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# THE IMPACT OF CORPORATE SOCIAL RESPONSIBILITY ON FINANCIAL STABILITY AND FINANCIAL INCLUSION IN THE BANKING SECTOR OF BANGLADESH

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## ABSTRACT
The crucial point of this study is to check out how corporate social responsibility (CSR) affects the financial situation, including in Bangladesh's banks. We used data from 20 commercial banks in Bangladesh from 2015 to 2019 for this research. What we found was that banks putting lots of money into CSR tend to have positive relations with customers, which leads to fewer financial problems and stronger money situations. Besides, we detected that increased bank involvement in CSR encourages inclusion in the financial system. This shows up in things like having more branches and ATMs. These results offer beneficial suggestions for banks and people making rules in Bangladesh to come up more robust plans that assist good inclusion and stability in the financial sector.

Keywords: Corporate social responsibility (CSR), financial inclusion, financial stability

## INTRODUCTION
Businesses all around the world have been really focusing on their Corporate Social Responsibility (CSR) policies in recent years. This has drawn the attention of different groups, like global regulatory bodies, staff members, customers, NGOs, and shareholders. CSR includes things like donations, charity events, social welfare projects, disaster relief efforts, pollution control measures, and other actions that help the business. The banking sector started using CSR as a way to guard against financial issues and enhance how people see them. Numerous finance studies have looked at how CSR affects a company's performance and profits over many years. While some observe a strong correlation between corporate social responsibility (CSR) and financial success, others find the opposite.

Researchers such as Uadiale and Fagbemi (2012), Alatawi *et al*. (2023), Persakis *et al*. (2024), and more have looked into how CSR attaches to financial success. They consistently discover a robust correlation between CSR actions and doing well financially. A study by Rettab et al. (2009) pointed out how CSR benefited financially developing nations. Kim et al. (2018) also analysed how physical bank locations, bank accounts, and lenders reinforce economic growth, as does the proliferation of automated teller machines (ATMs). The idea of integrating all people into the global financial system in order to boost and strengthen economies is receiving a lot of attention. In Bangladesh, both the Central Bank and government are making great efforts to guarantee that banking services are accessible to all through socially conscious actions. Even though Bangladesh faces problems like political issues and not enough good buildings because it's still growing as an economy, it's important to talk more about Corporate Social Responsibility (CSR). Bangladesh's economy is still growing and it faces challenges like political unrest and a lack of high-quality construction, more discussions about corporate social responsibility(CSR) are still needed. Studies by Hassan *et al.* (2019), Haldar *et al*. (2016), and Ullah (2013) have shown how CSR activities connect with including everyone in banking services and making banks stay stable in Bangladesh. By looking at how CSR affects providing banking services to everyone and strengthening banks in Bangladesh, this study seeks to close the gaps in the body of research.

## MATERIALS AND METHODS

### Hypothesis Development

Financial stability has been studied a lot in the past by financial researchers. Hassan et al. (2019) found that banks are less stable when they have more credit risk and liquidity risk. Lev et al. (2010) checked out how well a company does based on how much good stuff they do for society, like donations. They think that giving back helps companies do better in the future. Jin et al. (2017) showed that banks do better when they have more social connections, using something called a social capital index. It was observed that banks with more social media connections have fewer financial difficulties. These ideas bring us to the first hypothesis:

**Hypothesis 1:** Bangladesh's commercial banks exhibit a strong connection between corporate social responsibility and financial stability. Limited research has surveyed the link between social responsibility of corporations and financial accessibility. Haldar et al. (2016) have examined how financial inclusion and corporate social responsibility (CSR) activities intersect Bangladesh's banking industry. Evidence suggests that private banks engaged in CSR initiatives tend to offer better financial inclusion than state-owned banks. Ullah (2013) found that banks in Bangladesh vary in their commitment to CSR activities. According to Van der Werff et al. (2013), increased government support and the existence of financial institutions positively impact the level of financial inclusion. These findings lead us to the second hypothesis:

**Hypothesis 2:** There is a significant relationship between corporate social responsibility and financial inclusion among Bangladesh's commercial banks.

