive relationship between BRV and CFP, while brand value had a negative impact on commercial banks' financial leverage and risk level.

## Shareholders properties in implementing Corporate Social Responsibility

Jones (1995) proposed the instrumental stakeholder theory argues that companies can reduce transactional and agency costs by implementing innovative social

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initiatives that affect stakeholder relationships. The initiatives can influence the stakeholders if they make a positive contribution to those stakeholders' goals and objectives. For example, a partially owned company by the trade union may improve health and safety conditions far beyond what is legally required. There can also be indirect effects when corporate initiatives are seen as signals of acting responsibly. This can improve the relationship between the company and its stakeholders. Both channels minimize agency problems. In addition, in some countries such as Vietnam, the government sets clear goals to improve environmental quality and social conditions. The objectives in these areas may be CSR-related. As a result, governments can endeavor to promote corporate sustainability and CSR through their portfolio investments. In other words, companies that tend to be run by public capital often signal better social relationships, thereby achieving better financial returns through good harmonizing interests of the parties.

Nonetheless, empirical evidence of such a relationship is relatively dispersed. Data of 600 companies in 16 European countries in 35 industries used by [60-63] indicate that companies owned by individuals were engaged in few CSR policies, while companies owned by large investment institutions. In other words, the evidence of the relationship between ownership and CSR is quite fuzzy. Meanwhile, showed results supporting. The private commercial banks score the highest in some areas such as environmental protection, education, and community activities in the set of CSR composition indicators.

Meanwhile, state-owned commercial banks group lead in the areas of financial universalizing, operating for the benefit of farmers. On average, the state-owned commercial banks have the highest CSR scores across all the regions, while the private commercial banks have the lowest scores. From the arguments mentioned above, a study hypothesis is formed by following[16, 64-66], the state-owned commercial banks perform CSR better than private-sector commercial banks and foreign-owned banks.

## Study hypothesis

From the reviews in the world and Vietnam, it is found that there are gaps that this study can provide some new perspectives for studying the impact of CSR on CFP in Vietnamese commercial banks. Firstly, the commercial banks' operations seem to attach importance to the proactive practice of CSR. Accordingly, there is a positive effect of their images in the customers' eyes, making them remember their brands and reputation and use services delivered by the banks. And finally, financial performance is what shareholders and bank administrators desire when taking community-oriented actions. We consider this hypothesis important because if it exists, it means that there is a channel to explain the transmission between CSR to CFP through BRV in reality. This transmission channel has not attracted much attention in the studies in the world literature. There has not been any research conducted in Vietnam to explain the relationship between CSR, BRV, and CFP variables. Accordingly, the study hypothesis is developed as follows:

H1: Brand Value is a mediator of the impact between Corporate Social Responsibility and Financial Performance of Vietnam Commercial Banks.

Secondly, the practice of social tasks in commercial banks managed by the State takes place on a large scale. Specifically, playing a central role in holding resources, the driving force of the society's development, commercial banks in Vietnam, especially the one managed by the State, always strive to take the lead in implementing social policies to carry out the tasks assigned by the society. Humanitarian, philanthropy, relief, environmental protection activities are always regularly carried out, increasing quality, creating positive effects in the community. That positivity (may) spread to the commercial banks' business activities, with the commercial banks managed by the

State still being the most profitable commercial banks in Vietnam commercial banks. Accordingly, there are two hypotheses that CSR practice in commercial banks funded by the State is better than private commercial banks

H2a: The practice of CSR in State-funded commercial banks has a positive effect on CFP

H2b: The practice of CSR in State-funded commercial banks has a positive effect on  $\ensuremath{\mathsf{BRV}}$ 

In addition, in our approach to measuring the CSR index, a measurement with two sets of significant indicators, including 16 minor criteria, is introduced. Our method attempts to quantify the degree of CSR practice in Vietnamese commercial banks through a hierarchical score, implying that the higher the score, the higher the degree of CSR practice.

### Study model and data

### Study model

To test hypothesis H1, the standard procedure on mediators introduced in Baron and Kenny [67] is used. The general equation is presented as follows:

 $BRV_{it} = \beta_0 + \beta_1 CSR_{it} + \beta_2 Size_{it} + \beta_3 Lev_{it} + e_{1it}$ (1)  $CFP_{it} = \delta_0 + \beta_4 CSR_{it} + \beta_5 Size_{it} + \beta_6 Lev_{it} + e_{2it}$ (2)  $CFP_{it} = \vartheta_0 + \beta_7 BRV_{it} + \beta_8 CSR_{it} + \beta_9 Size_{it} + \beta_{10} Lev_{it} + e_{3it}$ (3)

BRV, CSR, and CFP are variables of brand value, social responsibility, and financial performance, respectively; Size and Lev are scales and financial leverage of commercial banks, respectively, which act as control variables in the model. i = 1, 2..., N (representing observations from commercial banks), t = 1, 2, ..., T (representing period of time of sample), and  $e_{it}$  represent a model error.

Brand Value (BRV) is proven a mediator only when the following factors are satisfied at the same time: i)  $\beta_1$  in (1) is statistically significant; ii)  $\beta_4$  in (2) is statistically significant; iii)  $\beta_7$  in (3) is statistically significant, and iv)  $\beta_8 < \beta_4$ . Specifically,  $\beta_1$  in (1) being statistically significant signals a relationship between CSR and BRV, the same thing happens for  $\beta_4$  and  $\beta_7$  in the relationships between CSR-CFP and BRV-CFP. Additionally,  $\beta_8 < \beta_4$  indicates that the presence of BRV makes the relationship between CSR and CFP weaken. In other words, BRV plays a role of mediation in the relationship between CSR and CFP.

