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CORPORATE SOCIAL RESPONSIBILITY AND BANK CREDIT RATINGS

This paper examines the association between bank credit ratings and Corporate Social Responsibility (CSR). The sample includes large publicly listed banks in the United States during fiscal years 2000-2016. Our findings indicate that CSR policies are positively associated with banks' credit ratings. We further test each dimension of the MSCI KLD database's ESG ratings and find that the CSR components measuring diversity and employee relations are particularly relevant in the credit rating context.

JEL classification: G21, G30, M14

Keywords: banks, credit ratings, CSR

1. INTRODUCTION

Corporate social responsibility (CSR) has gained significant attention in recent years and its importance is highlighted during turbulent times, such as the COVID-19 pandemic, the energy crisis, and the ongoing general widespread global political instability, including the war in Ukraine. These recent events have caused unexpected challenges for companies and, consequently, demonstrate the relevance of understanding the importance and influence of corporate social responsibility in the companies' operations and performance which is supported by earlier research.

El Ghouli et al. (2021) report that firms with good environmental, social, and governance (ESG) performance can attract a broader investor base. Moreover, Riedl and Smeets (2017) suggest that investors are willing to sacrifice some financial gains for holdings in socially responsible investments. However, reportedly, CSR may also enhance shareholder value (see e.g., Deng, Kang & Low, 2013; Nguyen, Kecskes & Mansi, 2020, Aouadi & Marsat, 2018; Capelle-Blancard & Petit, 2019). Finally, many studies show that high-quality CSR often lowers a firm's expected risk (see e.g., Albuquerque

et al., 2019; Chava, 2014; Hong & Kacperczyk, 2009; Hoepner et al., 2018; Reber, Gold & Gold, 2022).

CSR is the backbone of corporate reputation, and it is also widely accepted as one of the key components in impacting the success of a company. In addition to financial advantages, CSR may also provide strategic gains to companies in the form of competitive advantages. Because banking is largely based on trust, it can be argued that the role of CSR is particularly important in the financial industry.

A recent stream of literature focuses on corporate social responsibility in the banking industry. Grougiou et al. (2014) document that banks engaging in earnings management practices are also actively involved in CSR but, interestingly, the reverse relationship is not significant. Garcia-Sanchez, Martinez-Ferrero, and Garcia-Meca (2018) report that banks with more independent directors and more female members on their boards incline toward socially responsible behavior.

Recent papers argue that the real benefits of CSR are manifested in intangibles, such as reputation, relationships with stakeholders,

and trust that are not considered in traditional profitability measures (Attig et al., 2013; Lins, Servaes & Tamayo, 2017). Furthermore, Dallas (2004) argues that credit rating agencies consider CSR-related information in their decision-making. Although CSR has attracted significant interest from investors and other interest groups, its impact is still unclear in the banking industry where trust is even more crucial than in many other economic sectors. The importance of CSR in banking is further highlighted by the recent turmoil in the global political environment. We contribute to the existing literature by examining whether socially responsible behavior in the banking industry is associated with better credit ratings.

In contrast to prior work, this is the first paper to investigate the impact of corporate social responsibility on credit ratings, particularly in the banking industry. We motivate that studying CSR and credit ratings in the banking sector is particularly relevant and interesting since, due to a different set of contextual circumstances, banks have completely different priorities regarding CSR engagement than other sectors or industries. Specifically, for example, Castelo et al. (2013) argue that banks are mainly focused on anti-

money laundering, bribery, and corruption issues, together with environmental aspects of CSR.

We contribute to the existing literature by demonstrating a significant and positive association between credit ratings and high-quality CSR activities in the banking industry. This reported relationship is especially driven by the diversity and employee relations dimensions of CSR. Our results may have important implications for bank supervisors, regulators, depositors, and other stakeholders of financial institutions, as we highlight the relevance of effective CSR policies in the solvency of the financial industry.

