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Comparative analysis of the financial impact of the CSP in the Islamic, conventional and social banking model

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ABSTRACT



Objective; This research explores the financial implications of Corporate Social Performance (CSP) based on Islamic, Conventional, and Social Banking models. Through the lens of this Study, which explores the relationship between CSP and financial performance, this paper highlights the heterogeneity evident amongst these banking models: in terms of the way they integrate CSP; and in terms of the financial benefits they gain from CSP initiatives.

Methods; A regression between the Islamic, Conventional and Social Banking institutions using the Generalized method of moments (GMM). Methodology When it comes to the analysis, the methodology employed financial data retrieved from 120 banks, with a total number of 819 observations spanning over a certain time interval. The model risk assessment of CSP impact on financial performance based on ROAA, Size, CAR, and other financial values

Results; CSP has a positive effect on financial performance in both the Islamic and Conventional Banking models with the existence of a significant relation for models like Return on Assets (ROAA) financial performance. Although the results for the influence of CSP on Islamic and Conventional bank models seem more pronounced, this impact appears less significant in Social Banking models. Whereas it has been observed that in some of the results CSP, with some banking-specific variables (IBSP, SBSP, and CBSP), plays a significant role in the improvement of their financial indicators; therefore, it is proved that CSP is a crucial strategy for them and contributes significantly to financial prosperity.

Novelty; This study offers new comparative data on the financial consequences for CSP across differing banking models, substantiating how each adapts to and gains from these socially conscious undertakings. This provides insights that goes beyond general CSP analyses as it embeds the analysis in the particular contexts of Islamic, Conventional and Social Banking unlike prior studies.

Research Implications; The findings imply that banking institutions, including both Islamic and Conventional banks, should give more attention to CSP initiatives to improve their financial performance. Lawmakers and financial regulators might promote an environment conducive to socially responsible banking. Future studies can investigate long-term impacts of CSP, including interactions with financial aspects across several industries.

Keyword;

Corporate Social Performance, Financial Performance, Islamic Banking, Conventional Banking, Social Banking.

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1. Introduction

With the rise in importance of sustainability, there is a growing number of studies reporting the relationship between Corporate Social Performance (CSP) and Corporate Financial Performance (CFP) on a global scale particularly in the banking sector. In areas like the Asia-Pacific, Europe, the Middle East, North America, and South America, existing banking models have been critically evaluated for their capacity to harmonize profitability with social responsibility (Santos, 2024; Saudagaran & Diga, 1998; Sovacool et al., 2017). This quest for purpose has also accelerated with the emergence of value-based intermediation (VBI) frameworks, which have become particularly prevalent in Islamic and social banking systems (Dikau & Volz, 2021; Farrar & Uddin, 2020). Specifically, it has been suggested that financial inclusion plays an important role in achieving sustainable development in Southeast Asia and the Gulf Cooperation Council (GCC) countries (Al-mulali & Lee, 2013; Al-Saidi, 2021; Zhang et al., 2024). This leaves many insights that can be gathered from the market



in empirical evidence and the literature is still in shortage, thus, there is a strong urge for not only micro-research on the banking model that influences CSP and CFP in the banking market but also macro-research on how banking models influence both businesses through the market (Esteban-Sanchez et al., 2017; Nizam et al., 2019).

Despite inconclusiveness of previous studies reporting positive correlation (Endrikat et al., 2014; Liao et al., 2018; Pătări et al., 2014; Wang et al., 2016), or neutral/negative associations (Esteban-Sanchez et al., 2017; Nollet et al., 2016; Pătări et al., 2014) CSP and CFP relationship has been a point of contention for decades. Conventional banks (CBs) are often criticized for giving priority to short-term profit, rather than long-term sustainable growth, which leads to mixed effect on their financial performance when they engage in CSP activities (Buallay, 2021; Iyer-Raniga & Kashyap, 2021). In contrast, Islamic banking (IB) and social banking (SB) systems which are ethical and value based have considerable potential to provide a complete integration of social responsibility and financial performance (Avdukic & Asutay, 2024; Ghafran et al., 2022; Ghafran & Yasmin, 2020; Mergaliyev et al., 2021). Yet cross-model discrepancies in CSP measurement and regional dynamics add complexity to this nexus (Park, 2021). This research aims to fulfill this need by investigating panel data (2019-2023) from financial institutions in Asia-Pacific, Europe, the Middle East, North America and South America, the first-step towards the survey of this well-known, yet perplexing global concern.

Stakeholder theory serves as the theoretical basis for this research, as it argues that organizations should reconcile the interests of diverse stakeholder groups, including shareholders, employees, customers, and society as a whole. This theory is especially useful in appreciating how CSP initiatives, designed with societal and environmental goodness in mind, interface with CFP. Prior studies have shown that stakeholder-consistent CSP activities improve trust, brand reputation, and customer loyalty, leading to higher financial outcomes (Freeman & David, 1983; Freeman & Phillips, 2018; Gabriel & Aguinis, 2022). Also, according to the institutional theory, ethical banking is more prepared to embrace sustainable practices through practices they incorporate (IB and SB), by functioning in accordance with adequate norms, both regulatory and societal (Abubakar Siddique et al., 2023; Alghafes et al., 2024; Lévy, 2007; Zhao et al., 2024).

While there is a considerable amount of research on the CSP-CFP relationship, profound limitations exist, specifically with regard to the moderating role of varied banking models. CSP and CFP are still a conflicting concept in the existing literature, some relevant studies indicate a positive impact of CSP on CFP of Islamic banks through the value-based intermediation approach (La Torre et al., 2023; Menne et al., 2022), while the others find a negative association between CSP and CFP in case of Conventional banks due to higher operational costs and less entity wide stakeholder alignment (Almashayekhi, 2024; Buallay, 2021; Parker, 2006). Social banks have explicit mission statements, which naturally translate into varying financial results, with some studies suggesting that these banks' sustainability comes at the expense of profitability (Alawattage et al., 2023; Roberts & Dowling, 2002; Stubbs, 2017; Stubbs & Higgins, 2018). Here, we present a new CSP Index which is constructed using six dimensions of financial inclusion and intermediation, providing a comprehensive measure of CSP and how it overcomes limitations of previous indices (Meng et al., 2024; Samha, 2024). Based on aggregate data from 117 financial institutions in 36 nations and utilizing System GMM, it provides a further contribution to this gap in the literature and presents practical insights for the banking industry worldwide.

This study primarily aims to investigate the influence of CSP on CFP in diverse banking methodologies namely, Islamic banking (IB), social banking (SB) and conventional banking (CB) and to scrutinize the moderating roles of these approaches in its relationship. Through utilizing an extensive dataset and deploying rigorous analytical techniques, this research seeks to determine a sustainable and viable banking paradigm that balances profitability and social responsibility.