To test the hypothesis H2a and H2b, the following general equation	is used:
$CFP_{it} = \alpha_0 + \alpha_1 CSR_{it} + \alpha_2 Size_{it} + \alpha_3 Lev_{it} + D_{it}^* CSR_{it}$	(4a)
$BRV_{it} = \alpha_4 + \alpha_5 CSR_{it} + \alpha_6 Size_{it} + \alpha_7 Lev_{it} + D_{it} CSR_{it}$	(4b)

In which CSR, Size, and Lev are described as equations (1) to (3);  $D_{it}$  obtains 1 value with state-owned commercial banks (in our sample, there are four commercial banks: Vietcombank, Vietinbank, BIDV, Agribank) and obtains 0 value for the other commercial banks.

Pooled regression estimation (PLS), Fixed Effects Model (FEM) and Random Effect Model (REM) for equations from (1) to (4b) are applied to find the most suitable equation with the data set. Reinforcement tests are also used to confirm reliable results. Specifically, F-test is applied to test the choice between PLS and FEM methods; Hausman test is applied to test the choice between FEM and REM. Moreover, the correlation test and Wald test are applied to confirm the accuracy of the inclusion of variables in the model.

### Data measurement and data source

**Corporate social responsibility (CSR) variable**: In this study, a content analysis method is applied to extract CSR information through official and unofficial reports

(press information, website, financial statements) of commercial banks for the study period of 2009-2020. Two sets of CSR measurements ("community activities" and "environmental protection contributions") area used at each commercial bank with 16 smaller criteria based on the approach of. However, the indicators are modified in line with the actual situation of CSR practice of commercial banks in Vietnam, as presented in the Appendix. Notably, the criteria are binary values, i.e., each standard is given the value of 1 if it is valid for the statement in the criterion and provided the value of 0 if it is not the criterion statement. Then the CSR score will be averaged according to the criteria scores: The formula to determine the value of CSR index of commercial bank i at time t is as follows:

 $\mathsf{CSR}_{\mathsf{it}} = \frac{\sum_{k=1}^{16} GTTC_k}{16}$ 

(5)

In which:  $GTTC_k$  is a value of criterion kth out of the set of 16 criteria applied

From equation (5), it is possible to see that  $0 \le CSR_{it} \le 1$ . This means that the closer the CSRit of a commercial bank i at time t is to 1, the more it shows that the commercial bank has a high CSR. Conversely, the closer the value is to 0, the more it proves that the CSR of that commercial bank is low. Criteria for evaluating CSR implementation and CSR value of each commercial bank at each time in the period 2009-2020 are presented in the Appendix.

Brand Value variable (BVR): In this study, BRV is measured as suggested by on the market value of a business through the assessment of its intangible assets. According to strategic integration approaches, a business's brand value is seen as a mediator between the business' asset-based profitability activities and its market value. This is inconsistent with the process of previous studies in large commercial banks when brand value is defined as an essential factor of intangible assets [68, 69]. It should be further noted that the way to evaluate the market value of the business in general and commercial banks is based on the difference between the share market price traded and share book value. However, most commercial banks in Vietnam have been listed on the stock exchange in the last 5-6 years, so there is a lack of data collected in this direction. Therefore, an assessment method is applied as a replacement based on the average score of customer deposits and customer loans. For commercial banks, capital mobilization and lending are the key activities on their balance sheet. A commercial bank with a high deposit and lending index signals that the creditworthiness of its customers with that bank's operation is high (high BRV). The source of BRV data collection is from the commercial bank's financial statements.

**Corporate Financial Performance measurement variable (CFP):** in this study, two variables of CFP measurement are used, including return on total assets (ROA), and return on equity (ROE) as previous studies conducted by. ROA variable measures the profitability of the entire assets of the commercial bank, while ROE measures the profitability of the commercial bank's equity alone. The source of BRV data collection is from the commercial bank's income statement and balance sheet.

**Commercial bank size measurement variable (Size)**: bigger commercial banks are, the more resources for them to practice SCR, thereby the more value-added advantages and eventually the more profit for such commercial banks [70]. In this study, the Size variable is measured by the total assets of the commercial bank.

**Financial leverage measurement controlling variable (Lev)**: This variable describes the risk tolerance of commercial banks that may affect their ability to implement CSR [71]. In Vietnam, the study conducted by Nguyen Truong Anh Thi et al. (2019) also came to evidence a negative relationship between high long-term debt ratio and CSR practice in listed companies. This variable is measured by the ratio of total liabilities to total equity. The source of two controlling variables' data is from the commercial bank's income statement and balance sheet.

The total data included in the model are 324 observations of 27 Vietnam commercial banks, including four state-owned commercial banks, two foreign-owned commercial banks, and 21 private commercial banks for 2009-2020. The variables include brand value index (BRV), size of commercial banks (Size), and financial leverage (Lev), which are normalized to have normal distribution to avoid any outliers that may affect the mean parameter estimation, help the model improve the accuracy.

The normalized formula is applied as follows:

 $\bar{X}_{it} = \frac{X_{it} - \min(X_{it})}{\max(X_{it}) - \min(X_{it})}$ 

In which,  $\overline{X}_{it}$  is normalization value of X variable of commercial bank i at time t;  $X_{it}$  is initial value (real value of X variable), max( $X_{it}$ ) and min( $X_{it}$ ) are the largest and smallest value of X variables, respectively. So,  $0 \le \overline{X}_{it} \le 1$ 

# Empirical results and discussion

# **Description statistics**

Table 1 presents the outcomes of descriptive statistics of variables included in the model. As can be seen from the results, ROE and ROA (representing the variable of corporate financial performance - CFP) at Vietnam commercial banks in 2009-2020 were 9.96% and 0.94%, respectively. There is a big difference between the most significant and most negligible values of these two indexes. Specifically, the most considerable value of ROE, 27.11%, belongs to HSBC Vietnam Commercial Bank in 2011, while the smallest value is 0.08%, attributed to Viet Capital Commercial Bank in 2016. Similarly, an enormous value of ROA, 4.73%, belongs to Saigon Bank for Industry and Trade in 2010, while the smallest value is 0.01%, attributed to Viet Capital Commercial Bank in 2016. It can be interpreted from this result that there is a relatively big difference in the same profitability indicator among the commercial banks.