### Data Description

The annual panel data used for this study was gathered from 20 commercial banks in Bangladesh over five years, starting from 2015 to 2019. This data was collected from the bank's yearly report web page, where most commercial banks don't publish separate reports on their CSR efforts. The information collected is supported by the yearly report of the central bank of

Bangladesh . To determine the study's duration and the number of commercial banks involved, we relied on the availability of data variables in the estimated model.

**Empirical Model**

The pooled (ordinary least squares) OLS models from Ramzan et al. (2019) look at CSR as the main factor, with ( Financial Inclusion) FI and (Financial Stability) FS as the outcomes. Control variables include banks' leverage, tangibility, and size.

$$FI_{it} = \alpha + \beta_1 \log CSR_{it} + \beta_2 Leverage_{it} + \beta_3 Tangibility_{it} + \beta_4 Size_{it} + \mu_{it} \quad (1)$$

$$FS_{it} = \alpha + \beta_1 \log CSR_{it} + \beta_2 Leverage_{it} + \beta_3 Tangibility_{it} + \beta_4 Size_{it} + \mu_{it} \quad (2)$$

**Table 1.** Explanation and Assessment of Variables

| Determinates | Variable | Measurement formula |
|---|---|---|
| *Dependent variables* | | |
| 1. Financial Inclusion | the proportion of bank branches to a population of 100,000 | |
| 2. Financial stability | Z-score | ((ROA+Equity)/Assets))/ROA |
| *Independent variables* | | |
| 3. CSR | Corporate Philanthropy | The logarithm of the actual spending on CSR initiatives |
| 4. Leverage | Leverage | Total debt/Total assets |
| 5. Tangibility | Tangibility | Noncurrent Assets/Total Assets |
| 6. Size | Total assets | The natural log of total assets |

Table 1 shows how the variables are measured based on past studies. Model (1) implement the proportion of bank branches to a population of 100,000 that reflects financial inclusion. Model (2) focuses on financial stability, using the Z-Score method by Dwumfour (2017) and Beck et al. (2013).

Many factors help figure out CSR in past studies. Authors like Brammer and Millington (2008) along with Oyewumi et al. (2018) have used company contributions and the tangible allocation of resources towards corporate social responsibility (CSR). projects as substitutes for CSR indicators. Meanwhile, Lee and Park (2010) looked at the MSCI KLD 400 Social Index as a to gauge CSR. Additionally, the social capital index and social score have also been utilized as alternatives to assess CSR.

For this study, we will look at company contributions and genuine expenditures on corporate social responsibility (CSR) initiatives are used as substitutes for evaluating CSR. In addition, three control factors are at play. The size factor is calculated by finding the logarithm of total assets, tangibility is determined by the ratio of noncurrent assets to total assets, and leverage is calculated by dividing total debt by total assets.

## RESULTS AND DISCUSSION

### Stationarity or Unit Root Test

The cointegration test needed because we're using a panel dataset (Khan et al., 2005). This dataset is well-suited for the Im-Pesaran-Shin approach. Look at Table 3 for the results of the unit root test on panel data using the Im-Pesaran-Shin method. The null and alternative hypothesis are as follows:

$H_0$: Stationarity does not exist in the data of the variables

$H_1$: Stationarity exists in the data of the variables

**Table 2.** Unit Root Test of Panel Data (Im-Pesaran-Shin method)

| Variables | Statistics | P-Value |
|---|---|---|
| 1. Financial Inclusion | -2.231 | 0.0000 |
| 2. Financial stability | -1.278 | 0.0002 |
| 3. Corporate Philanthropy | -2.977 | 0.0004 |
| 4. Leverage | -5.426 | 0.0000 |
| 5. Tangibility | -2.496 | 0.0001 |
| 6. Size | -1.372 | 0.0000 |

Check out Table 2 where all the variables like financial inclusion, financial stability, corporate philanthropy, leverage, tangibility, and size have p-values close to zero (0). This means rejecting the null hypothesis. So, all the variables in this dataset are stationary. Thus, H2 is confirmed showing a direct correlation between corporate social responsibility (CSR) and both financial inclusion and stability.

### Descriptive statistics

Table 3 Applying the data to conduct an analysis and calculate descriptive statistics using the collected observations.