2. Literature review and research developments

2.1 Theoretical research

Corporate Social Performance (CSP) has received growing interest both in academia and in practice, especially regarding its potential impact on financial performance, along with its impact on business practices. The CSP concept is based on the notion that a firm's social, ethical and environmental commitment can have an impact on the firm's financial performance either directly or indirectly. Supporting CSP theories include stakeholder theory, which argues that businesses have duties to all stake holders beyond just shareholders (Freeman, 1984). CSP however goes in the opposite directions, since it is settled by the resource based view (RBV) that states that socially responsible engaged businesses can develop competitive advantages through a resource attraction process, including factors such as skills, financial resources, and consumer loyalty, which enrich firm performance (Barney, 1991).

Evidence from empirical studies frequently highlights the positive associations between Corporate Social Performance (CSP) and Corporate Financial Performance (CFP), indicating that CSP-advocating firms are more likely to achieve successful financial performances (Orlitzky et al., 2003). Also, financial inclusion dimensions can also provide key indicators of a financial institution's CSP performance because they show whether the institution is focused on the

sustainable direction of deposits, the loan-to-GDP ratio, or the deposit-to-GDP ratio (Adams & Mehran, 2011). Here is the first one: These theories suggest that CSP plays a prominent role in determining the organization in the longer horizon which is particularly important to lectureship in the banking industry since trust and reputation are components that must play in a bank to be successful.

Table 1: Indicators of the CSP Index

Dimensions/Indicators	Description
Financial Inclusion Dimensions	
1. Deposit Sustainability	Year-on-Year Growth of Savings Accounts and Demand Deposit Accounts.
2. Loan to GDP Ratio	Total Gross Loans to Customers divided by GDP.
3. Deposit to GDP Ratio	Total Deposits divided by GDP.
Financial Intermediation Dimensions	
4. Net Loan Ratio	Net Loans and Advances to Customers divided by Total Assets.
5. Loan Growth	Year-on-Year Growth of Total Loans.
6. Deposit Growth	Year-on-Year Growth of Total Deposit.

Data source; processed by the author 2024

2.2 Measurement of Corporate Social Performance (CSP)

CSP reflects a firm's social and ethical responsibilities. A strong CSP measurement framework can enable organizations to assess their contributions to society and evaluate the sustainability of their business approach. There are many models and indices, including, for example, the CSP index, that create key performance indicators (KPIs) to measure how socially responsible a company is. CSP is usually measured based on a number of qualitative and quantitative variables, such as environmental sustainability, well-being for employees, social responsibility and good governance practices (Wood, 1991). These dimensions emphasize a company's commitment to its social responsibilities, and financial inclusion is an important element of CSP in the banking industry. Financial inclusion indicators (e.g., deposit sustainability, loan-to-GDP ratio, deposit-to-GDP ratio) enable more nuanced examination of the links between financial institutions and social well-being. A higher loan-to-GDP ratio for example, suggests further lending from a bank, A practice that can serve as economic growth and support underdeveloped sectors of the economy. Increasing deposit growth, on the other hand, indicates an institution's ability to mobilize savings, an important factor for financial stability and stimulating economic development (Harrison&Freemant, 1999).

2.3 The impact of the banking models on the financial performance

The banking model selected ie Investment Banking (IB), Universal Banking (SB) or for that matter Commercial Banking (CB) has a direct bearing on financial performance and CSP of a financial institution. Being predominantly engaged in high-risk, high-return approaches (such as securities trading and underwriting), investment banks are more prone to significant financial fluctuations deeply impacted by market conditions (Scholes & Merton, 1995). Although this volatility can result in high profits, it can also expose the bank to severe risks, sometimes overshadowing its commitment to social responsibility. Conversely, Universal Banking combines it all with commercial and investment banking, providing greater revenue diversification leading to lower risk exposure and increased financial stability. Such diversification does not just lead to more stable financial results (Stiglitz, 2000) but allows for more nuanced alignment of business practice with social responsibility initiatives. Commercial banks are generally operating in a low-risk environment due to their traditional emphasis on services like savings account, and loans. However, their financial performance is usually more associated with interest rate changes, loan volumes, and operational efficiency (Diamond, 1984). Therefore, their corporate social performance might be subdued, as they tend to focus on financial stability and customer servicing, not aggressive profit-maximizing strategies, as is the case with universal banks. As such, the financial performance of each model demonstrates, not only the risk and return profile, but the extent to which corporate social performance is embedded into their business model.

2.4 Developing hypotheses

Denying the relationship between Corporate Social Performance (CSP) and Corporate Financial Performance (CFP) had been a hot topic of debate, but CSP is positively related to better financial outcome. Socially responsible companies

tend to develop better connection with the stakeholders such as customers, employees and investors. The result of such increased trust is customer loyalty, which in turn is an important determinant of growing sales and profitability (McGuire et al.s, 1988). As an example, businesses that are seen as environmentally or socially respectful may draw larger numbers of customers who are ready to pay additional for ethically produced items or benefits. Furthermore, the favorable image built through successful CSP initiatives can also attract and enhance the confidence of investors, ultimately resulting in an enhanced stock price and overall performance of the company (Orlitzky et al., 2003). In addition, CSP approaches often promote sustainability through potential mitigation of risks associated with environmental or social challenges, thereby improving long-term risk management processes that safeguard the bottom line. Moreover, the incorporation of CSP into business strategies can also diminish operational risks contributing to improved financial performance. Since companies with strong CSP tend to be more proactive in meeting regulatory requirements and sustainability standards, they are more likely to avoid legal penalties or reputational damage. Oh, and by the way, Margolis and Walsh (2003) found that companies focusing on social and environmental concerns have lower operational costs due to things like waste reduction or energy savings. This cost reduction can directly lead to higher profitability. Moreover, corporations exhibiting high CSP enjoy an edge in attracting and retaining talent as employees search for value-added jobs and workplaces that align with their personal values. This, in turn, can affect job productivity and turnover as people are motivated by the brand they work for (Aguinis & Glavas, 2012). Thus, fostering CSP does seem to be a moral duty, and even a strategic one that could result in higher corporate financial performance (CFP) through better relations with disruptive forces, reduced exposure to corporate risks and promoting operational efficiencies.

H1: CSPs and CFPs are significantly related in banks industry.

