

Value-Driven Bankers and the Granting of Credit to Green Firms*

Di Bu, Matti Keloharju, Yin Liao, and Steven Ongena

May 23, 2023

* Bu is with Macquarie University (di.bu@mq.edu.au), Keloharju is with the Aalto University School of Business, CEPR, and IFN (matti.keloharju@aalto.fi), Liao is with Macquarie University (yin.liao@mq.edu.au), and Ongena is with the University of Zurich, Swiss Finance Institute, KU Leuven, NTNU Business School and CEPR (steven.ongena@bf.uzh.ch). We thank Alberta di Giuli, Samuli Knüpfer, Deniz Okat, and seminar and conference participants at Aalto University, Bank of Finland, and ZEW Conference on Ageing and Sustainable Finance for comments, and Penglong Li, Kimmo Niinimäki and Wenjia Yu for superb research assistance. We have used ChatGPT to edit the text. Bu and Liao acknowledge research support from the Australian Research Council under project No. LP200301118. Keloharju acknowledges research support from the Academy of Finland (No. 292363 and 319316) and OP Group Research Foundation.

Value-Driven Bankers and the Granting of Credit to Green Firms

Abstract

How do bankers treat green firms? Utilizing unique loan application and banker preference data from a mid-sized bank, we find that customer managers, serving as front-line bankers, provide more favorable recommendations for green firms, particularly when they hold strong green values. However, a minority of environmentally skeptical bankers counteract this trend. These brown managers fake green interests when their recommendations bear no weight, and conversely, diminish their endorsements to green firms when they do hold significance. Additionally, brown loan officers, acting as superiors to these managers, strive to offset positive green firm evaluations by downgrading them.

Keywords: Green bank lending, customer managers, loan officers, values

JEL Codes: G21

It's not hard to make decisions when you know what your values are.

— Roy E. Disney

Does a firm's environmental orientation and performance matter for its access to credit? And do the environmental values of the banker handling the firm's loan application or her superior who ultimately approves it matter for the success of the application?

To answer these questions, we analyze comprehensive credit data from a mid-sized Chinese bank, which is coupled with responses from a value survey involving its personnel. The bank's handling of loan applications is uniquely suited to identify the complex interplay between the loan applicant's environmental orientation and bankers' preferences. In its precisely prescribed setting, firm loan applications are randomly assigned to a front-line banker, called a customer manager, and her recommendation (i.e., strong rejection, rejection, neutral, approval, or strong approval) is randomly assigned to a superior, called a loan officer, for further evaluation and ultimate decision. Neither banker knows the other's identity.

Our analysis of detailed loan application data leads us to four new findings. First, a firm's green orientation matters for the customer manager's recommendation on the loan application. The environmental score given by the manager prominently features in the recommendation passed on to the next level, even when controlling for the firm's assessed truthfulness, ability to repay, willingness to repay, and product safety, and a vast array of hard data on its industry, owner type, and financials, among other things.

Second, we observe that the impact of environmental orientation is even larger when the loan application is handled by customer managers with stronger green preferences. We measure the preferences of customer managers and loan officers towards environmental values using a proprietary survey, which assesses their agreement with four

statements related to respect for the Earth, unity with nature, protecting the environment, and preventing pollution. The uplift in recommendations in these cases is meaningful.

Third, we find that green and brown managers' assessments differ in how they deal with applications in which their opinion can be expected to matter the most. Green managers tend to issue more positive recommendations on loan applications made by green firms regardless of their chance of approval. The behavior of brown managers is more nuanced. They aim to signal green preferences by providing recommendation uplifts when they can safely anticipate that the ultimate loan approval decisions taken by loan officers, who are their superiors, are unaffected by their recommendation. In contrast, when brown managers think their recommendation truly matters for the outcome, they shade their recommendation for green loan applicants.

Finally, our fourth finding is that brown loan officers push back by downgrading green applications arriving at their desk. Although they do not know the identity of the customer manager handling the application, nearly all loan officers in our sample have been exposed to the distribution of bankers' surveyed biospheric values during an in-house business-skills training program. As a result, brown officers may surmise that their preferences deviate from those of the customer managers in general, who tend to have greener preferences.