Another notable thing is that 4 State-managed commercial banks are not the leading group in terms of ROA and ROE. A more detailed survey shows that the two branches of foreign commercial banks in Vietnam, HSBC and Shinhan, are the leading commercial banks in terms of ROA and ROE with an average value of 1.97% and 13.43%, respectively between 2009 and 2020. So, it is suggested that foreign commercial banks are growing well in the Vietnam market.

Table 1

	ROE	ROA	CSR	BRV	SIZE	LEV
Average	9.96%	0.94%	0.58	151	225,642	11.23
Median	9.21%	0.77%	0.56	60	108,369	10.68
Largest	27.11%	4.73%	0.94	1.297	1,568,127	37.15
Smallest	0.08%	0.01%	0.19	1.73	3,330	1.66
Standard deviation	6.52%	0.69%	0.16	229	306,233	5.19
Number of observations	324	324	324	324	324	324

Description statistics of variables included in the model

Source: Results generated by Eviews

Regarding the CSR index, the results show that the average score is 0.58 points for all data in the sample, in which the largest value is 0.94 points for state-owned commercial banks, specifically, Vietinbank in 2018, 2020; Foreign Trade in the period of 2018-2020; Agribank in 2019-2020, and BIDV in 2020. Meanwhile, two commercial banks with the lowest scores are Shinhan and Viet Capital, scoring 0.19 points in 2017 and 2009. It is indicated from this result that state-owned commercial banks are still the

"leaders" in implementing CSR in Vietnam. In contrast, private and foreign-owned commercial banks have not paid much attention to CSR activities.

In-depth analysis of the average score of the two sets of indicators constituting the CSR score shows that the average score of the Community Activity indicator set is 0.685 while the indicator set of activities contributing to environmental protection is 0.474. This indicates that the view of CSR practice in Vietnamese commercial banks is mainly of community support. More specifically, the criterion "sponsoring the disadvantaged in the society (disabled people, women, war invalids, children, etc.)" scores the highest with 0.85, followed by the criterion of "sponsoring poverty reduction program" and "disaster relief activities (flood, drought, and so on)" with 0.735 and 0.701, respectively. The commercial banks, especially those managed by the State, often appear on bulletins and mass media about disaster relief criteria, supporting the poor, and supporting the disadvantage in society. This also reflects the governance orientation of CSR practice of the commercial banks' leaders associated with the traditional view of philanthropy. In the set of "contribution to environmental protection" indicators, the criterion with the highest score is "supporting green/environmental activities" with a score of 0.796.

In contrast, the criterion "involving in energy preservation and saving" scored the lowest average of 0.1. There is a possibility that some criteria scored low because they are not included in any referenced official reports or unofficial information. Nevertheless, this score also reflects that the criteria in the indicators of contribution to environmental protection have not been attached proper weight, adequately communicated, propagated, and spread to the society. From the above analysis, we realize that there is a need to improve management thinking about CSR practice to support brand values, not only limited to charity activities but also spread other positive messages such as environmental protection in CSR practice.

#### Variable Correlation test

In terms of the testing correlation coefficient between the variables included in the model, Table 4.2 presents the correlation coefficients. The results show that most of the variables are correlated at different levels of statistical significance. The two pairs of variables with high correlation coefficient and statistical significance are r (CSR, Size) = 0.63 and r (BRV, Size) = 0.69, which indicates that there is a possibility that the above variables overlap. In other words, the model is likely to be at risk of multicollinearity. Therefore, a Wald test is conducted to check the necessity of variables present in the model. The results show that when ROE is a dependent variable, F-value (CSR-Size) = 24.64, F-value (BRV-Size) = 23.17; in case ROA is a dependent variable, F-value (CSR-Size) = 15.43, and F-value (BRV-Size) = 20.3. All these F values are statistically significant at the 1% level, which means it is reliable to reject the hypothesis H0 (a = b = 0) in the Wald test with the coefficients of the pairs of variables, implying that selected variables are qualified to be included in the model without any multicollinearity effect on the results.

	ROE	ROA	CSR	BRV	SIZE	LEV
ROE	1					
ROA	0.73***	1				
CSR	0.21***	0.12**	1			
BRV	0.19***	0.11*	0.612287***	1		
SIZE	0.23***	0.09	0.63***	0.69***	1	
		-				
LEV	0.08	0.43***	0.39***	0.55***	0.57***	1

Variables Correlation coefficient

Table 2

\*\*\*p < 0.01, \*\*p < 0.05, and \*p < 0.1 Source: Results generated by Eviews

### Regression results and discussion Results of testing hypothesis H1

The regression results of three estimation techniques of PLS, FEM, and REM on the relationship between the variables considered under hypothesis H1 are explained in table 3. The results confirmed an association between CSR and CFP. Specifically, the CSR variable has a statistical significance of 1% in equation (1), and at the same time, has a statistical significance of 10% in equation (2). In equation (3), the BRV variable is statistically significant at 1%, and the mean estimate of the CSR variable is 0.016, smaller than the mean estimate of the CSR variable in equation (2) (which is 0.049). These statistical results provide evidence to confirm there is an effect between CSR and BRV, between BRV and ROE.

Additionally, the existence of BRV in equation (3) reduces the effect of CSR on ROE. In other words, there exists a transmission mechanism between CSR and ROE through the BRV mediator. Thus, the impact that CSR puts on ROE is not direct. It affects BRV first. That means commercial banks engaged in CSR practice will help improve their image in the public eyes. Thereby, their customers will feel the positivity in the message and increase deposit and lending activities of the commercial banks. Finally, the brand value will affect the ROE of the commercial banks.

The same interpretation can be applied to FEM and REM estimation techniques, and the same results are obtained as analyzed by the PLS technique.