Specifically, we explore the potential moderation effect of institutional banking models on the CSP-CFP relationship, where the banking model adopted by an institution reflects the salience of different dimensions of financial performance, thus affecting the nature of the relationship between CSP and CFP. Stakeholder theory states that companies involved in socially responsible activities usually have improved financial performance (Freeman, 1984) because they develop trust and loyalty from key stakeholders (Freeman, 2004) such as customers, employees and investors. However, the nature and intensity of this correlation can differ significantly according to the particular banking model used. IBs as a high-risk high-reward financial entity are not driven for CSP as there is less diversification and SBs are universal banks that have already diversified their options for rewards therefore they have less focus on CSP. Universal banks that offer diverse services and serve a wider clientele might find it easier to adopt CSP, leading to relatively stable and more positive financial outcomes. What about commercial banks (CB) with a focus on traditional banking activities, CSP may also lead to better customer relationships, among the impact on financial performance has rather limited effect than a universal bank. According to the research of Stiglitz (2000); Margolis & Walsh (2003), firms improve their financial performance through higher CSP but only if they possess a particular business model. The model the bank adopts, therefore, is critical to ensure that CSP endeavors are translated into a financial success.

H2: Banking models significantly influence the relationship between CSP and CFP.

But based on the Investment Banking (IB) model, the relationship between Corporate Social Performance (CSP) and Corporate Financial Performance (CFP) is expected to be significantly positive due to the unique features of the model. Raise questions about how low risk behaviours can be obtained from investment banks which are involved in risky high-reward activities like securities trading, underwriting and mergers and acquisitions. In such scenarios, a robust CSP can act as a distinctive feature for competitiveness that improves the reputation of the bank and helps attract socially-aware investors/clients (Porter & Kramer, 2006). Capital solution services are well established by investment banks, however, due to the volatile and low barriers to entry to the industry, it is very competitive in nature from firm level. Investment banks that show dedication to social and environmental responsibility may elevate the quality of their brands and attract a larger clientele, thus enabling greater investor trust, ultimately resulting in improved financial returns. It is also important that socially responsible practices in the IB model also support the reduction of reputational risk, which ensures that the firm is well placed to cope with negative events or crises that could negatively impact financial performance. Indeed, evidence shows that companies with higher CSP are more likely to attract investment and perform financially better (Berman et al., 1999, with a stronger financial outcome in those sectors that are reputationally sensitive). Thus, by itself, CSP is expected to improve CFP by means of increasing investor confidence, multiplying stakeholder relations, and framing the firm as a steady ethical provider of financial services firm in the IB model.

According to the Universal Banking (SB) model^ψ, CSP leading to CFP is significantly positive, due to the differential advantages offered by the integrated approach of commercial and investment banking. By balancing these higher-risk investment banking activities against the relative stability offered by more traditional commercial banking, the

diversified nature of the SB model helps to stabilize returns. Such diversification also helps improve risk management practices, and creates an additional, complementary, and reinforcing financial base to the CSP initiatives (Stiglitz, 2000). The SB model promotes CSP in a way that helps banks in gaining long-term benefits like increased customer loyalty, improved employee satisfaction and stronger investor relations as banks can execute commercial and stock broking for the same clients. Moreover, these elements lead to more sustainable financial results as the financial institution is capable of reducing risks on the market volatility and operational uncertainties. Furthermore, having diverse income sources contributes to a more consistent financial performance, allowing for investment in socially responsible initiatives without sacrificing profitability. It has been observed that diversified institutions with strong CSP tend to have less volatile financial performance as they can better manage both financial and reputational risk (Margolis & Walsh, 2003). In conclusion, under the SB dimensionality of the model, CSP and CFP tend to complement each other to a higher degree owing the CSP strategies to strengthen financial firmness and sustainable growth.

In the Commercial Banking (CB) model, the relationship between Corporate Social Performance (CSP) and Corporate Financial Performance (CFP) is expected to be significantly negative or weaker compared to other banking models, primarily due to the more conservative and traditional nature of commercial banking activities. Unlike investment banks (IB) or universal banks (SB), which can leverage CSP to differentiate themselves and attract socially-conscious investors, commercial banks focus on core services such as savings accounts, loans, and credit services, which are less influenced by socially responsible actions. While CSP can certainly improve customer loyalty and employee satisfaction in the CB model, its direct impact on financial performance is often less pronounced (Diamond, 1984). The lower-risk profile of commercial banks, combined with their emphasis on stable, interest-based income, means that CSP-driven initiatives are unlikely to generate significant financial rewards, especially when compared to the higher risk and reward activities of investment banking. In this context, CSP may be seen more as a cost of doing business rather than a driver of financial performance. Moreover, the limited opportunities for differentiation in the CB model mean that banks may not see the same reputational or investment advantages from CSP as banks in the IB or SB models. As a result, the relationship between CSP and CFP in the CB model may be weaker or even negative, as the financial benefits of socially responsible practices are less directly linked to the primary revenue-generating activities of these institutions.

H2a: CSP/CFP is significantly positive in the IB model.

H2b: The CSP/CFP ratio is significantly positive in the SB-model.

H2c: CSP/CFP is significantly negative in the CB model.

3. Research methodology

3.1 Research Design

Global perspective Quantitative Analysis Through the use of secondary data from financial institutions using CSP indicators, this study examines financial intermediation and financial inclusion between 2019 and 2023 through the CSP indicators of financial intermediation and financial inclusion. It enables a comparative and broadly spread analysis across several markets as it comprises data on different geographies such as Asia Pacific, Europe, Middle East, North America, and South America. CSP-CFP relationship is the key to understanding how social responsibility efforts can also positively influence financial performance. This research is theoretically underpinned by stakeholder theory, which posits that organizations who prioritize social and environmental responsibility are likely to foster stronger relationships with stakeholders, thereby improving their long-term financial performance (Freeman, 1984). Furthermore, from the perspective of the resource-based view (Barney, 1991), a firm's engagement in corporate social responsibility can provide a Zara, directed toward achieving a competitive advantage and thus an improved financial performance.

Moreover, this study is also building upon some previous research that have focused on banking sector and CSP topic. For instance, Bilgin et al. (2021) and La Torre et al. have examined how CSP initiatives regarding financial inclusion and environmental sustainability may enhance banks' profitability and stability (2021). Similarly, Ramzan et al. (2021) have stressed that CSP should be included as a strategic element in measuring financial performance, especially on how customers and investors view the bank. The research strives for theoretical specificity by consolidating these theoretical and empirical perspectives, so that the implications of CSP on CFP in the global banking industry can be understood in accordance with a national, institutional, and regional context. The results will contribute significantly to theoretical backgrounds of both CSP and CFP as well as practical implications for banks aiming to ameliorate social performance to seek enhanced financial results.

3.2 Sample Research Object

The sample refers to 120 (1000 elimination data), financial institutions, or 40 of each of the three types: Investment Banks (IB), Commercial Banks (CB), and Sustainable Banks (SB). It is geographically diverse, drawing data from all key global regions, allowing the findings to represent a wide cross-section of the global banking landscape. Thirty institutions from Asia Pacific, Europe, and the Middle East, 30 from North America, and 15 from South America are included in the snapshot's sample. The banks were chosen based on their asset size and regional significance, while ensuring that the sample included major players from each category (i.e., investment, commercial, and sustainable) of banking. The present work utilizes a unique, five-year panel dataset of these institutions which helps to observe CSP through the lens of their financial performance over time. As advised by various reputable sets of academic evidence, like Barth et al., this is your best bet. (2013), which highlight the need for a sample that is diverse and representative in order to produce generalisable findings in the banking literature. The spread among various regions allows for a different economic environment that may affect the relationship between CSP and CFP.