One challenge in interpreting our second finding (but not plausibly the third or the fourth) is that it could potentially be explained by information rather than bankers' personal values. For example, green bankers may have a better understanding of environmental risk and therefore make more informed judgments about its effects on the creditworthiness of loan applicants. Although we are unable to directly observe bankers' understanding of environmental risk, we can test whether they assign environmental scores as we would expect from well-informed bankers. Prior research indicates that ESG

ratings are predominantly determined by hard data (e.g., Berg, Kölbel and Rigobon, 2022; Christensen, Serafeim and Sikochi, 2022), and safety-related variables belong to the core components of ESG ratings (Berg, Kölbel and Rigobon, 2022). If green managers were indeed better knowledgeable, we would anticipate that hard variables would explain more of their environmental scores, and that their environmental and safety scores would exhibit higher correlation.

However, our analysis suggests that this is not the case. If anything, hard variables explain less of green managers' environmental scores, and their environmental and safety scores are less highly correlated. These results speak against the conjecture that our second finding could be attributed to information rather than values.

Is the interrelationship between biospheric values and the environmental score unique in its association with customer manager overall recommendations and loan outcomes? We show evidence it is. This applies to both components of the interrelationship, as the interaction variable loses much or all of its explanatory power when one of them is varied. For example, substituting the variation in customer managers' biospheric values with variation in their gender, level of education, or age (which exhibit low correlation with their biospheric values) renders the interaction variable unable to explain overall recommendations. Similarly, replacing the environmental score with another soft or hard variable eliminates or significantly weakens the explanatory power of the interaction. Although our study design does not permit us to claim causality for the observed relations, our findings suggest there is something distinct in the relationship between biospheric values and the environmental score—as the hypothesis of the significance of personal values would lead us to expect.

Our paper aims to contribute to four different areas of literature. First, besides other salient firm observables, such as comprehensive external or internal firm credit ratings

(e.g., Cole, 1998; Delis, Fringuellotti, and Ongena, 2020; Hau et al., 2021),¹ firm-bank distance (Agarwal and Hauswald, 2010), bank prospecting incentives (Cole, Kanz, and Klapper, 2015; Agarwal and Ben-David, 2018) or funding (e.g., Brown, Kirschenmann, and Ongena, 2014), and/or monetary conditions (e.g., Jiménez et al., 2012, 2014), our paper documents that the green orientation of firms can be a potent novel factor determining their loan application success. This finding aligns with the increasing attention given to the green orientation of firm projects and their financing by banks (e.g., Accetturo et al., 2022; Auzepy, Bannier, and Martin, 2022; Dursun-de Neef, Ongena, and Tsankova, 2022) and markets (e.g., Krueger, Sautner, and Starks, 2020; Pástor, Stambaugh, and Taylor, 2021, 2022; Pedersen, Fitzgibbons, and Pomorski, 2021).

Second, our paper shows that customer managers' green preferences will matter for their credit recommendations. This novel finding contributes to papers arguing that bankers' gender (e.g., Beck, Behr, and Guettler, 2013; Beck, Behr, and Madestam, 2018), religion (e.g., Baele, Farooq, and Ongena, 2014), emotional state (e.g., Cortés, Duchin, and Sosyura, 2016; Morales Acevedo and Ongena, 2020; Mishra and Ongena, 2022), attention and familiarity (Campbell, Loumiotis, and Wittenberg Moerman, 2019), and/or commonality in ethnicity (Fisman, Paravisini, and Vig, 2017; Frame et al., 2022; Jiang, Lee, and Liu, 2022), and in general loan-specific preferences (Herpfer, 2021) may matter for credit outcomes. This finding also complements prior literature suggesting that

¹ External credit ratings, provided by credit rating agencies, are found to be somewhat informative. Hand, Holthausen, and Leftwich (1992), Ederington and Goh (1998), Kliger and Sarig (2000), Sironi (2003), Cavallo, Powell, and Rigobon (2013), and Correa et al. (2014), for example, show that rating changes matter for explaining stock and bond returns of non-financial borrowers as well as for banks, though their ratings are found to be dispersed (e.g., Morgan, 2002; Hirtle, 2006; Iannotta, 2006; Livingston, Naranjo, and Zhou, 2007; Bannier, Behr, and Guettler, 2010; Iannotta, 2011; Jones, Lee, and Yager, 2012; Flannery, Kwan, and Nimalendran, 2013; and King, Ongena, and Tarashev, 2020). Internal credit ratings, employed by the financial intermediaries themselves, are found to reflect their credit monitoring ability, for example over time and across geographical distance (e.g., Machauer and Weber, 1998; Brunner, Krahen, and Weber, 2000; Carling et al., 2007; Nakamura and Roszbach, 2018; Claessens, Ongena, and Wang, 2022).

personal values can shape the decision making of investors (e.g., Hong and Kacperczyk, 2009; Riedl and Smeets, 2017), corporate executives (e.g., di Giuli and Kostovetsky, 2014; Cronqvist and Yu, 2017), judges (e.g., Harris and Sen, 2019), and politicians (e.g., Washington, 2009).