2. RELATED LITERATURE AND HYPOTHESIS

The responsibility of companies towards society is a longstanding debate. In particular, during the two recent decades, we have witnessed a surge of academic interest in CSR. Two contradicting theories regarding the relationship between CSR policies and firm value were developed in the academic literature by the end of the 20th century. Interestingly, early work on CSR in corporate

decision-making argues that the only corporate responsibility of a company is to maximize the shareholders' wealth (Friedman, 1970). The Underperformance Hypothesis (Friedman, 1970) states that CSR policies require firms to consume resources, thus, negatively affecting the firm value. Friedman (1970) reasons that companies should use all available resources to engage in activities designed to increase profits while engaging in open and free competition and without any deception or fraud. Furthermore, Friedman (1970) argues that it is the government's mission to set the rules and maintain regulations to ascertain that other stakeholders' interests are taken into the account.

On the contrary, Freeman (1984) suggests that besides focusing on the shareholders, companies should also cherish their relationship with all stakeholders (such as customers, suppliers, communities, etc.) that are affected by their operations. This opposing view is the so-called Stakeholders' Theory, which argues that CSR policies promote long-term relationships with stakeholders that would result in a reduction of costs, and therefore, an increase in firm value (Freeman, 1984). Therefore, it is important that companies take all stakeholders

into account when making corporate decisions. The Stakeholder Theory teachings have prevailed in recent decades as the desired way of doing business. Jensen (2002) further suggests that doing business while taking care of stakeholders' needs ultimately increases the shareholders' wealth as well. Finally, it is highly unlikely that a company can be successful and profitable in a long term without taking good care of its employees, making sustainable products, and preserving the environment for future generations.

The importance of CSR has been growing significantly during the recent decades as more and more companies are paying attention to responsible behavior and to the impact their operations make (Deng et al. 2013). Nevertheless, the motivation behind companies' efforts toward CSR is an open debate. Legislative requirements and the political system are among the most important reasons behind the responsible behavior of companies (Ioannou and Serafreim, 2012; Becchetti et al. 2012). In particular, one of the directives by the European Union in 2016 was mandatory reporting on environmental, social, and diversity information by large companies in the EU. Furthermore, the growing impact of CSR has been backed

strongly by investors and society. Above all, the growth of responsible investing by both institutional and retail investors has pressured companies to operate more responsibly (Sparkes et al. 2004). For example, the United Nations (UN) initiative on Principles of Responsible Investments (PRI) established in 2015 encourages investors to follow ESG disclosures and use socially responsible investments to better manage their risks. UN's PRIs are currently having 4,902 signatories worldwide with an estimated total of assets under management of USD 121.3 trillion (Principles of Responsible Investments Annual Report, 2022).

Further, external pressure from society shapes the companies' behavior toward being more sustainable. Particularly, an unethical company faces challenges to attract investors, customers, and good employees (Fombrun, 1966). Moreover, an environmental, social, or governance-related incident can potentially hurt the company financially, and damage its reputation and relationship with network partners (Sullivan et al. 2007). Finally, the responsible activities of a company can potentially lead to better financial performance as well. Companies operating sustainably and responsibly can create a

competitive advantage that is especially profitable in the long run (Deng et al. 2013; Jeong et al. 2018).

Empirical literature focused on the financial industry is relatively scarce, although it provides some evidence indicating that social responsibility is related to the value and risk of financial institutions. In particular, studies from Simpson and Kohers (2002), Chih et al. (2010), Wu and Shen (2013), and di Tommaso and Thorton (2020) find contradicting results when assessing the effect of CSR practices on firm value and risk. Simpson and Kohers (2002) use a sample of commercial banks in the United States and find a positive relationship between social and financial performance. Likewise, Wu and Shen (2013) find a positive relationship between CSR and financial performance in terms of return on assets and return on equity after analyzing a large international sample of banks. Nevertheless, they further find the opposite relationship when focusing on non-performing loans. The work of di Tommaso and Thorton (2020) provides the opposite results. They focus on European banks, showing high ESG scores to be related to a lower value in terms of Tobin's Q, the book value of capital and equity process; but also, to lower risk

measured by Z-score, credit default swap spreads, and nonperforming loans. Chih et al. (2010) focus on an international sample of financial firms listed on the Dow Jones World Index and the Dow Jones Sustainability Indices, finding no significant relationship between financial and CSR performance. However, they find that firms in countries with stronger investor rights engage in less CSR activities and that bank regulation positively affects CSR policies.