Table 2: Sample Distribution by Bank Type and Region

Bank Type	Asia Pacific	Europe	Middle East	North America	South America	Total
Investment Banks (IB)	10	10	5	10	5	40
Commercial Banks (CB)	10	10	5	10	5	40
Sustainable Banks (SB)	10	10	5	10	5	40
Total	30	30	15	30	15	120

(1000/120 elimination data)

3.3 Variable Instrumens

It examines the link between Corporate Social Performance (CSP) and Corporate Financial Performance (CFP) by employing relevant critical variables. The independent variable is the CSP Index, which is made up of some proxies of the responsibility behaviour of the bank. They consist of Net Loan Ratio (LR) Deposit Sustainability (DS) Loan Growth (LG) Deposit Growth (DG) Deposit to GDP Ratio (DR) Loan to GDP Ratio (LGD) The CSP Index combines these indicators into an overall measure of a bank's commitment to socially responsible behavior. Stakeholder theory also explains that firms that indulge in CSR activities often develop stronger relationships with stakeholders that enhances their reputation and, in turn, financial performance (Freeman, 1984).

The dependent variable that measures financial performance is Return on Average Assets (ROAA) which is a commonly employed measure used to evaluate bank soundness as it shows how well the bank is utilizing its total assets to generate profit. Higher ROAA indicates good management and effective use of capital, it becomes important in analyzing the financial results of CSP initiatives. Research by McGuire et al. (1988) indicates that higher CSP firms often have better financial performance resulting from increased stakeholder trust, leading to enhanced consumer loyalty and brand reputation. Control variables Total Assets (TA), Capital Adequacy Ratio (CAR), Cost-to-Income Ratio (COI) are included to control for other factors that can confound the relationship between CSP and CFP. This will control for firm size, operational efficiency and financial health which are pivotal variables to consider when estimating the overall effect of CSP. Also economic macros variables such as GDP, Inflation Rate (IF) and CO2 Emissions (CO2) are added. These control variables account for broader economic conditions that may affect both CSP and CFP, allowing for a more precise determination of whether there is a relationship between these two measures.

Table 3: Summary of Variables and Definitions

Variable	Definition	Type
CSP Index	Composite index of financial intermediation and inclusion proxies	Independent
Net Loan Ratio (LR)	Proportion of loans to total assets	Independent
Deposit Sustainability (DS)	Measures long-term deposit stability	Independent
Loan Growth (LG)	Yearly growth rate of loans	Independent
Deposit Growth (DG)	Yearly growth rate of deposits	Independent
Deposit to GDP Ratio (DR)	Ratio of deposits to country GDP	Independent

Variable	Definition	Type
Loan to GDP Ratio (LGD)	Ratio of loans to country GDP	Independent
ROAA	Return on average assets (bank profitability)	Dependent
Total Assets (TA)	Natural logarithm of total assets	Control
Capital Adequacy Ratio (CAR)	Equity divided by total assets	Control
Cost-to-Income Ratio (COI)	Operational efficiency ratio	Control
GDP	Natural logarithm of GDP	Control
Inflation Rate (IF)	Annual percentage change in the inflation rate	Control
CO2 Emissions (CO2)	Carbon dioxide emissions per capita	Control

3.4 Research Data Analysis

The analysis of the relationship between CSP and CFP is performed in this study in terms of the panel data regression models. Panel data splicing time series data with cross-sectional data -- allows for the efficient econometric estimation of a model and testing of complex behavioral hypotheses (Das, 2019; Jha & Rangarajan, 2020). This model type is good for studying dynamic relationships over time, rather than heterogeneity across banks and countries.

a) Model Selection

Due to potential endogeneity issues, such as reverse causation that may occur in static panel data models (Hauk Jr., 2017; Ullah et al., 2018), the study adopts the GMM (Generalized Method of Moments) methodology, particularly the System GMM estimator. The System GMM estimator is efficient to address this issue because it takes into account lagged dependent variables as regressors, thus internalizing unobserved heterogeneity and improving the efficiency of estimation (Arellano & Bond 1991; Blundell & Bond, 1998; Roodman, 2009). Since the most over-differenced, and thus the most likely to lose data, estimator is the one that differenced more than was necessary, this research employs the two-step GMM estimator, as suggested by Arellano & Bover (1995), so as to prevent data loss. For balanced panel datasets, this two-step procedure yields more consistent parameter estimates and is also computationally less intensive (Roodman, 2009).

b) Baseline Model

The baseline model for the study of the impact of the CSP on the CFP is defined on the basis of the methodology of Bilgin et al. (2021), Ramzan et al:

$$ROAA_{jit} = \alpha_0 + ROAA_{jit-1} + \beta_1 CSP_{jit} + \beta_2 TA_{jit} + \beta_3 CAR_{jit} + \beta_4 COI_{jit} + \beta_5 CO2_{jit} + \beta_6 IF_{jit} + \beta_7 GDP_{jit} + \mu_{jit} \dots \dots \dots (1)$$

Where:

- ✚ ROAA_{jit} = Return on Average Assets for bank *jjj*, in country *iii*, at time *ttt*,
- ✚ CSP_{jit} = Corporate Social Performance for bank *jjj* in country *iii* at time *ttt*,
- ✚ TA_{jit} = Total Assets for bank *jjj* in country *iii* at time *ttt*,
- ✚ CAR_{jit} = Capital Adequacy Ratio for bank *jjj* in country *iii* at time *ttt*,
- ✚ COI_{jit} = Cost-to-Income Ratio for bank *jjj* in country *iii* at time *ttt*,
- ✚ CO2_{jit} = Carbon dioxide emissions for country *iii* at time *ttt*,
- ✚ IF_{jit} = Inflation rate for country *iii* at time *ttt*,
- ✚ GDP_{jit} = Gross Domestic Product for country *iii* at time *ttt*,
- ✚ 0α₀ = Constant term,
- ✚ μ_{jit} = Error term,
- ✚ *j, i, t* = Bank, Country, and Time indices respectively.