Third, we uncover evidence suggesting that brown customer managers may fake green concerns, i.e., give better evaluations to green firms only when it does not matter. This finding complements evidence on the “limits to hard information” documented by Berg, Puri, and Rocholl (2019).

Finally, our paper shows that loan officers aim to neutralize positive recommendations from green customer managers. This finding suggests an active discretionary role for superiors in a formal hierarchy in dealing with bankers’ discretion (e.g., Liberti and Mian, 2009; Cerqueiro, Degryse, and Ongena, 2011; Degryse et al., 2011; Puri, Rocholl, and Steffen, 2011; Gropp, Gruendl, and Guettler, 2012; Liberti, 2017). It may complement “solutions” where loan officers for example are rotated to prevent too positive loan evaluations of familiar clientele (e.g., Hertzberg, Liberti, and Paravisini, 2010).

The remaining sections of the paper are organized as follows: Section I introduces the institutional setup; Section II focuses on the main estimates; and finally, Section III offers concluding remarks.

I. Institutional Setup

A. The Bank

The data for this study was obtained from a Chinese commercial bank that operates exclusively within its home province. The bank has over 30 branches, and it has a total asset value of over 100 billion RMB (equivalent to approximately 15 billion USD).

Business loans account roughly for 90% of its loan portfolio. The bank employs around 1,600 individuals (with approximately 1050 working full-time). Of these employees, there are roughly 1,100 frontline employees, with an additional 230 serving as customer managers and another 80 working as loan officers. Each branch provides retail services, with an average of five customer managers per branch.

B. The Granting of Loans

The loan approval process involves three parties: the applicant, the customer manager, and the loan officer. The interactions between them occur over five stages (as illustrated in Figure 1).

Firstly, a client—typically a small-medium business owner—expresses interest in obtaining a business loan. Front-desk personnel usually advise the client to submit an initial application that includes information such as the requested amount, collateral offered, purpose of the loan, and basic financial details about their business. If an initial evaluation suggests that the business meets the bank’s requirements for a loan, staff will provide customers with a formal loan application form and list of required supporting documents.

The bank collects various pieces of information from applicants including demographic data on owners or managers; type of business; primary industry sector; years of operation; desired loan amount; intended use of funds; and two most recent audited financial statements among other things. All loan applications are centralized in the bank’s head office system. The head office assigns a loan application to the nearest branch to the applicant’s (business’s) address, and then randomly assigns the application to a customer manager in that branch, subject to the current workload of the customer manager allowing her to accept more work.

Secondly, once received by a customer manager at one of these branches, each application undergoes assessment to determine creditworthiness and probability of repayment. To verify the authenticity of the submitted documents, customer managers typically visit the applicant's business location and conduct an interview to gain a deeper understanding of the purpose of the loan, potential risks, and prospects for the business. This on-site investigation normally includes inspecting the business premises, checking the firm's inventory and assets, and assessing its overall financial status. Customer managers at this bank undertake on-site investigations for more than 70% of business loan applicants, highlighting the importance of this step in the loan application process. The collected data must be comprehensive, realistic, and specific to ensure the applicant's loan usage, legal compliance, industry and business management, and financial status meet the bank's loan process requirements.

Thirdly, the customer manager prepares a due diligence report based on the findings of the investigation and submits it, along with the applicant's supporting documentation, to headquarters for approval. Typically, a due diligence report includes a summary of the loan applicant's general condition, such as its business, assets, and debt, as well as an analysis of the company's repayment sources. The report also contains the customer manager's opinion of the loan application, including 1) the truthfulness of the customer's loan purpose; 2) the customer's ability to repay the loan; 3) the customer's willingness to repay the loan; and 4) the customer's creditworthiness.

Fourthly, while the customer manager is responsible for preparing the application materials and writing a due diligence report, the final approval decisions are made by loan officers at the bank's headquarters. After the due diligence report and supporting documents are submitted, the loan applications are assigned to loan officers at random by the bank's central dispatcher algorithm. According to the bank, loan officers have no

influence over the assignment process, and the assignment algorithm does not take loan officers' characteristics into consideration. The only exception is the loan officer's current workload, which may be taken into account to avoid overburdening her with too many applications at once.