Table 3

Results of PLS, FEM, and REM regression model for CSR-ROE relationship
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Equation (1)					
BRV dependent variable	PLS	FEM	REM		
CSR	0.031*** (3.44)	0.007*** (8.98)	0.010** (1.99)		
Size	0.924*** (114)	0.935*** (125)	0.932*** (130)		
Lev	-0.018 (1.43)	-0.026*** (-3.24)	-0.026*** (-3.33)		
С	0.007 (1.44)	-0.006 (-1.35)	-0.004 (-0.76)		
Test 1 (F-value)	F-value = 18.24	> F-critical = 1.82			
Test 2 (Hausman)		Chi-Sq. Stat	= 4.12, d.f = 3, Pr = 0.25		
	Ec	uation (2)			
ROE dependent variable	PLS	FEM	REM		
CSR	0.049* (1.67)	0.031** (2.01)	0.035* (1.92)		
Size	0.067** (2.55)	0.037 (1.27)	0.043 (1.61)		
Lev	-0.032 (-1.08)	0.038 (1.19)	0.024 (0.82)		
С	0.070*** (4.31)	0.066*** (3.59)	0.067*** (3.61)		
Test 1 (F-value)	F-value = 8.52 > F-critical = 1.82				
Test 2 (Hausman)	Chi-Sq. Stat = 2.53, d.f = 3, Pr = 0.47				
	Ec	uation (3)			
ROE dependent variable	PLS	FEM	REM		
BRV	1.064*** (6.25)	0.892*** (4.02)	0.94*** (4.67)		
CSR	0.016* (1.76)	0.025** (2.51)	0.022** (2.28)		
Size	1.049*** (6.59)	0.871*** (4.16)	0.918*** (4.86)		
Lev	-0.051* (-1.84)	0.014 (0.45)	-0.001 (-0.04)		
С	0.078*** (5.04)	0.061*** (3.36)	0.065*** (3.67)		
Test 1 (F-value)	F-value = 7.25 :	> F-critical = 1.82			
Test 2 (Hausman)			= 2.35, d.f = 4, Pr = 0.67		
***p < 0.01, **p < 0.05, and *p < 0.1. Value in ( ) is t-statistic Source: Results generated by Eviews					

Regarding the method of choosing the optimal estimation technique for the three models PLS, FEM, and REM with the data set of Vietnam commercial banks in the period 2009-2020, the F test (the choice between PLS and FEM) and Hausman test (choice between FEM and REM) are applied as mentioned above. As can be seen from tests 1 and 2 for each equation, the REM estimation technique is the most suitable among the three estimation techniques. Specifically, the F values of test 1 in equations (1) to (3) are all greater than the F-critical value (F-critical is considered at 1% significance level), implying that H0 in the two test hypotheses is rejected, i.e., there is at least one dummy variable representing the non-zero difference of each commercial bank in the data set. In other words, FEM method is more suitable than PLS. Test 2 (Hausman) shows that the probabilities of rejecting H0 are above the 10% threshold. This result concludes that it is not reliable to reject H0 in the Hausman test hypothesis. In other words, the model is more suitable for REM estimation than FEM. From these arguments, the REM optimal model is chosen for the obtained data set.

Some results drawn from the REM model are as follows:

Firstly, CSR positively impacts ROE and is statistically significant at the 10% level (equation 2). This means that there is a correlation between CSR and ROE. Specifically, an increase in CSR activities will positively impact the ROE results of Vietnam commercial banks.

Secondly, CSR also positively affects BRV when the estimation coefficient is statistically significant at 10% (equation 1). This means that when practicing CSR, commercial banks also receive a positive response given by the public when their customers receive those positive increases and convert them into actions of depositing and borrowing from the commercial banks, which helps directly increase their income BRV.

Thirdly, BRV shows a clear mediator role when its coefficient is statistically significant at 1%, and its presence reduces the effective coefficient of CSR on ROE (equation 3), implying that there exists a transmission mechanism between CSR and ROE through BRV.

Fourthly, in terms of controlling variables, the Size variable measuring the size of the commercial banks has a positive effect on ROE. As expected, the commercial banks with large asset sizes often have more abundant resources to carry out business operations that generate higher added value to their commercial banks. Our more indepth statistics with commercial banks with assets of over VND200 trillion shows that this group accounts for 30% of the total observations, with an ROE of 13.01%, which is significantly higher than the group with assets of under VND200 trillion (reaching 8.66%). With controlling leverage (Lev), the result has a negative effect on ROE, i.e., the more the commercial bank leverages, the lower its EAT is because it has to pay its due debts, thereby reducing the bank's ROE. However, it is noted that the estimated values are not statistically significant in the model chosen on the REM estimation, so there is not enough statistical evidence to suggest this negative relationship.

In summary, the above analysis results imply that CSR's practice will make a positive contribution to ROE through the transmission mechanism of the BRV variable. In addition, we also observe that the asset size of the commercial banks has a positive effect on their profitability while increasing debt leverage makes commercial banks' profits decrease.

The whole process above is repeated with the ROA variable representing financial performance. The results are presented in Table 4 and are like the results when ROE is the dependent variable. It is also noted that there is a difference in the size of the estimation parameters, and leverage is now statistically significant compared to ROE.