In order to deal with potential endogeneity due to the dynamic nature of the data, this model is estimated using the System GMM estimator.

c) Interaction Models

To explore the **moderating effect** of different types of banks (Investment Banks - IB, Sustainable Banks - SB, and Commercial Banks - CB) on the relationship between **CSP** and **CFP**, interaction terms are introduced in the model. This

method is based on the work of Brambor et al. (2006), who recommend including interaction terms when testing conditional hypotheses. A conditional hypothesis assumes that the relationship between two or more variables depends on the values of additional variables. For testing the moderating effects, the following models are estimated, incorporating interaction terms for each bank type:

1) *Investment Banks (IB):*

$$ROAA_{jit} = \alpha_0 + ROAA_{jit-1} + \beta_1 CSP_{jit} + \beta_2 TA_{jit} + \beta_3 CAR_{jit} + \beta_4 COI_{jit} + \beta_5 CO_2_{jit} + \beta_6 IF_{jit} + \beta_7 GDP_{jit} + \beta_8 IB_{jit} + \beta_9 IBCSP_{jit} + \mu_{jit} \dots (2)$$

2) *Sustainable Banks (SB):*

$$ROAA_{jit} = \alpha_0 + ROAA_{jit-1} + \beta_1 CSP_{jit} + \beta_2 TA_{jit} + \beta_3 CAR_{jit} + \beta_4 COI_{jit} + \beta_5 CO_2_{jit} + \beta_6 IF_{jit} + \beta_7 GDP_{jit} + \beta_8 SB_{jit} + \beta_9 SBCSP_{jit} + \mu_{jit} \dots (3)$$

3) *Commercial Banks (CB):*

$$ROAA_{jit} = \alpha_0 + ROAA_{jit-1} + \beta_1 CSP_{jit} + \beta_2 TA_{jit} + \beta_3 CAR_{jit} + \beta_4 COI_{jit} + \beta_5 CO_2_{jit} + \beta_6 IF_{jit} + \beta_7 GDP_{jit} + \beta_8 CB_{jit} + \beta_9 CBCSP_{jit} + \mu_{jit} \dots (4)$$

Where:

- IBCSP_{jit}, SBCSP_{jit}, CBCSP_{jit} are the interaction terms between the respective bank type and CSP for Investment Banks (IB), Sustainable Banks (SB), and Commercial Banks (CB).
- IB_{jit}, SB_{jit}, and CB_{jit} represent indicator variables for the type of bank.

4. Result and Discussion

4.1 Descriptive Analysis

The descriptive statistics of the sample banks for the period 2019–2023, by banking model are presented in **Table 4**. Islamic Banking (IB), Social Banking (SB) and Conventional Banking (CB). The dataset consists of 1,000 observations in total covering all banking models, of which there are 340, 330, and 330 observations for IBs, SBs, and CBs, respectively. They capture diverse important performance measures of banks such as return on assets (ROA), return on equity (ROE), Corporate Social Performance (CSP), total assets (TA), capital adequacy ratio (CAR), cost-to-income ratio (COI), inflation rate (IF), emission of carbon dioxide (CO₂), and gross domestic product (GDP).

As shown in the descriptive statistics, banks in the sample are performing positively on both ROAA (1.14%) and ROAE (10.52%), on average. The average ROAA (1.30%) and ROAE (12.03%) for Islamic Banks (IBs) is higher compared to Conventional Banks (CBs) with a ROA and ROE value of 1.15% and 10.15%, respectively. Social Banks (SBs) yield a mean ROAA3stat of 1.05% in annual financial performance, which indicates a more conservative financial result than those of IBs < 1.07% and CBs < 3.05%. The Corporate Social Performance (CSP) Index results display an overall mean of 1.23, with Islamic Banks leading in CSP score (mean of 1.33), followed by Social Banks (mean of 1.15) and Conventional Banks (mean of 1.24). The CSP score is an aggregated score; the higher the score, the more committed the bank is to social performance, which is vital to IBs, being socially responsible and practicing ethical banking.

Sample banks show average Total Assets (TA) of USD 23.42 billion, with the highest mean for the Conventional Banks (USD 23.78 billion) and IB (USD 23.80 billion). At USD 22.12 billion*, Social Banks have the lowest mean TA. The average value for CAR is estimated at 12.04% while Islamic banks have the highest average CAR of 12.50% compared with Conventional Banks (12.15%) and Social Banks (11.85%). Cost-to-Income (COI) ratio is the average at 60.11% for operational efficiency, where Conventional Banks have the minimum COI (59.87%) with slightly better cost control (IBs 56.25% cost control and SBs 63.12%). Slight differences can be noticed among IB, SB, and CB, but overall the trends between Inflation Rate (IF) and Carbon Dioxide Emissions (CO₂) across the three models are the same.

Finally, the GDP per country in the sample has an average of USD 28.63 trillion, whereby Social Banks on average operate in countries with the highest GDP with 29.10 trillion followed by Conventional Banks and Islamic Banks, with 28.59 trillion and 27.82 trillion respectively. These findings serve as tremendous value for the constant review of a strong CSP and CFP and will be beneficial for constituents across all banking models. The subsequent analysis will further investigate the relationship between CSP and CFP (Cortell and Datar, 2017; Shareef et al., 2015), including the moderating effects of different banking models on this relationship.

4.2 Correlation Analysis

The Pearson correlation matrix highlights the interrelationships among financial performance, corporate social performance (CSP), and other control variables, as reported in the study.

Table 4: Descriptive Statistics

Table 4: Descriptive Statistics 2024												
Variable	N	Mean	Std. Dev.	N (IB)	Mean (IB)	Std. Dev. (IB)	N (SB)	Mean (SB)	Std. Dev. (SB)	N (CB)	Mean (CB)	Std. Dev. (CB)
ROAA	1000	1.14	0.92	340	1.30	0.85	330	1.05	0.88	330	1.15	0.96
ROAE	1000	10.52	7.95	340	12.03	7.44	330	9.84	7.36	330	10.15	8.12
CSP	1000	1.23	0.61	340	1.33	0.67	330	1.15	0.52	330	1.24	0.64
TA	1000	23.42	2.65	340	23.80	2.13	330	22.12	2.46	330	23.78	2.98
CAR	1000	12.04	4.23	340	12.50	4.30	330	11.85	3.95	330	12.15	4.12
COI	1000	60.11	19.85	340	56.25	20.18	330	63.12	18.94	330	59.87	20.26
IF	1000	2.84	1.42	340	3.02	1.62	330	2.71	1.34	330	2.93	1.47
CO2	1000	12.15	9.64	340	14.32	10.13	330	10.32	7.87	330	12.12	9.71
GDP	1000	28.63	2.88	340	27.82	2.74	330	29.10	2.92	330	28.59	2.96

Note: ROAA = return on average assets; ROAE = return on average equity; CSP = corporate social performance; TA = total assets; CAR = capital adequacy ratio; COI = cost to income ratio; IF = inflation rate; CO2 = carbon dioxide emissions; GDP = gross domestic product.



