# Reputation, Corporate Social Responsibility, and Financial Performance of Banks

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**ABSTRACT**
This paper investigates the joint effects of reputation and corporate social responsibility (CSR) on the financial performance of a global sample of banks. Firstly, reputation and CSR act as compliments rather than substitutes. Reputation positively affects return on equity, return on invested capital, and return on assets. CSR positively relates to the above, as well as net interest income. The effects on share price remain unclear. These findings are more pronounced for less reputable and less socially responsible banks, indicating a curvilinear relationship. It is further argued that investing in CSR poses better opportunities for profit enhancement than reputation.

**Keywords**
Reputation, reputational capital, corporate social responsibility, CSR, bank financial performance

## INTRODUCTION

In capital markets, investment banks bridge the gap between investors and entrepreneurs by fulfilling two pivotal functions [7]. First, the bank's specialization in sales and marketing of securities helps reduce the issuer's (entrepreneur's) transactional costs. Second, investors, unsure of the state of affairs inside an issuing company, will discount securities to account for this informational asymmetry. Because investment banks have skewed incentives when it comes to marketing debt or equity, and because investors cannot observe the rigor of the bank's screening standards, a similar informational asymmetry exists between investors and the bank. However, as opposed to issuers, banks interact regularly in the market and can thus build "reputational capital" reflective of their service quality. Hence, investors can turn to the bank's reputational capital as a guarantee that information conveyed by the bank is reflective of the actual state of the issuer, thereby reducing informational cost of capital for the issuer. The production of higher quality services, however, requires larger amounts of resources. This observation led Fang [7] to inquire on the effects of reputation on bank financial performance.



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A similar vein of research, and a hotly debated topic, studies corporate social responsibility (CSR) and its effect on financial performance. This paper defines CSR according to McWilliams & Siegel [16] as "actions that appear to further some social good, beyond the interest of the firm and that which is required by law". However, CSR research within the banking sector is scarce. CSR comprises and enhances the public's perception of the bank [16], and is thus a vital part of the bank's reputation. Enhanced reputation influences financial performance as it attracts resources that serve as competitive advantage, or act as a safety net in bad times [8][10][11][13][17]. Hence, this paper argues that the construct of bank reputation comprises two dimensions: social reputation as a function of CSR engagement, and market reputation as a function of the bank's intermediary service quality. Because social reputation and market reputation jointly constitute the concept of reputation, and because both affect financial performance, they should be considered in a joint context. Henceforth, "reputation" refers to market reputation, and "CSR" refers to social reputation. This paper aims to quantify the joint effects of reputation and CSR on bank financial performance.

In doing so, the paper contributes to extant literature in five ways. Firstly, the paper addresses Fang's [7] inquiry on the relationship between reputation and financial performance. Secondly, while the role of reputation is well established, research hereon remains confined by the boundaries of the United States. Hence, a global sample of banks is chosen to more holistically study reputation's effects on financial performance. Thirdly, existing literature focusses solely on the effects of reputation in any singular market (i.e., equity underwriting). As financial performance is based on a bank's interactions in multiple markets simultaneously, a new reputation measure to reflect this broader context is introduced. Fourth, reputation and CSR have yet to be considered in a joint context. This paper quantifies the relationship between reputation, CSR, and financial performance, jointly, while deepening the shallow pool of CSR knowledge within the banking sector. Lastly, it reconciles between reputation and CSR by arguing that CSR poses better investment opportunities as means for profitability enhancement.

## THEORETICAL FRAMEWORK

### Reputation and the Price Premium

The theoretical literature on reputation in the products market indicates a positive relationship between firm reputation and their product prices. In a perfectly competitive market, where quality is ex ante unobservable, high-quality products should sell at a premium [12]. The premium, firstly, signals that the product is high quality, as it ensures that the present value of future income derived from this premium is greater than short term profit from

defrauding customers by cutting quality without adjusting the product price. Secondly, the premium incentivizes the producer to maintain the high quality of its products, and serves to compensate him for the investments required to build reputation. This argument can be generalized to financial markets where firms attempt to sell securities. However, it works at best imperfectly when investors are uncertain about the credibility of the information conveyed by the firm, and thus the need for financial intermediaries, is legitimized.