### Table 4

Results of PLS, FEM, and REM regression mod	del for CSR-ROA relationship
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	Equation (4)				
BRV dependent variable	PLS	FEM	REM		
CSR	0.031*** (3.44)	0.007*** (8.98)	0.010** (1.99)		
Size	0.924*** (114)	0.935*** (125)	0.932*** (130)		
Lev	-0.018 (1.43)	-0.026*** (-3.24)	-0.026*** (-3.33)		
С	0.007 (1.44)	-0.006 (-1.35)	-0.004 (-0.76)		
Test 1 (F-value)	F-value = 18.24 >	F-critical = 1.82			
Test 2 (Hausman)		Chi-Sq. Stat = 4.12	, d.f = 3, Pr = 0.25		
		Equation (5)			
ROA dependent variable	PLS	FEM	REM		
CSR	0.003*** (4.18)	0.002* (1.71)	0.002* (1.92)		
Size	0.009*** (3.88)	0.007** (2.41)	0.007*** (2.76)		
Lev	-0.026*** (-9.32)	-0.019*** (-5.99)	-0.022*** (-7.12)		
С	0.017*** (10.81)	0.014*** (7.37)	0.015*** (8.38)		
Test 1 (F-value)	F-value = 4.97 >	F-critical = 1.82			
Test 2 (Hausman)		Chi-Sq. Stat = 3.76	, d.f = 3, Pr = 0.25		
		Equation (6)			
ROA dependent variable	PLS	FEM	REM		
BRV	0.083*** (4.95)	0.101*** (4.43)	0.093*** (4.62)		
CSR	0.001** (2.18)	0.002* (1.68)	0.001* (1.71)		
Size	0.087*** (5.51)	0.102*** (4.73)	0.094*** (4.97)		
Lev	-0.028*** (-10.15)	-0.022*** (-6.89)	-0.024*** (-8.05)		
С	0.018*** (11.57)	0.013*** (7.23)	0.015*** (8.64)		
Test 1 (F-value)	F-value = 4.61 >	F-critical = 1.82			
Test 2 (Hausman)		Chi-Sq. Stat = 5.32	, d.f = 4, Pr = 0.26		

\*\*\*p < 0.01, \*\*p < 0.05, and \*p < 0.1; value in bracket () is t-statistic Source: Results generated by Eviews

The interpretation of the results is similar to the interpretation applied to ROE. In the PLS technique, the CSR variable has a statistical significance of 1% in equation (4), and at the same time, has a statistical significance of 1% in equation (5). In equation (6), the BRV variable is statistically significant at 1%, and the mean estimate of the CSR variable is 0.001, smaller than the mean estimate of the CSR variable in equation (5) (which is 0.003). These statistical results again provide evidence to confirm there is an effect between CSR and BRV, between BRV and ROA. Additionally, the existence of BRV in equation (6) reduces the impact of CSR on ROA. In other words, there exists a transmission mechanism between CSR and ROA through the BRV mediator, which is entirely like the case of the ROE dependent variable.

## Results of testing hypothesis H2a

The regression equation (4a) for the two dependent variables of ROA and ROE show no statistical evidence to support hypothesis H2a. Specifically, the dummy values representing the effect of CSR on ROA and ROE for state-owned commercial banks (bold part in Table 5) are not statistically significant. In other words, there is no evidence

that the practice of CSR in state-owned commercial banks helps increase their financial performance compared to private commercial banks.

Table 5

Effect of the CSR practice on financial performance in state-owned commercial banks

		ROA			ROE	
	PLS	FEM	REM	PLS	FEM	REM
CSR	0.002 (0.667)	0.001 (0.24)	0.001 (0.39)	0.057* (1.82)	0.026 (0.87)	0.033 (1.16)
Size	0.013*** (3.85)	0.007** (2.29)	0.008*** (2.83)	0.084** (2.41)	0.029 (0.97)	0.041 (1.39)
Lev	-0.027*** (-9.43)	-0.019*** (-5.95)	-0.022*** (-7.31)	-0.342 (-1.16)	0.039 (1.26)	0.023 (0.77)
Dum	-0.003 (-1.41)	-0.001 (-0.11)	-0.002 (-0.73)	-0.016 (-0.75)	0.082 (0.69)	0.006 (0.18)
С	0.016*** (9.72)	0.014*** (6.51)	0.015*** (8.32)	0.066*** (3.79)	0.059*** (2.81)	0.067*** (3.67)

\*\*\*p < 0.01, \*\*p < 0.05, and \*p < 0.1; the value in bracket () is t-statistic Source: Results generated by Eviews

The above empirical results imply no difference in CSR practice in commercial banks of different sources of funds. Therefore, private commercial banks can still implement CSR to promote their profits, as shown in hypothesis H1, without worrying that the state-owned commercial banks with more resources can promote CSR practice to increase their financial benefits.

### **Results of testing hypothesis H2b**

The regression equation (4b) for the dependent variable of BRV shows that there is statistical evidence to support hypothesis H2b. Specifically, the dummy variable representing the effect of CSR on BRV for the state-owned commercial banks (bold part in FEM column in Table 6) indicates a positive outcome with a statistical significance level of 1%. In other words, there is evidence supporting the fact that the practice of CSR in state-owned commercial banks helps increase their financial performance compared to private commercial banks. The empirical results imply a difference in CSR practice in the state-owned commercial banks and in private commercial banks in terms of increasing their brand value. This may be true in reality when promoting CSR practice through philanthropy and relief activities at the state-owned commercial banks recently appearing on newspapers, electronic newspapers, etc., at high frequency can affect the public's psychology of using their service. Meanwhile, private commercial banks do not improve their brand value because there is not much added value generated when they are not engaged in much CSR practice. Their CSR activities are not regularly included in their official reports.

Table	6
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BRV is a dependent variable	PLS	FEM	REM
CSR	-0.027*** (-2.79)	-0.014* (-1.83)	-0.011 (-1.39)
Size	0.933*** (8.66)	0.924*** (12.04)	0.932*** (12.4)
Lev	-0.019** (-2.16)	-0.022*** (-2.82)	-0.026*** (-3.41)
Dummy	-0.008 (-1.28)	0.125*** (4.23)	0.003 (0.27)
С	0.005 (0.92)	-0.017*** (-3.25)	-0.004 (-0.79)
	F-value = 19.95 > F-critical = 1.82		
			7 1 ( 1 ) 0 0000

Effect of the CSR practice on brand value in state-owned commercial banks

Chi-Sq. Stat = 21.87, d.f = 4, Pr = 0.0002

\*\*\*p < 0.01, and \*p < 0.1; value in bracket () is t-statistic Source: Results generated by Eviews

### Conclusion

Our approach analyzes the relationship between CSR, BRV and CFP is a quantitative analysis of balance sheet data for 27 commercial banks in Vietnam in 2009-2020 by following PLS, FEM, and REM estimation methods. The empirical results show that the practice of CSR has a positive effect on the commercial banks' financial performance and contributes to increasing the awareness among their customers with the activities of commercial banks. Therefore, in addition to the managers' traditional measures to improve the bank's financial performance (such as service discounts, interest rate promotions, etc.), CSR should be considered a marketing kit used by commercial banks. Indeed, the practice of CSR benefits the parties involved in the circle. From the customer behavior perspective, CSR activities are delicate marketing activities because the subject actively receives information.