The relationship between CSR practices and credit ratings in the financial industry has not been examined. The closest related literature to our work is non-banking firm studies by Attig et al., 2013, Bae et al. (2018); Jiraporn et al., 2014; and Li et al. (2020). Attig et al. (2013) find that credit rating agencies tend to provide higher ratings to firms with good social performance. They further show that the individual components of CSR that are related to stakeholder management (i.e., community relations, diversity, employee relations, environmental performance, and product characteristics) exert a greater impact on creditworthiness. Jiraporn et al. (2014) use a sample of US firms from 1995 to 2007 and show a positive and statistically significant relationship between socially responsible firms

and their credit ratings. Bae et al. (2018) and Li et al. (2020) examine the impact of CSR activities and credit ratings on loan spreads. Focusing on a US sample of syndicated loans from 1991 to 2008, Bae et al. (2018) find that CSR strengths affect loan pricing after controlling for credit ratings. Likewise, Li et al. (2020) show a significant impact of CSR, credit ratings, and green certification on yield spreads using data on Chinese green bonds.

Given the empirical findings of previous studies focused on non-financial firms, the preliminary evidence on banking relating CSR policies and risk, and Freeman's (1984) Stakeholder theory, we posit the following hypothesis:

H1: There is a positive and significant relationship between CSR quality and the credit rating of financial institutions.

3. DATA AND METHODOLOGY

SAMPLE AND VARIABLES

The data consist of large publicly listed banks in the United States. The financial data are gathered from Bloomberg and the CSR

data are from KLD. Our data cover fiscal years 2000-2016. Thus, both the financial crisis and periods of more normal market conditions are covered. The total sample consists of 486 bank-year observations and 59 individual banks.

Following Shen et al. (2012) and Attig et al. (2013), we proxy the bank credit ratings (*RATING*) by S&P long-term ratings (i.e.: ratings on obligations with an original maturity of 365 days and more). The bank credit ratings are coded as 16 ordinal values so that the highest rating in our sample (AA+) equals 16 and the lowest (CCC+) equals 1.

We measure *CSR* for each bank as the cumulative score of six dimensions of the ESG ratings retrieved from the MSCI KLD database. The MSCI KLD database provides data on the following CSR dimensions: environment (*ENV*), community (*COM*), human rights (*HUM*), employee relations (*EMP*), diversity, (*DIV*), and product (*PRO*)¹. The final value for each dimension is calculated as the sum

¹ Following Lins et al. (2017), we do not include the dimension *Corporate governance* in our tests because governance is generally not part of a firm's CSR remit.

of the *strengths* minus the sum of the *concerns* scores for that particular category.

Our control variables consist of the following set of ratios that are commonly used in the banking literature and are shown to affect credit ratings: profitability (*ROA*), equity to total assets (*Capital*), the cost-to-income ratio (*Efficiency*), non-performing loans (*NPLR*), and capital structure, measured as loans to assets (*Loantoassets*). Finally, we control for the bank size by the natural logarithm of total assets (*Size*).

DESCRIPTIVE ANALYSIS

According to our descriptive statistics reported in Table 1, the average and median *RATING* is BBB+. Regarding our main explanatory variables, *CSR* is the most volatile variable, ranging from 21 to a minimum of 2. Concerning the CSR components, *EMP* presents the highest average (4.08), which might be due to many ESG efforts in the banking industry being focused on employee policies.

Table 1: Descriptive statistics

Variables/stat	Mean	Median	S.D.	Max.	Min.
<i>RATING</i>	10.22	10	2.39	16	1
<i>CSR</i>	8.97	9	3.24	21	2
<i>COM</i>	1.78	2	0.91	5	0
<i>DIV</i>	3.01	3	1.55	9	0
<i>EMP</i>	4.08	4	1.53	10	1
<i>HUM</i>	2.29	2	0.67	4	0
<i>PRO</i>	3.40	4	1.10	6	-1
<i>ROA</i>	0.90	1.00	0.95	4.43	-6.54
<i>Capital</i>	10.26	9.97	2.75	32.80	4.21
<i>Efficiency</i>	61.70	61.58	28.20	165.21	0
<i>NPLR</i>	1.45	0.80	1.76	13.32	0
<i>Size</i>	10.67	10.40	1.39	14.76	8.38
<i>Loantoassets</i>	61.01	65.58	16.14	96.17	4.64

This table provides the mean, median, standard deviation, maximum and minimum values of each variable.