How do financial intermediaries solve the credibility problem on behalf of the issuer? Reputation has been proposed as a general solution to agency problems in contracting in numerous settings [4]. The upshot of this theory is that firms should be willing to pay a price premium for reputable underwriters to certify their security issues and thus to diminish informational asymmetry. Furthermore, this argument extends to all areas of financial intermediation which satisfy the requirement that quality is ex ante unobservable. An important observation is that reputation is one of the most valuable assets of financial intermediaries [7]. As they are repeated players in financial markets, their survival and future income is tied directly to their reputation. Consistent with the arguments above, if the present value of future income derived from their reputation is greater than the short-term profits earned by defrauding investors and sacrificing reputation, intermediaries will find defrauding their investors suboptimal.

The theory is fully supported by empirics. Investment banks with greater reputation are more effective in reducing the impact of information asymmetry in capital markets [1]. Moreover, intermediary reputation is positively related to fees charges, and therefore, gross income. Most importantly, reputable banks will actively choose to underwrite high-quality firms, and vice versa [1][7]. Hence, non-random matching occurs between the issuer and underwriter, leading to selection bias. Finally, despite the higher gross incomes, maintaining a reputational advantage is costly in equilibrium, as it could not be a competitive advantage otherwise, thereby negating its effect on financial performance. As such, the theory sheds no light on this revenue-cost mystery. Whereas one would expect firms to strictly make value-adding investments, indicating a positive relationship between reputation and financial performance, there exists a need to diversify in an extremely competitive market [7], due to which no clear relationship might exist. Hence, I am agnostic of the relationship between reputation and financial performance.

### Corporate Social Responsibility and Profitability

The previous context concerns the bilateral relationship between the bank, representing the issuer, and the investor, thus including only a limited variety of stakeholders. How can banks enhance their image as perceived by the multitude of other stakeholders it deals with on a day to day basis, and how does this affect profitability. Previous research has concluded that corporate social responsibility is a major signal used by firms to build social reputation [8]. However, academics often offer contradictory conclusions about the profitability of CSR [15]. This trend remains true for the limited research on CSR within the banking sector [2][3][19]. Moreover, reputation is not considered jointly.

The inconclusive results prompt mixed views on the economic value of CSR. On the one hand, the negative view states that the costs incurred to pursue CSR strategies, which are more readily identifiable than its associated revenue, lead to competitive disadvantage [18]. Moreover, due to peer pressure and legitimacy concerns, firms enter a vicious cycle of increasingly costly CSR activities to simply match competitors [17]. This leads to lowered financial performance across the industry with no potential for differentiation.

On the other hand, the positive view sees many benefits, both qualitative and quantitative. Qualitatively, CSR strengthens a firm's competence to build and sustain diverse stakeholder relationships [18], which could serve as competitive advantage on its own. Moreover, the firm's social reputation is shown to reduce losses in bad times, thus acting as in insurance policy [10][11][13]. Quantitatively, CSR increases transparency and thus reduces information asymmetry between the firm and the investors. Coupled with a differentiation effect, this reduces the cost of debt and equity capital of the firm [5]. The recent boom in ethical investing further improves the liquidity of socially engaged firms [5].

While this overview is far from exhaustive, it gives an impression through which mechanics CSR could improve financial performance, particularly within the banking industry. In fact, the effect of CSR on financial performance is empirically found to be positively related to the level of competition in the industry [11], the level of public awareness of the industry [3], and if the firm has reputational concerns and a high capacity to impact society [6][13]. As the above is true for the banking sector [3][7], I expect that CSR is positively related to the financial performance of banks.

## METHODOLOGY

### Performance, Independent, and Control Variables

Financial performance is measured along traditional lines in five ways: share price, log net interest income (logNII), return on equity (ROE), return on invested capital (ROIC), and return on assets (ROA).