Finally, the loan officer assigned to the application accesses the applicant's information and reviews the due diligence report to determine whether to approve the application, and to set the appropriate interest rate, loan amount, and loan term. In cases where the loan officer finds gaps or unclear information in the loan application documents or the due diligence report, she may request the customer manager to perform further investigations and obtain additional materials from the loan applicant. The loan application review is conducted under conditions of complete anonymity, where customer managers do not know which loan officers will access their loan applications, and loan officers do not know who submitted the loan applications. Loan officers exercise discretion over the evaluation, approval, and pricing of loans, with approximately 10% of the credit rating weight assigned to their discretionary judgement. The average duration of the loan process is about 10 business days.

C. Assessing the Greenness of Bankers and Loan Applicants

In October 2020, the bank conducted a survey on its full-time employees through its internal communication system, with an impressive response rate of 85%. Most relevant for our purposes, the survey assessed the biospheric values of the bankers, which were measured using a set of questions and scales developed by de Groot and Steg (2008) and Bouman, Steg, and Kiers (2018). The biospheric values were measured based on the customer manager's or loan officer's attitude towards four statements, namely, respecting the Earth, unity with nature, protecting the environment, and preventing pollution. Scores ranged from -1 to 7, where -1 represented strong disagreement and 7 indicated strong

agreement. The average score of the attitudes towards the four statements is used to measure the greenness of the bankers.

To ensure its employees are equipped with the necessary business skills and stay up to date with the latest industry legislation and regulations, the bank conducts training sessions several times a year. These sessions range from several hours to several days, and most of them are mandatory for the employees. Most relevant for our study purposes, between December 2020 and January 2021, a 3-hour business-skills training was organized by the bank that included half an hour dedicated to discussing environmental friendliness in evaluating loan applications. During this session, the instructor presented the distribution of the biospheric values of the bank employees that were collected in the pre-training survey. The training was well-attended, with 91% of the bank's customer managers and 94% of its loan officers present.

In April 2021, the bank made changes to its business loan due diligence report by adding environmental and safety scores. The revised report was applied on an experimental basis for 2,994 potential loan applicants. These applicants were invited to a bank-sponsored training that lasted for 150 minutes between April and July 2021. (More details about these trainings are provided in Section II.C.) Out of the 2,994 firms, 2,147 attended the training and 1,436 applied for a loan between April 2021 and February 2022. For this experiment, the bank revised its randomization algorithm to allocate loans randomly to customer managers and loan officers who responded to the survey. Our sample consists of these loan applications, with Appendix 1 in the Internet Appendix providing an empirical test whose results are consistent with the bank's assertion of random assignment of the customer managers and loan officers to loan applications.

D. How Green Is the Firm?

Table 1 presents descriptive statistics on loan applicants and loan outcomes, with Panel A providing information on the loan applicants themselves. The median (mean) age of a loan applicant is 7 (8) years, with total assets valued at 632,000 (1.4 million) RMB. Additional information about the distribution of the loan applicants' industry and company registration type can be found in Table A1, Panel A and Panel B, respectively. Appendix 2 defines all the variables used in the study.

Table 1 Panel B reports on loan outcomes and soft variables: approximately 58% of all applicants are granted loans for an average maturity of 1.7 years, while the average effective interest rate stands at 5.9% per annum. The mean environment score is reported as being 4.19 out of 5, while safety scores come in slightly lower at an average rating of 3.74 out of 5; overall recommendation scores have a mean value of 3.86 out of 5.

The distribution across these scores can be seen in Panel C where more than half receive top marks for environmental friendliness and overall recommendations; however, only about one-quarter achieve high ratings for safety measures taken by their firms. Table A1 Panel C provides additional details regarding truthfulness and willingness to repay variables whereas Table A1 Panel D focuses solely on ability to repay variable.

As outlined in Appendix 2, the scales used to measure each variable differ from one another but are generally easy to interpret. However, it should be noted that three specific variables require particular attention: truthfulness, environmental score, and safety score. The lowest category for each variable is defined as "Can't judge." To investigate whether bankers interpret "Can't judge" statements as indicating lower scores (rather than being a manifestation of confusion that could be interpreted as either low or high scores), we cross-tabulate the three variables with the overall recommendation score and the loan approval indicator. The results are presented in Table A2 Panels A to F, and show that all

three variables are monotonically associated with the two outcome variables. This suggests that bankers likely interpret “Can’t judge” statements as corresponding to lower scores.