Regarding bank-specific controls, we can note from the average bank size that the sample consists of large institutions. This is explained by our sample selection of public banks. The mean capital ratio is 10.26% which indicates that, in general, U.S. public banks are well-capitalized. The average efficiency ratio is above 50, which

implies suboptimal values. As we are focusing on commercial banks, the proportion of loans to total assets is above 60%, while the non-performing loans ratio is around 1.45% on average.

The correlation matrix depicts that there is a positive correlation between all CSR components and the credit rating, except for the CSR component *Product*, which has a negative and significant correlation (-0.37) with the credit rating. Moreover, also most of the CSR components have positive and significant correlations with one another.

Table 2: Correlation matrix

	RATING	CSR	COM	DIV	EMP	ENV	HUM	PRO
RATING	1							
CSR	0.2822* (0.00)	1						
COM	0.3025* (0.00)	0.5628* (0.00)	1					
DIV	0.3769* (0.00)	0.5036* (0.00)	0.3237* (0.00)	1				
EMP	0.1526* (0.0003)	0.7036* (0.00)	0.2410* (0.00)	0.067 (0.1143)	1			
ENV	0.1485* (0.0004)	0.6857* (0.00)	0.3932* (0.00)	0.1329* (0.0017)	0.3929* (0.00)	1		
HUM	0.0378 (0.3729)	0.4709* (0.00)	0.4014* (0.00)	0.0086 (0.8398)	0.2329* (0.00)	0.6625* (0.00)	1	
PRO	-0.3695* (0.00)	0.0427 (0.3145)	-0.1292* (0.0022)	-0.5195* (0.00)	0.0097 (0.8199)	0.1583* (0.0002)	0.2218* (0.00)	1

This table provides the pairwise correlations between the credit rating and the CSR score and CSR components: environment (ENV), community (COM), human rights (HUM), employee relations (EMP), diversity, (DIV), and product (PRO). * Denotes statistical significance at the 0.1 level.

3. RESULTS AND DISCUSSION

We employ the following regression for examining the relationship between bank credit ratings and CSR:

$$RATING_{j,t} = \beta(CSR\ scores)_{j,t} + \gamma(Bank - specific\ controls)_{j,t} + \phi(Year\ dummies)_{j,t} + \varepsilon_{j,t} \quad (1)$$

Where $RATING_{j,t}$ denotes the S&P long-term credit rating converted to an ordinal scale from 16 (AA+) to 1 (CCC+) of bank j at year t . *CSR scores* present the main explanatory variables in our study, comprising CSR score (*CSR*) and CSR dimensions, including environment (*ENV*), community (*COM*), human rights (*HUM*), employee relations (*EMP*), diversity, (*DIV*), and product (*PRO*). The set of bank-specific control variables includes proxies from size (*Size*), profitability (*ROA*), capitalization (*Capital*), efficiency (*Efficiency*), impaired loans (*NPLR*), and capital structure (*Loantoassets*). We control for the time-fixed effects by including dummy variables for fiscal years. Given the nature of our dependent variable, to avoid biased coefficient estimates, we employ ordered response models, similar to Shen, Huang, and Hasan (2012) and Attig et al. (2013).

Our regression results are reported in Table 3. According to our results, most of the CSR components and the total CSR score have a significant impact on the credit ratings, thereby supporting our

bivariate results. In particular, the coefficient for *CSR* is positive and highly significant in Model 1, thereby indicating that high-quality *CSR* is associated with good credit ratings in the banking industry. These results provide empirical evidence supporting the Stakeholder view (Freeman, 1984) in the banking sector. In Models 2-7 the *CSR* components for community, diversity and employee relations have positive and statistically significant coefficients in line with Attig et al., 2013. Our results are further aligned with a strand of literature focused on financial institutions that links board gender diversity to lower credit risk (e.g.: Palvia et al., 2015; Amore and Garofalo, 2016; Andries et al., 2017; Kinadeter et al., 2021). Moreover, good employee relations are also linked to lower cost of debt and higher credit ratings (Bauer et al., 2009). Unexpectedly, the coefficient for the product dimension of *CSR* is negative and statistically significant (Model 7). However, in a similar vein, Esteban-Sanchez, de la Cuesta-Gonzales, and Paredes-Gazquez (2017) find a negative relationship between the product responsibility dimension and the financial performance of banks. The authors suggest that their findings may be explained by banks moving towards a more relational business model to meet the real needs of their customers. In Model 8 we

combine all CSR components and find that the strongest positive impact on banks' credit ratings is driven by the diversity and employee relations components of banks' CSR activities.