Empirical papers typically employ the bank's market share as a reputational approximation. However, as market share is limited to the market in which the share exists, this paper introduces market capitalization as a suitable approximation for a broader context. Conceptually, both market capitalization and market share reflect the present value of future income. Moreover, they both employ the same logical flaw that cash flow size is an accurate measure of quality. This performance variable is then operationalized based on relative differential reputation. The second performance variable is Asset4's CSR score. Unreported results show that the CSR and reputation constructs move independently, thus legitimizing simultaneous inclusion.

Firm characteristic control variables are also utilized: log total assets (logTA), leverage (ratio (D/E), loan-to-deposit ratio (LD), loan loss reserve (LLR), and number of shares outstanding in millions (SO).

Data is gathered from Thomson Reuter's DATASTREAM database, which also includes Asset4 data. The final sample is an unbalanced panel dataset that contains 10,194 bank-year observations for 63 banks over the period 2002-2015.

### The Performance Model

Since reputation is endogenous, the data is non-random, and an omitted-variable bias exists. To account for this, a fixed effects model is used that includes terms for unobserved bank and time-invariant effects caused by endogeneity. Moreover, standard errors are clustered at the bank-level for robustness.

## RESULTS

### Baseline

Table 1 represents the estimation results from the fixed effects performance regression over the full sample.

**Table 1**

*Performance Regression: Linear Cluster-Robust Standard Error Specifications*

| | Share Price | logNII | ROE | ROIC | ROA |
|---|---|---|---|---|---|
| CSR | 25.399 | **0.004**** | **0.365**** | **0.024***** | **0.006***** |
| | (1.53) | **(2.29)** | **(2.06)** | **(4.04)** | **(3.34)** |
| REP | -5612.619 | 1.129 | **267.046***** | **51.070***** | **16.044***** |
| | (-1.28) | (0.74) | **(2.86)** | **(5.45)** | **(4.98)** |
| Constant | -27209.83* | -1.551 | -116.769 | 33.219*** | 5.722** |
| | (-1.85) | (-0.67) | (-1.44) | (3.90) | (1.98) |
| logTA | 1459.804* | 0.874*** | 6.153 | -1.695*** | -0.289* |
| | (1.87) | (7.04) | (1.41) | (-3.72) | (-1.86) |
| DE | -0.085 | -9.22E-07 | 0.005*** | 1.72E-4 | 1.01E-4 |
| | (-1.14) | (-0.08) | (3.80) | (1.18) | (1.58) |
| LD | -6.267 | -0.001 | -0.087 | 7.50E-4 | 0.001** |
| | (-1.01) | (-0.92) | (-0.98) | (0.33) | (2.62) |
| LLR | -6.074* | -0.001** | -0.035 | 9.24E-4 | 0.001 |
| | (-1.68) | (-2.43) | (-1.09) | (0.28) | (0.76) |
| SO | -0.283 | -3.62E-5** | -0.004 | -3.40E-4*** | -1.47E-4*** |
| | (-1.43) | (-2.07) | (-1.59) | (-3.39) | (-4.76) |
| N Obs. | 742 | 739 | 739 | 739 | 683 |
| Adj. $R^2$ | 0.0026 | 0.8040 | 0.0365 | 0.2089 | 0.1842 |

*** P < 0.01; ** p < 0.05; * p < 0.10. Based on two-tailed tests, bank and time fixed effects, and standard errors clustered at the bank-level. T-statistics are reported in parentheses.

From left to right, no significant effect of either CSR or reputation on share price is found. Additionally, this model exhibits the lowest R-squared, indicating the need for additional control variables. In the second column, which has the highest R-squared at over 80% of variation explained, CSR is found to be positively related to NII, although economic impact is debatable. In column three, CSR is statistically significantly related to ROE, suggesting that shareholder returns increase as banks become more socially responsible. However, shareholders only reap significant economic value if a considerable change in CSR rating occurs – the coefficient is less than 3% of the mean value (unreported), banks employ extremely low amounts of equity, and a 20-point score increase (on a 100-point scale) would represent a change from the 25th to 50th percentile. Additionally, reputation is significantly, positively related to ROE. In column four and five, CSR is found to enhance both ROIC and ROA. However, a similar interpretation as for ROE prevails. Reputation is found to positively affect ROIC and ROA as well. More reputable banks with better CSR policies can make more lucrative investment decisions and use their assets more efficiently. While the effects of CSR are likely to differ on a per bank basis, the effects of reputation can be attributed to the endogenous matching of banks and clients; more reputable banks proactively choose to serve a better clientele from which they can extract higher returns, possibly also making their assets more efficient. However, given the reputation construct, a considerable effect is troublesome to effectuate by banks. To illustrate, a one standard deviation movement in the construct value would represent a jump larger than moving from the 25th to the 75th percentile of the construct range.