E. How Green Is Your Banker?

Table 2 presents data on the characteristics of 202 customer managers and 64 loan officers. On average, these individuals are between 34 and 35 years old, possess a bachelor’s degree, and have approximately five years of experience working at the bank. More than two-thirds of both groups are men. The mean biospheric values for customer managers and loan officers are 4.91 (with a maximum of 7) and 5.46, respectively. A score of 3 indicates that respondents consider the values to be “important,” while a score of 6 indicates that they view them as “very important.” These values appear to reflect the biospheric values held by all bankers within the institution regardless of their department or position. Table A3 reports that bankers who do not handle loan applications have a qualitatively similar mean biospheric-values score of 5.36, with little variation observed across departments or job positions. This figure is relatively close to the mean score of 4.79 found in prior research for Chinese respondents (Wang et al., 2021). Both customer managers’ and loan officers’ biospheric values display negative skewness measures ranging from -1.3 to -1.4 . In other words, a minority of people in both groups have environmental values that differ significantly from those of the majority (by being low). We will investigate later how the behavior of this minority group differs from that of the rest.

II. Results

A. *Correlations*

Table 3 Panel A presents the correlations between the loan granting decision and firm soft information variables. Traditional soft variables exhibit high correlation with one another as well as with both the overall recommendation and loan granting decision, with correlations ranging from 0.76 to 0.88. On the other hand, environmental and safety risks display much smaller correlations with these two factors, ranging between 0.20 and 0.42.

In Table 3 Panel B, we report on the correlations between the loan granting decision, firm environmental score, overall assessment, and customer managers' and loan officers' biospheric values. We find that there is almost zero correlation (-0.002) between customer managers' biospheric values and their environmental risk assessments while a small correlation (-0.02) exists between their biospheric values and overall recommendations; this implies that environmentally conscious customer managers tend to give lower scores on average. Similarly, the correlation between loan officers' biospheric values and the loan granting decision is slightly negative, at -0.01 .

Table A4 Panel A provides correlations between customer managers' biospheric values and their gender, education, and age. The correlations are negative but small, ranging from -0.02 for female gender to -0.07 for age. In Panel B, the corresponding correlations for loan officers are presented. Due perhaps to a smaller sample size (only 64), the range of correlations is larger, from -0.23 for high school or equivalent level of education indicator to 0.17 for age.

B. Explaining Loan Applications` Approval

B.1. The Role of the Firm`s Green Orientation for its Loan Application Success

To understand which factors contribute to customer managers` evaluations of loan applications, Table 4 presents results from linear probability model regressions of the overall recommendation on several predictors.

Specification 1 includes only hard firm variables as independent variables, with both debt assets ratio and current ratio showing a significant negative association with the overall recommendation. The coefficient for the debt assets ratio is as expected, while that for the current ratio is not.²

Specification 2 adds traditional soft risk measures and safety score as independent variables. As expected, coefficients for traditional soft risk measures (truthfulness and reasonableness, ability to repay, and willingness to repay) are positive and command t -values greater than 8. Safety score also shows high significance with a t -value of 5.44. Soft variables appear to capture some of the explanatory power of hard variables, particularly the debt assets ratio; at the same time, R^2 increases considerably, from 0.43 to 0.79.

Specification 3 includes the environmental score variable as a continuous variable in the regression equation, which commands the highest t -value at 14.83. With the exception of willingness to repay, the coefficients for all other variables decrease slightly from Specification 2. However, the R^2 of the model continues to increase considerably, from 0.790 to 0.848.

² Consistent with our puzzling current ratio evidence, He and Hu (2016) and He et al. (2021) find current ratio to be positively associated with the loan spread.

Specification 4 models environmental score using dummy variables which show monotonic association with overall recommendation scores without any substantial effects on regression coefficients or R^2 values when customer manager fixed effects are added into regression equation. This suggests that customer managers' values or traits have relatively little predictive power on the overall level of the recommendations.

B.2. The Role of the Customer Managers' Green Preferences

Table 5 examines how the interaction between customers managers' biospheric values and the environmental score is associated with their overall recommendation. Panel A replicates the results of Table 4 Specification 3 for each quintile of customer managers' biospheric values. Our focus here is on any differences in coefficients for a given variable between high- and low-biospheric-values customer managers. The p -value of a χ^2 test that compares these coefficients appears in the rightmost column.