Table 3. Ordered probit results of CSR qualitative issue areas on credit ratings

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
<i>CSR</i>	0.06*** (0.02)							
<i>COM</i>		0.12** (0.05)						0.09 (0.06)
<i>DIV</i>			0.13*** (0.04)					0.11*** (0.04)
<i>EMP</i>				0.09** (0.04)				0.08* (0.04)
<i>ENV</i>					0.04 (0.04)			0.00 (0.06)
<i>HUM</i>						0.09 (0.07)		0.05 (0.10)
<i>PRO</i>							-0.11* (0.06)	-0.11* (0.07)
<i>ROA</i>	0.12 (0.12)	0.13 (0.12)	0.12 (0.12)	0.13 (0.13)	0.13 (0.12)	0.13 (0.12)	0.14 (0.12)	0.12 (0.12)
<i>Capital</i>	-0.15*** (0.03)	-0.15*** (0.00)	-0.15*** (0.03)	-0.15*** (0.03)	-0.15*** (0.03)	-0.15*** (0.03)	-0.15*** (0.03)	-0.16*** (0.03)
<i>Efficiency</i>	-0.01 (0.01)	0.00 (0.03)	0.00 (0.01)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.01)
<i>NPLR</i>	-0.48***	-0.46***	-0.46***	-0.48***	-0.47***	-0.47***	-0.46***	-0.47***

	(0.05)	(0.05)	(0.05)	(0.05)	(0.05)	(0.05)	(0.05)	(0.05)
<i>Lntotassets</i>	0.58***	0.62***	0.58***	0.60***	0.63***	0.64***	0.60***	0.51***
	(0.05)	(0.05)	(0.05)	(0.05)	(0.05)	(0.04)	(0.05)	(0.06)
<i>Loantoassets</i>	-0.01***	-0.01***	-0.01***	-0.01***	-0.01***	-0.01***	-0.01***	-0.01***
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Year dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	486	486	486	486	486	486	486	486
Pseudo R ²	24.78	24.44	24.71	24.53	24.31	24.32	24.43	25.23

This table reports the coefficients and robust standard errors (in parentheses) for eight ordered probit models. The dependent variable is the S&P long-term credit rating converted to an ordinal scale from 16 (AA+) to 1 (CCC+). *Capital* is the Equity to total assets ratio, *Efficiency* is the cost-to-income ratio, *NPLR* is the impaired loans to gross loans ratio, *Size* is the natural logarithm of total assets and *Loantoassets* is the ratio of loans over total assets. ***, **, and * denote statistical significance at the 0.01, 0.05, and 0.10 levels, respectively.

Both diversity and employee relations components of CSR are considered “progressive” social thinking positions - as opposed to “traditional” social thinking (McGuire et al, 2012). Thus, “progressive” banks that cherish diversity in their culture by preventing discrimination in the workplace have higher credit ratings than “traditional” banks. Furthermore, banks that cherish the relationship with unions, implement various no-layoff policies, and therefore perform well in the employee relations dimension of CSR, also benefit in the form of higher credit ratings.

As a robustness check, logit-ordered models confirm the previous findings of a positive relationship between the credit ratings and CSR activities of banks. These results reported in Table 4 indicate that diversity and employee relations components are mainly responsible for the positive and significant association between credit ratings and bank CSR.