### Extended Analysis

A potential concern for banks is the difference in difficulty of obtaining a better CSR rating compared to improved reputation. To further the analysis on whether CSR or reputation is a better strategy for improving financial performance, two regimes are taken from the full dataset and are subjected to the same model. Regime 1 is the less reputable, less socially responsible regime. Regime 2 is more reputable, more socially responsible regime. Table 2 shows the estimation result, where Panel A corresponds to Regime 1, and Panel B to Regime 2.

**Table 2**

*Performance Regression: Extended Analysis Specifications*

| | Panel A | | | | | Panel B | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Share Price | logNII | ROE | ROIC | ROA | Share Price | logNII | ROE | ROIC | ROA |
| CSR | **35.610***** | **0.006***** | **0.509***** | **0.027***** | **0.006**** | 0.002 | 0.001 | **0.092**** | 0.010 | **0.005**** |
| | **(5.90)** | **(7.42)** | **(3.33)** | **(3.61)** | **(2.29)** | (0.01) | (1.53) | **(2.00)** | (1.57) | **(2.37)** |
| REP | **381052.7***** | **29.036***** | **6703.958***** | **470.462***** | **194.439***** | **2507.939***** | **2.450**** | **264.170***** | **40.426***** | **12.014***** |
| | **(6.34)** | **(3.76)** | **(4.40)** | **(6.21)** | **(7.53)** | **(13.15)** | **(2.31)** | **(5.15)** | **(5.83)** | **(5.25)** |
| Constant | -13137.26 | -0.394 | 241.776 | 65.634*** | 18.190*** | -767.491** | 1.529 | 153.179 | 33.107*** | 2.145 |
| | (-1.58) | (-0.37) | (1.15) | (6.28) | (5.10) | (-2.40) | (0.86) | (1.74) | (2.77) | (0.53) |
| logTA | 706.213 | 0.806*** | -14.352 | -3.612*** | -1.022*** | 20.755** | 0.714*** | -5.908* | -0.908** | -0.150 |
| | (1.52) | (13.50) | (-1.22) | (-6.18) | (-5.12) | (1.98) | (12.17) | (-1.93) | (-2.19) | (-1.08) |
| DE | -0.165 | 3.13E-5** | 0.006** | 3.52E-4*** | 1.67E-4*** | 2.56E-4 | -1.26E-5 | 0.013*** | -7.98E-4*** | -2.10E-4** |
| | (-1.57) | (2.24) | (2.28) | (2.65) | (3.76) | (0.18) | (-1.59) | (6.69) | (-2.94) | (-2.21) |
| LD | -5.708*** | -5.20E-4*** | -0.084*** | 6.70E-4 | 0.001** | 0.126 | 9.09E-5 | -0.010 | 0.002 | 0.003* |
| | (-5.47) | (-3.86) | (-3.14) | (0.53) | (2.45) | (0.92) | (0.12) | (-0.26) | (0.33) | (1.69) |
| LLR | -13.034 | -0.002** | -0.074 | 0.003 | 0.001 | 2.841 | 0.002 | -0.370 | -0.122 | 0.010 |
| | (-1.41) | (-1.98) | (-0.32) | (0.23) | (0.33) | (1.16) | (0.12) | (-0.57) | (-1.41) | (0.34) |
| SO | -0.915 | -1.50E-5 | -0.001 | -2.14E-4 | -3.16E-5 | 0.284 | -0.004** | -0.229*** | -0.243** | -6.19E-4 |
| | (-0.31) | (-0.40) | (-0.17) | (-0.58) | (-0.25) | (0.87) | (-2.14) | (-2.63) | (-2.06) | (-0.15) |
| N Obs. | 355 | 353 | 354 | 354 | 334 | 387 | 386 | 385 | 385 | 349 |
| Adj. $R^2$ | 0.0335 | 0.6530 | 0.1234 | 0.3834 | 0.4009 | 0.0076 | 0.0644 | 0.0004 | 0.0006 | 0.0678 |