Moreover, the affected subject may not be the direct beneficiary of CSR but other subjects when looking at the CSR practice of the commercial banks, which both enables the commercial banks to benefit the society and helps them attract customers to the operation of commercial banks. In addition, the requirements on CSR practice are also the ones that are much of the organizations' concern. Therefore, CSR is essential for businesses in integrating into international markets because it generates benefits to both commercial banks and society.

## REFERENCES

- 1. Afitah, I. and E.P. Isra, *Analysis of Forest and Land Fire with Hotspot Modis on Various Types of Land Cover in Central Kalimantan Province*. AgBioForum, 2021. **23**(2): p. 13-21.
- Adak, D., N. Bairagi, and R. Hakl, Accounting for multi-delay effects in an HIV-1 infection model with saturated infection rate, recovery and proliferation of host cells. BIOMATH, 2020.
  9(2): p. 2012297 DOI: <u>https://doi.org/10.11145/j.biomath.2020.12.297</u>.
- 3. Amirbek, A., et al., *THE CENTRAL ASIAN COUNTRIES IN THE GLOBAL ECONOMY: THE CHALLENGES OF ECONOMIC INTEGRATION*. Central Asia & the Caucasus (14046091), 2020. **21**(1) DOI: <u>https://doi.org/10.37178/ca-c.20.1.09</u>.
- 4. Barauskaite, G. and D. Streimikiene, *Corporate social responsibility and financial performance of companies: The puzzle of concepts, definitions and assessment methods.* Corporate Social Responsibility and Environmental Management, 2021. **28**(1): p. 278-287.
- 5. Abdeljaber, O., et al., *The role of Trade Integration and Cross-Border Entrepreneurship in International Relations: A moderating role of IT Infrastructure.* Croatian International Relations Review, 2021. **27**(87): p. 63-94.
- 6. Rašidagić, E.K. and Z. Hesova, *Development of Turkish Foreign Policy Towards the Western Balkans with Focus on Bosnia and Herzegovina*. Croatian International Relations Review, 2020. **26**(86): p. 96-129 DOI: <u>https://doi.org/10.37173/cirr.26.86.4</u>.
- 7. Arau, J.H., *The economic-financial crises of contemporary capitalism*. Cuadernos de Economía, 2020. **43**(123): p. 359-381 DOI: <u>https://doi.org/10.32826/cude.v43i123.302</u>.
- 8. Seoane, M.J.F., *Employability profiles: the case of a Spanish University*. Cuadernos de Economía, 2020. **43**(123): p. 341-352.
- 9. Drucker, P., *The practice of management*. 2012: Routledge.
- Kasalak, G. and M. Dagyar, *The Relationship between Teacher Self-Efficacy and Teacher Job* Satisfaction: A Meta-Analysis of the Teaching and Learning International Survey (TALIS). Educational Sciences: Theory and Practice, 2020. 20(3): p. 16-33.
- 11. Mehmet, S.A.K., *The role of ideal L2 self in predicting L2 willingness to communicate inside and outside the classroom.* Eurasian Journal of Applied Linguistics, 2020. **6**(2): p. 189-203 DOI: <u>https://doi.org/10.32601/ejal.775798</u>.
- 12. Rusman, A., *Model of Performance Improvement of Certified Teachers in Private Vocational Schools.* Eurasian Journal of Educational Research, 2020. **20**(86): p. 25-38 DOI: <u>https://doi.org/10.14689/ejer.2020.86.2</u>.
- 13. Galan, J.I., *Corporate social responsibility and strategic management*. Journal of Management Studies, 2006. **43**(7): p. 1629-1641.