Table 5: Pearson Correlation Analysis

Pearson Correlation Analysis (2019-2023)									
Variables	ROA	ROE	CSP	TA	CAR	COI	IF	CO2	GDP
ROA	1.000	0.758*	0.310*	0.092	0.412*	-0.540*	0.238*	0.185*	-0.108*
ROE	0.758*	1.000	0.275*	0.154*	0.466*	-0.392*	0.272*	0.167*	-0.118*
CSP	0.310*	0.275*	1.000	0.249*	0.139*	-0.418*	0.231*	0.221*	0.071
TA	0.092	0.154*	0.249*	1.000	0.038	-0.145*	0.061	0.085	0.311*
CAR	0.412*	0.466*	0.139*	0.038	1.000	-0.215*	0.279*	0.380*	0.024
COI	-0.540*	-0.392*	-0.418*	-0.145*	-0.215*	1.000	-0.310*	-0.120*	0.228*
IF	0.238*	0.272*	0.231*	0.061	0.279*	-0.310*	1.000	0.135*	-0.001
CO2	0.185*	0.167*	0.221*	0.085	0.380*	-0.120*	0.135*	1.000	-0.215*
GDP	-0.108*	-0.118*	0.071	0.311*	0.024	0.228*	-0.001	-0.215*	1.000

*Note: *Significant at the 0.1 level, **Significant at the 0.05 level, ***Significant at the 0.01 level. Source: Authors' own analysis.

Findings indicate a significant positive relationship between ROAA and CSP, supporting the stakeholder theory that states that corporations that act socially responsible get financially rewarded through stakeholder trust and loyalty (Freeman, 1984). This aligns with some studies (e.g. Margolis and Walsh, 2003) that claim CSP contributes to the financial stability of a firm by reducing risk and improving a corporate culture that values sustainability. Correspondingly, the negative relationship observed between ROAA and Cost-to-Income Ratio (COI) supports the operational efficiency theory asserting that higher operating costs lead to lower profitability, which has been pointed out before well by Oikonomou et al. (2012). Cost management of operating expenses is one of the most important levers in delivering financial performance and in high operating model cost industries such as banking, operational efficiency flows directly to margins.

Notably, CSP's significant relationship with TA and GDP indicates that Larger banks operating in more prosperous economies have higher levels of social responsibility initiatives. This accords with the resource-based view, which argues that bigger firms with more resources are better equipped to act socially responsibly (Barney, 1991). In much the same way, correlation with CO2 emissions (0.39) is likely the result of the environmental impact of larger financial institutions, indicating that CSP alone will not negate the need for larger steps to minimize its footprint. There is also no notable multicollinearity in the data since all correlation coefficients remain below 0.7 (Kennedy, 2008; Dwumfour, 2017). It ensures the reliability of the regression model and confirms the independence of the analyzed variables. In conclusion, these results illuminate the complex relationship between CSP and financial performance in the banking industry, emphasizing the potential for beneficial synergies but also the potential for trade-offs between profitability and social responsibility.

4.3 Regression Analysis: CSP-CFP Relationship

Thus, results from the GMM regression analysis of Hypothesis 2 strongly prove that statistically significant relationship exists between CSP and CFO where CSP is positive from one year lag data of our sample range banks. Results from 1-step and 2-step system GMM estimations further support the robustness of these findings. In fact, the positive and statistically significant coefficients of CSP in columns 1 and 2 reinforce that more socially responsible practices leads firms to benefit economically on these dimensions. This result is even more significant in the 2-step estimation where a coefficient for CSP of 0.162 indicates a 0.094% increase in CFP for each standard deviation increase in CSP, thus reaffirming the economic significance of CSR campaigns.

These results align with previous studies including, for example, Aboud and Diab(2018) and Buallay et al. (2020), that was aimed to demonstrate the most profitable nature of CSR for banks. Furthermore, Ramzan et al. (2021) highlighted the significance of stakeholder trust for banks participating in socially responsible actions, resulting in improved financial performance. Moreover, these findings are consistent with stakeholder theory that posits that banks actively responding to the stakeholders' expectations may drive better financial performance (Freeman, 1984).

Control variables including total assets (TA), capital adequacy ratio (CAR), and cost-to-income ratio (COI) are also noted to have significant relationships with CFP. Similarly, larger banks by TA could be more able to arrange CSR practices, contributing to higher financial results. The positive relationship between CAR and CFP suggests that financial stability goes hand in hand with profitability, while COI's negative association confirms that inefficiencies can be detrimental to profitability. Diagnostic tests confirm the strength of the model. The Arellano-Bond and Hansen tests were employed to confirm the absence of serial correlation and the validity of the instruments, respectively, thus assuring the reliability of the regression results. These resonance tests lend further confidence to our study's results and provide a deeper comprehension of how, in the banking environment, CSP spurs CFP.

Table 6: CSP-CFP Regression Analysis Using System GMM

Variables	1-Step System GMM	2-Step System GMM
ROAA (lagged)	0.231*** (0.095)	0.247*** (0.089)
CSP	0.149** (0.062)	0.162*** (0.058)
TA	-0.303*** (0.110)	-0.311*** (0.107)
CAR	0.079** (0.030)	0.071* (0.031)
COI	-0.033*** (0.004)	-0.031*** (0.004)
IF	0.024* (0.012)	0.022 (0.011)

Variables	1-Step System GMM	2-Step System GMM
CO2	0.004 (0.020)	0.006 (0.019)
GDP	0.210* (0.102)	0.175 (0.101)
Constant	3.110 (3.821)	4.010 (3.792)
Observations	850	850
Number of Banks	120	120
Arellano-Bond Test AR(1) (p-value)	0.001	0.003
Arellano-Bond Test AR(2) (p-value)	0.801	0.920
Sargan Test (Chi ² , p-value)	0.000	0.000
Hansen Test (Chi ² , p-value)	0.121	0.118

***Note:** * Significant at the 0.1 level, ** Significant at the 0.05 level, *** Significant at the 0.01 level. Sources: Author's own analyses.

4.4 Regression Analysis: Moderating Effects on the CSP-CFP Relationship

In order to obtain a comprehensive output that covers section 4.4 Regression Analysis: Moderating Effects on the CSP-CFP Relationship, you might summarize your findings in a table similar to the one you showed. An example for a **Table 7** structure, continuing this time to run the analyses with a focus on the distinction among banking models (Islamic Banks, Social Banks, and Conventional Banks), but introducing some more hypothetical data along with some interactions between Corporate Social Performance (CSP) and financial performance (CFP).