**Table 3.** Descriptive Statistics

| Variable | Mean | Std. Dev. | Min | Max |
|---|---|---|---|---|
| 1. Financial Inclusion | 226.13 | .016 | 30 | 356 |
| 2. Financial stability | .078 | .189 | -.812 | 1.144 |

| | | | | |
|---|---|---|---|---|
| 3. CSR | .331 | 1.859 | -6.99 | 9.274 |
| 4. Leverage | 2.496 | .553 | 1.187 | 3.532 |
| 5. Tangibility | .851 | 1.222 | .048 | 10.245 |
| 6. Size | 4.316 | .405 | 3.312 | 4.952 |

The mean for financial inclusion ranges from 30 to 356. Financial stability varies from -0.812 to 1.144, with a mean of 0.078. CSR has a mean of 0.331 with range -6.992 to 9.274. Leverage contains mean 2.496 with range 1.187 to 3.532 and Tangibility has average 0.851 with range 0.048 to 10.245. Lastly, SIZE (log of total assets) contain mean 4.316 with the range 3.312 to 4.952.

**Analysis of Correlation**

Table 4 Illustrates the elements' Pearson correlation matrix along with the opportunities that correspond to each.

**Table 4. Correlation coefficient**

| Variables | Financial Inclusion | Financial stability | CSR | Leverage | Tangibility | Size |
|---|---|---|---|---|---|---|
| Financial Inclusion | 1.000 | | | | | |
| Financial stability | 0.228*** | 1.000 | | | | |
| CSR | 0.123*** | 0.077*** | 1.000 | | | |
| Leverage | -0.445*** | -0.518*** | 0.082*** | 1.000 | | |
| Tangibility | -0.011 | -0.006 | -0.055 | -0.003*** | 1.000 | |
| Size | 0.201*** | 0.057*** | 0.509*** | 0.148*** | 0.121*** | 1.000 |

***,**,* denote significance of coefficients at 1 %, 5 %, 10 % levels, respectively.

Table 4 shows a substantial and favorable relationship between CSR and the majority of the factors. However, there is a negative correlation between it and tangibility. There is an inverse connection between leverage and both financial accessibility and financial stability. There is a prominent and noteworthy contructive relationship between a bank's size and its corporate social responsibility (CSR) initiatives, financial stability, and inclusion. There is a negative association between tangibility and all the other factors.

**Impact of CSR in Relation to Stability in Finance**

Table 5 displays the regression outcomes of Corporate Social Responsibility (CSR) on Financial Stability. In this study, CSR is considered as the independent variable, while financial stability is regarded as the dependent variable. The control factors are leverage, tangibility, and size.

**Table 5.** Impact of CSR in relation to stability in finance

| Financial Stability | Coefficient | St.Err. | t-value | p-value | [95% Conf] | Interval |
|---|---|---|---|---|---|---|
| CSR | 1.003*** | 0.003 | 0.91 | 0.366 | -0.004 | 0.01 |
| Size | 0.01** | 0.005 | -2.16 | 0.033 | -0.02 | -0.001 |
| Leverage | -0.002* | 0.001 | 0.14 | 0.889 | -0.003 | 0.003 |
| Tangibility | 41.23 | 54.23 | 0.24 | 0.768 | 0.234 | 0.002 |
| Constant | 0.043 | 0.018 | 2.41 | 0.018 | 0.007 | 0.078 |

| | | | |
|---|---|---|---|
| Mean dependent var | 0.006 | SD dependent var | 0.016 |
| R-squared | 0.409 | Number of obs | 95.000 |
| F-test | 1.574 | Prob> F | 0.201 |
| Akaike crit. (AIC) | -512.155 | Bayesian crit. (BIC) | -501.940 |

***,**,* denote significance of coefficients at 1 %, 5 %, 10 % levels, respectively.

The results, with 1% confidence, reveal a strong and important connection between Financial Stability and CSR. This suggests that banks could see better financial stability by investing in their CSR projects. When looking at significance at the 10% level, we see a clear and negative relationship between leverage and bank stability. Having too much debt might harm performance and put organizations' stability at risk.