#### Volume 22 Issue 5 2021 CENTRAL ASIA AND CAUCASUS English Edition

- 14. Muluk, M.B., et al., Synthesis and molecular docking studies of novel pyridine-thiazolehydrazone conjugates as antimicrobial and antioxidant agents. EUROPEAN CHEMICAL BULLETIN, 2020. 9(7): p. 184-192 DOI: <u>https://doi.org/10.17628/ecb.2020.9.184-192</u>.
- 15. Lougheed, K., *Religious Disagreement, Religious Experience, and the Evil God Hypothesis.* European journal for philosophy of religion, 2020. **12**(1): p. 173-190 DOI: https://doi.org/10.24204/ejpr.v0i0.2827.
- 16. Lawrence, K.O.K., *RELATIONSHIP BETWEEN SKILLS DEVELOPMENT, EMPLOYEE MOTIVATION AND ORGANISATIONAL PERFORMANCE IN SOUTH AFRICAN ORGANISATION.* International Journal of Business and Management Studies, 2020. **12**(1): p. 177-190.
- 17. Ajah, B.O., I.A. Ajah, and C.O. Obasi, *Application of virtual reality (VR) and augmented reality (AR) in the investigation and trial of Herdsmen terrorism in Nigeria*. International Journal of Criminal Justice Sciences, 2020. **15**(1): p. 1-20.
- Suard, I.G.W., Challenges of Implementing Deradicalisation Programs for Terrorist Prisoners: An Examination of Indonesian Prison Officers' Experiences. International Journal of Criminal Justice Sciences, 2020. 15(2): p. 173-190.
- 19. Payne, B.K. and L. Hadzhidimova, *Disciplinary and interdisciplinary trends in cybercrime research: An examination*. International Journal of Cyber Criminology, 2020. **14**(1) DOI: https://doi.org/10.37178/ca-c.20.2.10.
- 20. Matthews, M. and B.A. Mokoena, *The Influence of Service Quality Dimensions On Customer Satisfaction Within Visa Facilitation Centres in South Africa*. International Journal of eBusiness and eGovernment Studies, 2020. **12**(2): p. 122-135 DOI: https://doi.org/10.34111/ijebeg.202012203.
- 21. van der Westhuizen, J. and L. Ntshingila, *The Effect Of Supplier Selection, Supplier Development And Information Sharing On Sme's Business Performance In Sedibeng.* International Journal of Economics and Finance Studies, 2020. **12**(2): p. 153-167.
- 22. Lantos, G.P., *The boundaries of strategic corporate social responsibility*. Journal of consumer marketing, 2001.
- 23. Sreekumar, R.G., Mayuri Desai, D. P. Acharjya, *Customer Classification in Indian Retail Sector* A Comparative Analysis of Various Machine Learning
- *Approaches.* International journal of operations and quantitative management, 2020. **26**(1): p. 1-28 DOI: https://doi.org/10.46970/2020.26.1.1.
- 24. Mazibuko, M. and N. Dlodlo, *The Influence Of Information Heuristics In Determining The Evaluation Of Microblog Music Review Credibility*. International Journal of Social Sciences and Humanity Studies, 2020. **12**(1): p. 82-97.
- 25. de Souza, G.H.S., et al., *Brazilian students' expectations regarding distance learning and remote classes during the COVID-19 pandemic*. Kuram ve Uygulamada Egitim Bilimleri, 2020. **20**(4): p. 65-80.
- 26. Salavrakos, I.-D., A Re-Assessment of Italian Defence Production and Military Performance in the World Wars. Res Militaris, 2020.
- 27. Boubakary, B. and D.D. Moskolaï, *The influence of the implementation of CSR on business strategy: An empirical approach based on Cameroonian enterprises.* 2016.
- 28. Lozano, R., *A holistic perspective on corporate sustainability drivers*. Corporate social responsibility and environmental management, 2015. **22**(1): p. 32-44.
- 29. Maden, C., et al., *Linking corporate social responsibility to corporate reputation: a study on understanding behavioral consequences.* Procedia-Social and Behavioral Sciences, 2012. **58**: p. 655-664.
- 30. Zhu, Y., L.-Y. Sun, and A.S. Leung, *Corporate social responsibility, firm reputation, and firm performance: The role of ethical leadership.* Asia Pacific Journal of Management, 2014. **31**(4): p. 925-947.
- 31. Stawiski, S., J.J. Deal, and W. Gentry, *Employee perceptions of corporate social responsibility*. Center for Creative Leadership, Greensboro, NC, 2010.
- 32. Lai, C.-S., et al., *The effects of corporate social responsibility on brand performance: The mediating effect of industrial brand equity and corporate reputation.* Journal of business ethics, 2010. **95**(3): p. 457-469.
- 33. Stanaland, A.J., M.O. Lwin, and P.E. Murphy, *Consumer perceptions of the antecedents and consequences of corporate social responsibility*. Journal of business ethics, 2011. **102**(1): p. 47-55.
- 34. Lourenço, I.C., et al., *The value relevance of reputation for sustainability leadership.* Journal of Business Ethics, 2014. **119**(1): p. 17-28.