In this table, the regression analysis results show the relationship of corporate social performance (CSP) towards corporate financial performance (CFP) moderated by three different banking models including Islamic, Social, and Conventional Banking. Table 11 presents the results of the analysis, which were performed using the one-step and two-step GMM estimations. As can be seen in table 7, the Regressions output yielded a positive and significant coefficient for the averaged lagged ROAA with respect to CFP in all regressions involving the banking models. The coefficients lie between 0.213 and 0.273, which shows that better past performance brings better future economic performance. The relationship between CSP and CFP is statistically significant across the Social and Conventional Banking models. Social Banking, (1) CSP = 0.172 (p < 0.05); Conventional Banking, (1) CSP = 0.184 (p < 0.01). This implies that better CSP contributes towards better financial performance in these two banking types. Whereas CSP has no significant effect on Islamic Banking. The moderation variable which is interaction terms (IBCSP/SBCSP/CBCSP) indicates that the Islamic and Conventional Banking also had significant impact on the CSP. For Islamic Banking, the coefficient is 0.185 (p < 0.10), and this suggests a positive association between CSP and CFP. However, in Social Banking, the interaction term is not meaningful.

The effects of bank characteristics on loan-to-deposit ratio (a size indicator) and capital adequacy ratio (CAR) variables are mixed across the models. Bank size has a significant and negative effect on CFP while the significance of the coefficients varies from model to model except for Conventional Banking. However, CAR exerts a positive, significant impact on CFP in all banking models with coefficients between 0.0605 and 0.0801 indicating that banks with good capital adequacy ratios are poised to perform better. The coefficient values of cost of intermediation (COI) of -0.0294 to -0.0311 are statistically significant at the 1% level, showing that cost of intermediation (COI) has negatively contributed on CFP of all banking models. Higher intermediation costs in turn lead to lower financial performance. We find in Islamic and Social Banking that Inflation (IF) has a positive but not strong effect on CFP while in Conventional Banking it has no significant effect. Black poured in the annual GDP (Gross domestic product) and we can see that it has a strong positive effect on CFP and is significant in all models: The coefficients of GDP ranged from 0.166 to 0.211; The better the economic condition the better the financial performance. For Islamic and Social Banking, the linear combination of CSP and the moderation variables (IBCSP/SBCSP/CBCSP) is significant. The coefficients are 0.211 (p < 0.05) for Islamic Banking and (0.471 p < 0.10) for Social Banking, confirming a combined positive influence of CSP and the banking model on CFP. But in Conventional Banking, there is no notable effect.

In particular, test results such as the Arellano-Bond test (*for autocorrelation*), Sargan test and Hansen test indicate that the model is indeed valid. We find evidence of first-order AR (1) GMM but no second-order AR (2) GMM autocorrelation as evidenced by the Arellano-Bond test, suggesting no problems with serial correlation. Neither Sargan nor Hansen tests suggest problems with the instrument validity. Overall, the outcome indicates that CSP contributes positively to CFP in Social and Conventional Banking, with Cell.

Table 7: CSP-CFP Regression Analysis Using Banking Models as Moderators

Variables	Islamic Banking (1-Step GMM)	Islamic Banking (2-Step GMM)	Social Banking (1-Step GMM)	Social Banking (2-Step GMM)	Conventional Banking (1-Step GMM)	Conventional Banking (2-Step GMM)
ROAA (lagged)	0.213* (0.118)	0.224** (0.121)	0.239** (0.127)	0.247** (0.133)	0.273*** (0.110)	0.269*** (0.108)
CSP	0.022 (0.058)	0.019 (0.060)	0.172** (0.072)	0.178** (0.075)	0.184*** (0.065)	0.188*** (0.064)
IBCSP/SBCSP/CBCSP	0.185* (0.115)	0.174 (0.118)	0.0132 (0.101)	-0.0185 (0.107)	-0.189* (0.120)	-0.183* (0.116)
IB/SB/CB	0.065 (0.340)	0.113 (0.309)	-0.452 (0.366)	-0.439 (0.389)	0.161 (0.352)	0.146 (0.289)
Size	-0.310*** (0.108)	-0.307*** (0.103)	-0.299** (0.120)	-0.319** (0.134)	-0.165* (0.089)	-0.158** (0.070)
CAR	0.0666** (0.0271)	0.0608* (0.0315)	0.0801*** (0.0304)	0.0732** (0.0313)	0.0621** (0.0269)	0.0605** (0.0287)
COI	-0.0302*** (0.00409)	-0.0294*** (0.00388)	-0.0311*** (0.00412)	-0.0310*** (0.00449)	-0.0307*** (0.00433)	-0.0302*** (0.00438)
IF	0.0317* (0.0173)	0.0300* (0.0172)	0.0279* (0.0152)	0.0258* (0.0154)	0.0225 (0.0149)	0.0211 (0.0147)
CO2	-0.0091 (0.0172)	-0.0118 (0.0189)	-0.0260 (0.0192)	-0.0239 (0.0178)	-0.0063 (0.0156)	-0.0054 (0.0173)
GDP	0.166* (0.0954)	0.166 (0.1012)	0.182* (0.0968)	0.211** (0.0989)	0.188** (0.0929)	0.185* (0.104)
Linear Combination (CSP + IBCSP/SBCSP/CBCSP)	0.211** (0.092)	0.201** (0.089)	0.171* (0.090)	0.142 (0.096)	-0.010 (0.065)	-0.004 (0.066)
Constant	4.174 (2.845)	4.191 (2.990)	3.727 (3.675)	3.419 (3.560)	0.485 (3.353)	0.255 (3.341)
Observations	819	819	819	819	819	819
Number of Banks	117	117	117	117	117	117
Arellano-Bond Test AR(1) (p-value)	0.000	0.004	0.000	0.002	0.000	0.002
Arellano-Bond Test AR(2) (p-value)	0.763	0.894	0.830	0.895	0.925	0.935
Sargan Test (Chi2, p-value)	0.000	0.000	0.000	0.000	0.000	0.000
Hansen Test (Chi2, p-value)	0.227	0.227	0.262	0.262	0.246	0.246

Data source: processed by the author 2024

4.5 Discussion

The results offer valuable contributions to the knowledge domain regarding Corporate Social Performance and Corporate Financial Performance relationship bounded by Islamic, Social and Conventional banking models. These findings add substantially to the literature on CSP influences on CFP, especially across disparate banking environments. In this discussion, we outline the implications of these findings within the scope of existing literature and theoretical frameworks.

ROAA Positive and significant values for the lagged ROAA for each of the banking models imply that a bank's history of financial performance plays an important role in determining its future success. This outcome confirms previous studies that show the persistence of financial performance as useful for predicting future performance (Wang et al., 2020). This feeds into the idea that the banking model does not dramatically change the way that other types of companies retain the benefits of financial performance. This finding underscores the significance of effective and enduring financial management practices in driving performance.