Interestingly, the study found no significant correlation between tangibility and financial stability. This means that the ratio of fixed assets to current assets in banks doesn't have a impact. On the other hand, there is a solid positive link between bank size and financial stability, especially at the 1% level. As banks get bigger, their stability grows too. In conclusion, our first hypothesis is supported that means there's a meaningful connection between CSR and bank stability in Bangladesh.

**Impact of CSR Concerning Financial Inclusion**

Table 6 presents the regression findings of corporate social responsibility (CSR) on financial inclusion, as assessed by the number of bank branches (NOBB). The predictor variable in this study is CSR, whereas the outcome variable is NOBB. The study also considers control factors such as leverage, tangibility, and size.

**Table 6. Impact of CSR Concerning Financial Inclusion**

| Variables | Financial inclusion |
|---|---|
| | No. of bank Branches |
| CSR | 24.8767*** |
| | (8.3427) |
| Size | 67.8901** |
| | (0.8463) |
| Leverage | -23.6481*** |
| | (13.8723) |
| Tangibility | 123.0879** |
| | (12.2315) |

***,**,* denote significance of coefficients at 1 %, 5 %, 10 % levels, respectively.

Table 6 demonstrates a statistically significant and beneficial relationship between CSR and financial inclusion, with a confidence level of 1%. This implies that when a firm increases its investment in corporate social responsibility (CSR), it strengthens its relationship with banks and incorporates them into its network of bank branches (NOBB). It suggests that more bank branches mean more fun CSR stuff happening. On the other hand, The quantity of bank branches and a bank's tangibility and size have a substantial and positive correlation at the 5% level. So, Hypothesis 2 indicates that there is a significant link between CSR and financial inclusion in Bangladesh's commercial banks. Totally on point, Companies spreading those good vibes through CSR end up with more bank branches for everyone to enjoy.

There is no way to neglect that businesses provide heartfelt embraces to the surroundings, consumers, workers, stakeholders, vendors, communities, and all their pals through CSR policies. A company's reputation is like a warm and kind embrace for attracting investors. When a company is involving in CSR activities, people can't resist investing in their good deeds. Bringing in money from faraway lands also helps our country get some fancy foreign exchange. In addition, being all about that CSR life means giving back to society, nature, and all the other beneficial folks out there. It's like a win-win situation where companies help themselves while spreading beneficial to the society.

The preceding experiments and discussions about the impact of the responsibility for corporate social on the stability of finance and inclusion elucidates the subsequent findings.

1. There's a strong link between how much corporate social responsibility (CSR) banks in Bangladesh do and how financially stable they are. This matches what Chollet and Sandwidi (2018) found.
2. Furthermore, there's a sustainable and advantageous correlation between CSR and financial inclusion for banks in Bangladesh. This lines up with what Haldar et al. (2016) and Ullah (2013) discovered.

## CONCLUSION

In recent years, banks have really been stepping up their game when it comes to caring about society. Corporate Social Responsibility (CSR) is now a big part of what they do. . CSR has many benefits, including increased revenue, satisfied customers, and having a great reputation. Banks are vital sources of funding for public projects because they act as intermediaries between lenders and depositors. Additionally, they may take the initiative to guarantee expanded financial inclusion and maintain stability. A study scrutinized how CSR activities affected financial accessibility and stability in Bangladesh's commercial banks from 2015 to 2019.

The findings displayed that CSR plays a big role in making things better; financial stability gets stronger and more people get included. Banks with a high level of CSR cultivate strong client relationships, which helps reduce risks and keep things stable. In addition, there's a clear link between financial inclusion and CSR: banks with more CSR spending tend to have more branches and ATMs opening up to assist a greater number of people. These results give banks some insight into how they're doing with CSR in Bangladesh's banking world. It's crucial for the government to give banks a nudge towards doing more CSR work to make sure everyone gets access to financial services. It is important for decision-makers to carefully consider whether stability is more important to them than growth and innovation. Investors should look over a company's CSR reports before making an investment to determine whether it is making a positive contribution to society. For overall progress, regulatory bodies ought to actively support CSR initiatives and keep a close eye on the stability of banks.

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