Table 4. Ordered logit results of CSR components on credit ratings

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
<i>CSR</i>	0.11*** (0.03)							
<i>COM</i>		0.17* (0.10)						0.09 (0.11)
<i>DIV</i>			0.23*** (0.08)					0.11** (0.04)
<i>EMP</i>				0.19*** (0.07)				0.08* (0.04)
<i>ENV</i>					0.07 (0.07)			0.01* (0.06)
<i>HUM</i>						0.18 (0.13)		0.05 (0.10)
<i>PRO</i>							-0.15 (0.12)	-0.11* (0.07)
<i>ROA</i>	0.36* (0.20)	0.41** (0.19)	0.39** (0.19)	0.41** (0.19)	0.42** (0.19)	0.42** (0.19)	0.44** (0.18)	0.12 (0.12)

<i>Capital</i>	-0.27*** (0.07)	-0.28*** (0.07)	-0.28*** (0.06)	-0.27*** (0.06)	-0.28*** (0.07)	-0.28*** (0.07)	-0.28*** (0.06)	-0.16*** (0.03)
<i>Efficiency</i>	-0.01 (0.01)	0.00 (0.01)	0.00 (0.01)	0.00 (0.01)	0.00 (0.01)	0.00 (0.01)	0.00 (0.01)	0.00 (0.01)
<i>NPLR</i>	-0.92*** (0.12)	-0.88*** (0.10)	-0.88*** (0.11)	-0.92*** (0.10)	-0.89*** (0.10)	-0.88*** (0.10)	-0.87*** (0.10)	-0.47*** (0.05)
<i>Size</i>	1.05*** (0.09)	1.13*** (0.09)	1.05*** (0.10)	1.09*** (0.09)	1.14*** (0.09)	1.17*** (0.09)	1.12*** (0.09)	0.51*** (0.06)
<i>Loantoassets</i>	-0.02*** (0.01)	-0.02*** (0.01)	-0.02*** (0.01)	-0.02** (0.01)	-0.02*** (0.01)	-0.02*** (0.01)	-0.02*** (0.01)	-0.01*** (0.00)
Year f.e.	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	486	486	486	486	486	486	486	486
Pseudo R ²	24.93	24.43	24.71	24.68	24.36	24.39	24.41	25.29

This table reports the coefficients and robust standard errors (in parentheses) for eight ordered logit models. The dependent variable is the S&P long-term credit rating converted to an ordinal scale from 16 (AA+) to 1 (CCC+). *Capital* is the Equity to total assets ratio, *Efficiency* is the cost-to-income ratio, *NPLR* is the impaired loans to gross loans ratio, *Size* is the natural logarithm of total assets and *Loantoassets* is the ratio of loans over total assets. ***, **, and * denote statistical significance at the 0.01, 0.05, and 0.10 levels, respectively.

To overcome endogeneity, we run additional tests (not tabulated) providing similar results when using the lagged explanatory variables. We further examine the robustness of our results by testing alternative models as well as both ordered probit and logit regressions. We also regroup our dependent variable into four categories by

giving a value of 4 to banks with credit ratings of at least AA-; a value of 3 is given to those entities ranging from A+ to A-; institutions with credit ratings between BBB+ and BB- are assigned a value of 2 and, finally, we place banks with credit ratings of B+ or lower into category 1. The results of both ordered probit and logit regressions support the reported findings.

Our results provide further evidence on the positive relationship between CSR policies and credit quality supporting results from Attig et al, 2013 for non-financial firms. We find a positive and highly significant correlation between CSR and credit ratings and also between most CSR components, diversity and employee relations being the components with the strongest coefficients. This finding is in line with Esteban-Sanchez et al. (2017) who state that shareholders and employees could be the most relevant stakeholders in the banking industry. Our results further support those from Bauer et al. (2009) for non-financial firms, showing a positive correlation between employee relations and credit ratings; and provide additional empirical evidence to the banking strand of literature that links board gender diversity to lower credit risk (e.g.: Palvia et al., 2015;

Amore and Garofalo, 2016; Andries et al., 2017; Kinadeter et al., 2021).

4. CONCLUSIONS

During recent decades, attention to CSR policies has increased significantly. Regulators are issuing legislation to promote socially responsible practices, backed by a genuine interest from both investors and society (Sparkes et al. 2004).