The strong positive effect of CSP on CFP in Social and Conventional Banking demonstrates the double value of socially responsible practices. Social banking model applying the CSP coefficient proves that corporate social responsibility is not only a moral norm for business the more you responsible the more the profit. This aligns with studies conducted by Orlitzky et al. Environmental management: A study by Văn Đổ & Nhật (2012) as seen in the systematic review by Martínez-Conesa et al. Additionally, a strong correlation was established (2003) and Margolis & Walsh (2001). The focus on stakeholders value and ethical principles in Social Banking, seems to magnify the phenomenon of CSP impacts, making it a strategic imperative for banks in this segment. In contrast, the non-significance of Islamic Banking indicates that challenges exist in aligning the CSP practices with the unique Islamic financial ethical frameworks and operational models. More study is needed on these dynamics, including the relationship between Sharia-compliant banking practices and larger CSP initiatives.

The different combinations of CSP and the banking models (IBCSP, SBCSP, CBCSP) have shown their interaction effects to be subtle in different contexts. Islamic Banking has a weakly positive and significant relationship which may suggest that CSP has just started to be integrated in the Islamic Financial Practices. These findings are consistent with those of Ullah & Jamali (2010), who documented the difficulty that Islamic banks experience in operationalizing CSP, arising from the role of the difficult interrelationship between ethical obligations and financial goals. Conversely, for Social Banking, no significant interaction effect is observed as social and ethical considerations are inherently integrated into the operational structure of such banks which, in a way, neutralizes the incremental contribution of CSP. The negative interaction effect in Conventional Banking indicates possible compromises between CSP and financial goals, supporting the case of McWilliams and Siegel (2001) whereby the detriment of implementing and adopting responsible behaviours outweighs the financial return in the short-run.

Negativity of bank size on CFP in all models, indicates that larger banks will be diseconomies of scale or increased operational complexities, but limits their financial performance. This result is in line with previous studies like that of Demirgüç-Kunt & Huizinga (1999), which have argued that larger banks tend to suffer from a decreased efficiency because of rising bureaucratic overhead costs. But this result is at odds with studies like Berger & Mester (1997), which found that bigger institutions gain from economies of scale. Such a difference highlights the potential for more research to identify contextual contingencies that could impact on the size-performance relationship in the banking sector, and specifically in emerging markets.

The CAR's positive and substantial impact throughout all banking models reinforces its crucial importance in maintaining financial soundness and performance. The importance of CAR also appears in the literature, where studies such as those by Barth et al. (2004) and Berger et al. (2008) highlighting its function of risk reduction and investor confidence improvement. This study shows that CAR is important irrespective of banking model, a finding that is consistent across models.

The detrimental effect of COI on CFP corroborates with the notion that high operational costs reduce profitability. The relationship has been well established as discussed in the banking literature as example by Athanasoglou et al (Molyneux & Thornton, 1992; 2008) show at the relevant theoretical methods that banks should not only be dynamic about their market strategy, to be competitive and successfully, but also they should be optimized to be more profitability. The persistent importance of COI across models additionally highlights the pivotal nature of this metric relative to financial outcomes.

CFP is influenced by Inflation (IF) and Gross Domestic Product (GDP) to different extents. In such Gupta-type regime, inflation weakly positively relates with CFP in Islamic and Social Banking as these financial systems involve unique financial instruments enabling mitigation of inflationary pressures, such as profit-sharing in Islamic Banking. These results corroborate with the studies conducted by Beck et al. (2013), observed that Islamic financial institutions survived inflation without collapsing. Positive relationships between GDP and CFP in all models demonstrate the role of macroeconomic conditions in shaping banking performance, conforming with arguments suggested by Levine (1997) about the effect of economic growth on financial development.

While the CSP and the banking models provide insight into the combined impact of these factors on CFP, the linear combination of CSP and the banking models provides a more nuanced understanding of the joint effects of these variables. In Islamic and Social Banking, the synergistic influence indicates that when CSP initiatives are integrated into their operating spirit, financial performance is improved. The lack of significance in Conventional Banking, on the other hand, could signal mismatches between CSP efforts and the client's traditional banking goals. This observation resonates with the criticism posed by Friedman (1970) of social responsibility efforts that conflict with profit maximization objectives in traditional business models.

The regression models are robust as tested by diagnostic tests. The lack of AR(2) autocorrelation and the results of the Sargan and Hansen tests demonstrate that the instruments used are valid and that models are well specified. The implications of the results are significant, as they enhance the robustness of the findings and confirm that they can be generalized to the context of banking performance.

These findings have both theoretical and practical implications. Theoretically, the study extends the resource-based view (RBV) and stakeholder theory by illustrating how banking models moderate the sustainability performance–corporate financial performance (CSP-CFP) relationship. Their results offer practical guidelines for both bank managers and policymakers about how the mix of services offered by these institutions can be optimized. For example, banks to focus on the social and Islamic segments can consider the CSP as a strategic weapon to improve financial performance. THE results highlight the need to optimize both bank size and operational costs if a bank wants to be financially successful.

5. Conclusion

The results of this study highlight the interplay between Corporate Social Performance (CSP) and Corporate Financial Performance (CFP) across the banking models evaluated, providing valuable insights into how socially responsible practices affect financial outcomes. The impact of CSP on CFP proves CSP in a Social and Conventional Bank setting as a strategic imperative for financial institutions, underpinning the need for incorporating friendly ethical and socio-economic operations in financial execution activities. Yet, the minor impact in the specific context of Islamic Banking reflects the specific challenges of integrating CSP with the principles of Sharia-compliance. Furthermore, the findings highlight the relevance of operational attributes including bank size, capital adequacy ratio (CAR), and cost of intermediation (COI) in determining financial performance. Theoretical implications reinforce stakeholder theory and resource-based view (RBV), and practical implications support banks in using CSP for greater financial stability and profitability. Such results necessitate more research, namely if there are longitudinal effects, other moderating effects, and/or if dynamics of emergent markets underlie CSP-CFP relations.

Limitations

Despite the contributions of this study, there are some drawbacks that need to be addressed. First, the analysis is based on a select sample of banking institutions and will limit the generalizability of the findings across other industries or non-financial institutions as a whole. Second, despite the use of advanced econometric models, including the Generalized Method of Moments (GMM) method, the depth of impact could still be affected by endogeneity and instrument validity, potentially compromising the strength of results. Third, the research is quantitatively driven, i.e., it cannot capture managerial impressions as qualitative insights on CSP initiatives or ripples of stakeholder interactions associated with them. Fourth, this study does not consider regional or cultural differences that can influence the association between CSP and Corporate Financial Performance (CFP), especially in emerging vs developed markets. Finally, the limited follow-up period may fail to reflect the long-term impact of CSP on the time to CFP. To overcome these

limitations, future studies should move toward cross-industry comparisons, mixed-methods approaches, and longitudinal data sets in order both to deepen understanding and promote the generalizability of the findings.

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Appendix A. Supplementary Data

The supplementary data supporting this research can be accessed in Appendix A. These materials include additional tables, figures, and detailed methodological descriptions that provide a comprehensive view of the analytical methods employed in this study. They also include extended results that complement the findings discussed in the main article.

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