*** p < 0.01; ** p < 0.05; * p < 0.10. Based on two-tailed tests, bank and time fixed effects. T-statistics are reported in parentheses. Panel A represents the performance regression for the lower half of the sample set based on reputation. Panel B represents the performance regression for the upper half of the sample set based on reputation.

Three striking observations can be made from Table 2. (1) Reputation has become a significant predictor of every financial performance measure in both specifications. (2) CSR is a more significant enhancer of financial performance across all measures in Regime 1 compared to Regime 2. (3) Factor loadings are universally larger in Regime 1. In other words, CSR and reputation seem to be curvilinearly related to financial performance.

## CONCLUSION

With regards to reputation, this paper explicates that it increases financial performance as measured by ROE, ROIC, and ROA. In other words, more reputable banks earn higher returns for their shareholders, earn higher returns on their investments, and use their assets more efficiently. These findings materialize via endogenous issuer-underwriter matching, and is curvilinear. Hence, less reputable banks can extract greater benefits from improved reputation compared to the bulge bracket.

Previous research had not considered bank CSR policy and reputation in a joint context. This paper finds that banks with better CSR enjoy better financial performance as measured by NII, ROE, ROIC, and ROA. These results conform to my initial expectations, and are in line with the positive view on CSR. Moreover, like reputation, CSR stands in curvilinear relationship to these financial performance measures, implying that less socially responsible banks stand to gain more from improving their CSR policy than socially responsible banks.

The findings of this paper contribute to extant literature on organizational policy, CSR, and reputation. First and foremost, is shows that taking social responsibility can be a lucrative business. Within this realm, CSR receives the most support from empirical, conceptual, and practical grounds. Empirically, CSR is found to provide performance improvements in excess of those provided by reputation, given the two variable constructs. Conceptually, CSR scores and reputation move independently, implying that any bank, regardless of reputation, can improve their CSR policy – the effects of which would be larger for initially socially discrepant banks. Hence, CSR and reputation act as compliments rather than substitutes. Practically, reputation

is much harder to amass than CSR scores for a number of reasons, minimally: (1) banks produce experience goods, the quality of which cannot ex ante be experienced, in a business-to-business market marked by a limited number of participants. (2) the duration of an issuer-underwriter relationship reduces issuance costs for repeat business. These reasons make it extremely hard for newly reputable banks to steal business from incumbent banks [9][14]. In contrast, CSR improvements are much more observable from investors', researchers', and the general public's perspective. Firstly, competitor's CSR activity is readily observable through media and company reports, in contrast to proprietary business practices required to produce high-quality services. Secondly, high awareness exists amongst the public due to ongoing scrutiny of banks by the media [3]. Lastly, CSR activities, both tangible and intangible, can be disclosed on an annual basis in detailed CSR reports, which are shown to increase financial performance [5]. A caveat is, of course, that merely acting more socially responsible does not automatically entail a more lucrative business; required competences need to be fostered in the process.

Besides validity of data and theory, I recognize a number of limitations to this paper. Firstly, this paper did not test explicitly for causality. Secondly, the strength of the findings depends on the appropriateness of the reputation construct as a proxy for reputation, as well as its relation to CSR. As CSR is positively related to financial performance, increasing firm value, and as reputation is based on total firm value, simultaneous inclusion of both variables might confound the research. However, if CSR worked through reputation, this would serve to reduce its significance. As it remained significant at the 1% level in almost all specifications (and as unreported research showed independent variable movement), there is strong reason to believe this paper yields pragmatic results.

## ROLE OF THE STUDENT

Christopher de Koning was an undergraduate student working under the supervision of Clarissa Hauptmann when the research in this report was performed. The topical area was proposed by the supervisor. Every other activity was performed by the student.

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