The banking sector has demonstrated dubious ethical standards in recent years. Some examples are the placement of investment products without taking into account the customer's risk profile, or the granting of mortgages to high-risk customers, among others. These practices have been linked, to a certain extent, to the financial crisis of 2008, from which strong regulation has been developed (e.g.: Basel III Accord, MiFID II, etc.). Given the role of the financial industry in the previous crisis and the plausible arrival of a new crisis in the coming years because of the current macroeconomic situation of high inflation and low expected growth, it is of interest

to analyze corporate social responsibility in the banking industry. Consequently, we examine whether a positive relationship exists between CSR quality and the credit rating of financial institutions.

Our study contributes to the banking literature by examining whether socially responsible behavior in the banking industry is associated with better credit ratings. This paper is the first study that analyses the relationship between CSR and credit ratings in financial institutions. Additionally, we contribute to the literature by providing further empirical support to the Stakeholder view (Freeman, 1984). More specifically, our work is in line with Attig et al. (2013) and Jiraporn et al. (2014) showing a positive and significant relationship between CSR activities and debt credit ratings. Moreover, our findings indicate that a higher quality in the CSR elements that promote bank responsibility towards its community, diversity, and employee relations tend to increase the bank's creditworthiness. However, we document that the product dimension of CSR seems to have a negative association with credit ratings.

Consequently, we provide empirical support to the body of banking literature that relates female representation in the governing

organs of the firm to lower credit risk (e.g.: Palvia et al., 2015; Amore and Garofalo, 2016; Andries et al., 2017; Kinadeter et al., 2021). With regards to employee relations, our results support those from Bauer et al. (2009), whose work documents that firms with stronger employee relations enjoy a lower cost of debt and higher credit ratings.

In general, we provide support to non-banking literature (e.g.: Attig et al., 2013, Bae et al., 2018; Jiraporn et al., 2014; and Li et al., 2020) documenting the positive effect of CSR activities in the creditworthiness of firms, showing CSR as a value relevant element in the company that promotes credit quality of responsible firms.

As a limitation of this study, we recognize that endogeneity problems may arise from omitted variables and reverse causality between some variables. To address these limitations and to further improve the robustness of the results, we test for additional regression models and use an alternative dependent variable. Our results remain unchanged after these additional analyses.

Our results may have important implications for bank supervisors, regulators, depositors, and other stakeholders of financial

institutions, as we highlight the benefits of effective CSR policies in the solvency of the financial industry.

Looking ahead, future research could focus on the resilience of banking institutions in the imminent upcoming economic crisis given the current high inflation and interest rates. Moreover, it is important to examine the role of CSR policies and new banking regulations in coping with these challenging macroeconomic conditions.

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Appendix. MSCI KLD dimensions of CSR

The table describes the dimensions of the MSCI KLD database's ESG ratings, and the criteria for their *strengths* and *concerns*. The MSCI KLD database gives 1 point for each *strength* criteria a company meets and deducts 1 point for each *concern*.

Dimension	Strengths	Concerns
Environment	Beneficial products and services	Hazardous Waste
	Pollution Prevention	Regulatory Problems
	Recycling	Ozone Depletion Chemicals
	Clean Energy	Substantial Emissions
	Communications	Agricultural Chemicals
	Property, Plant and Equipment	Climate Change
	Management Systems	
Community	Charitable Giving	
	Innovative Giving	Investment Controversies
	Non-US Charitable Giving	Negative Economic Impact
	Support for Housing	Indigenous People's Relations
	Support for Education	Tax Disputes
	Indigenous People's Relations	
	Volunteer Programs	
Human Rights	Indigenous People's Relations	Labor Rights
	Labor Rights	Indigenous People's Relations
	Positive Record in South Africa	Controversies in South Africa
Employee Relations	Union Relations	Union Relations
	No-Layoff Policy	Health and Safety
	Cash Profit Sharing	Workforce Reductions
	Employee Involvement	Retirement Benefits Concerns
	Retirement Benefits	

	Health and Safety	
Diversity	CEO Diversity	
	Promotion Diversity	
	Board of Director	Controversies
	Work/Life Benefits	Non-Representation
	Women and Minority Contracting	
	Employment of the Disabled	
	Gay and Lesbian Policies	
Product	Quality R&D / Innovation	Product Safety
	Benefits to the Economically Disadvantaged	Marketing / Contracting
		Antitrust