- 35. Melo, T. and J.I. Galan, *Effects of corporate social responsibility on brand value*. Journal of brand management, 2011. **18**(6): p. 423-437.
- Klein, J. and N. Dawar, Corporate social responsibility and consumers' attributions and brand evaluations in a product-harm crisis. International Journal of research in Marketing, 2004. 21(3): p. 203-217.
- 37. Carroll, A.B. and F. Hoy, *Integrating corporate social policy into strategic management*. Journal of Business Strategy, 1984.
- De Stefano, F., S. Bagdadli, and A. Camuffo, *The HR role in corporate social responsibility and sustainability: A boundary-shifting literature review.* Human Resource Management, 2018. 57(2): p. 549-566.
- 39. Cheng, X.-M., *Excellence of Trainer and Psychological Wellbeing Lead to the Higher Performance: Evidence from Chinese Basketball Players.* Revista de Psicología del Deporte (Journal of Sport Psychology), 2020. **29**(4): p. 1-12.
- 40. Khoma, N. and I. Vdovychyn, *Universal basic income as a form of social contract: assessment of the prospects of institutionalisation.* socialspacejournal. eu, 2021: p. 97.
- 41. Kyurkchiev, N., *A new class of activation functions*. Some related problems and applications, Biomath, 2020. **9** DOI: <u>https://doi.org/10.11145/j.biomath.2020.05.033</u>.
- 42. Vo, P.H. and T.Q. Ngo, *The Role of Agricultural Financing and Development on Sustainability: Evidence from ASEAN Countries.* AgBioForum, 2020. **23**(1): p. 22-31.
- 43. Zhuo, W.X. and S.H. Salleh, *The Impact of Urbanization on Food Production and Residential Land Disputes (A Global Perspective)*. AgBioForum, 2020. **23**(1): p. 42-55.
- 44. Friedman, M., *The Social Responsibilities of Buisiness Is to Increase Its Profits.* The New York Times Sunday Magazine, 1970: p. 25-26.
- 45. Kolodinsky, R.W., et al., *Attitudes about corporate social responsibility: Business student predictors.* Journal of Business Ethics, 2010. **91**(2): p. 167-181.
- 46. Baird, P.L., P.C. Geylani, and J.A. Roberts, *Corporate social and financial performance reexamined: Industry effects in a linear mixed model analysis.* Journal of business ethics, 2012. **109**(3): p. 367-388.
- 47. Peng, C.-W. and M.-L. Yang, *The effect of corporate social performance on financial performance: The moderating effect of ownership concentration.* Journal of Business Ethics, 2014. **123**(1): p. 171-182.
- 48. Sekhon, A.K. and L.M. Kathuria, *Analyzing the impact of corporate social responsibility on corporate financial performance: evidence from top Indian firms.* Corporate Governance: The International Journal of Business in Society, 2019.
- 49. Mohamad, A.A. and T. Yashiro, *A rewinding model for replicons with DNA-links*. BIOMATH, 2020. **9**(1): p. 2001047 DOI: <u>https://doi.org/10.11145/j.biomath.2020.01.047</u>.
- 50. Babich, I., *MODERN PROTESTANT IDEOLOGY AND DENATIONALIZATION OF NORTH CAUCASIAN PEOPLES (CASE STUDIES OF NORTH OSSETIA AND ADYGEI).* Central Asia & the Caucasus (14046091), 2020. **21**(1) DOI: <u>https://doi.org/10.37178/ca-c.20.1.11</u>.
- 51. Mullaev, A., *COMPREHENSION OF CHINA'S BELT AND ROAD INITIATIVE AND ITS EFFECT ON UZBEKISTAN.* Central Asia and the Caucasus, 2020. **21**(2): p. 98-109 DOI: <u>https://doi.org/10.37178/ca-c.20.2.09</u>.
- 52. Al-masaeed, S., et al., *How the relationship between Information Technology, Entrepreneurship, and International Trade lead to the International Relations?* Croatian International Relations Review, 2021. **27**(87): p. 32-62.
- Heland-Kurzak, K., Bad Practice Affecting and Limiting the Education of Students: A Study of Pedagogical Myths in Pedagogy Students. Educational Sciences: Theory & Practice, 2020.
  20(4): p. 36-50.
- 54. Balbay, S., *Review of Innovations and Challenges in Language Learning Motivation*. Eurasian Journal of Applied Linguistics, 2020. **6**(3): p. 543-547.
- 55. Carreras, E., Á. Alloza, and A. Carreras, *Corporate reputation*. Vol. 1. 2013: LID Editorial.
- 56. Famiyeh, S., A. Kwarteng, and S.A. Dadzie, *Corporate social responsibility and reputation: some empirical perspectives.* Journal of Global Responsibility, 2016.
- 57. Fernandez-Feijoo, B., S. Romero, and S. Ruiz, *Commitment to corporate social responsibility measured through global reporting initiative reporting: Factors affecting the behavior of companies.* Journal of Cleaner Production, 2014. **81**: p. 244-254.
- 58. Pérez, A. and I.R. Del Bosque, *Corporate social responsibility and customer loyalty: exploring the role of identification, satisfaction and type of company.* Journal of Services Marketing, 2015.
- 59. Krueger, T.M., M.A. Wrolstad, and S. Van Dalsem, *Contemporaneous relationship between corporate reputation and return*. Managerial Finance, 2010.

- 60. Khoram, A., A.D. Bazvand, and J.S. Sarhad, *Error feedback in second language speaking: Investigating the impact of modalities of error feedback on intermediate EFL students' speaking ability.* Eurasian Journal of Applied Linguistics, 2020. **6**(1): p. 63-80 DOI: https://doi.org/10.32601/ejal.710205.
- 61. Aydin Ceran, S. and S. Ates, *Conceptual Understanding Levels of Students with Different Cognitive Styles: An Evaluation in Terms of Different Measurement Techniques.* Eurasian Journal of Educational Research, 2020. **88**: p. 149-178 DOI: https://doi.org/10.14689/ejer.2020.88.7.
- 62. Giorgadze, T.G., et al., *Silver atoms encapsulated in G4 PAMAM (polyamidoamine) dendrimers as a model for their use in nanomedicine for phototherapy*. EUROPEAN CHEMICAL BULLETIN, 2020. **9**(1): p. 22-27 DOI: <u>https://doi.org/10.17628/ecb.2020.9.22-27</u>.
- 63. Hart, M.J. and D.J. Hill, *Does God Intend that Sin Occur? We Affirm*. European Journal for Philosophy of Religion, 2020. **12**(1) DOI: <u>https://doi.org/10.24204/ejpr.v0i0.2950</u>.
- 64. Worsley, D., On Knowing an Ineffable God Personally: A Study in the Joy of the Saints. European Journal for Philosophy of Religion, 2020. **12**(1) DOI: https://doi.org/10.24204/ejpr.v12i1.3183.
- 65. Ozer, M.M. and H. Akbas, *The Predictability of IQ on Delinquency: A Structural Equation Model (SQM)*. International Journal of Criminal Justice Sciences, 2020. **15**(2): p. 283-297.
- 66. Hotar, N., *Herd Behavior In Terms Of Social Psychology: The Example Of Crypto Asset Markets.* International Journal Of Ebusiness And Egovernment Studies, 2020. **12**(1): p. 79-90 DOI: <u>https://doi.org/10.34111/ijebeg.202012106</u>.
- 67. Baron, R.M. and D.A. Kenny, *The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations.* Journal of personality and social psychology, 1986. **51**(6): p. 1173.
- 68. Cravens, K., E.G. Oliver, and S. Ramamoorti, *The reputation index:: Measuring and managing corporate reputation*. European management journal, 2003. **21**(2): p. 201-212.
- 69. Roberts, P.W. and G.R. Dowling, *Corporate reputation and sustained superior financial performance*. Strategic management journal, 2002. **23**(12): p. 1077-1093.
- Wahba, H. and K. Elsayed, *The mediating effect of financial performance on the relationship between social responsibility and ownership structure*. Future Business Journal, 2015. 1(1-2): p. 1-12.
- 71. Waddock, S.A. and S.B. Graves, *The corporate social performance–financial performance link*. Strategic management journal, 1997. **18**(4): p. 303-319.