Across all specifications, traditional soft risk measures are highly significant positive predictors, but this cannot be said for environmental scores. Specifically, we observe that the environmental score increases monotonically with increasing biospheric-values quintile: it has a coefficient of 0.049 ($t = 1.13$) in the bottom quintile and a coefficient of 0.536 ($t = 12.10$) in the top quintile; this difference is statistically significant at the 0.1% level. These findings suggest that environmental risk means different things to low- versus high-biospheric-values customer managers. Furthermore, the coefficient for the safety score is significantly larger for the top quintile at the 5% level.

Panel B presents standardized coefficients by biospheric-values quintiles to illustrate relative variable importance across all specifications presented in Panel A; assuming correct model specification, standardized coefficient sizes indicate which variables are relatively more important (Darlington, 1968). Although the exact ingredients and weights of the bank's credit models have not been revealed to us, the

inclusion of all ex-ante well-justified variables that the bank collects data on, and the high R^2 of the model, suggest we may not be too far off from the bank's model.

The results of the study indicate that the environmental score is particularly significant in the top-three quintiles, with a standardized coefficient of 0.385 in the top-biospheric-values quintile, which is higher than any other variable. In contrast, it has little importance in the bottom quintile and falls fourth largest (after willingness to repay, truthfulness and reasonableness, and ability to repay) in the second-lowest quintile.

Table 5 Panel C presents results from a pooled regression, as opposed to splitting the sample into quintiles. Specification 1 replicates Table 4 Specification 3 with the following adjustments: the demeaned environmental score is interacted with customer manager's biospheric-values quintile, and indicators for the biospheric-values quintiles are added to the regression.

The interaction variable in Specification 1 of Panel C increases monotonically in biospheric-values quintile, from 0.064 ($t = 1.71$) to 0.528 ($t = 12.26$). This finding is consistent with the results in Panel A and B, indicating that environmental risk matters more for customer managers who hold higher biospheric values. The interaction effects remain qualitatively similar in Specification 2 which adds customer manager fixed effects to the regression. In Specification 1, the main effect for the lowest-biospheric-values quintile is significantly positive ($t = 3.41$).³ This means that environmentally unconscious customer managers tend to be more lenient in their evaluations of firms on average. This finding is consistent with the slightly negative unconditional correlation between biospheric values and overall recommendations reported in Table 3 Panel B.

³ Notice that the customer manager fixed effects subsume these variables in Specification 2.

Table A5 relaxes the assumption of equal distances between consecutive levels of overall recommendations by performing the analysis of Table 5 Panel C using ordered logit. The results are qualitatively similar to those in Table 5 Panel C.

B.3. Customer Managers' Gaming Behavior

The question now arises as to whether customer managers manipulate their recommendations to align with their personal values. To investigate this, we analyze where potential manipulation by customer managers may occur. Table 6 Panel A presents the joint distribution of the decile of customer managers' predicted overall recommendation and an indicator showing whether the bank has granted a loan to the applicant. The predicted values for these recommendations are estimated using Specification 3 from Table 4.

We observe almost no variation in the loan granted indicator in the top-4 deciles, where a loan is almost always granted and the overall recommendation has no variation (see Table A6). Therefore, we focus our subsequent analyses on the other six deciles, which we divide into two groups: the bottom-3 deciles and the middle-3 deciles (i.e., deciles 4–6). We would expect to observe gaming in the middle-3 deciles, where the outcome of the loan is uncertain, but not in the bottom-3 deciles where the application is never accepted. Our tests focus on the difference of the biospheric-values–environmental-score interaction coefficients between these groups and how they differ as a function of the customer managers' biospheric values.

Table 6 Panel B presents the regression results of Table 5 Panel C Specification 1 separately for the bottom-3 and the middle-3 deciles. The interaction coefficients between these groups are significantly different at the 5% level for the two lowest-biospheric-values quintiles, while the differences for the other biospheric-values quintiles are not significant at conventional levels. These findings suggest that customer managers who are

skeptical about environmental concerns push back by allowing environmental scores to affect the overall recommendations when it does not matter for loan outcomes but not when it does. This allows them to claim that environmental factors influence their judgment, even though in reality it has no effect on the loan outcome.

Table A7 presents additional analysis using triple interactions to test whether biospheric values and environmental scores interact differently in the bottom-3-deciles group (where the outcome of the loan is virtually certain) and middle-3-deciles group (where it is uncertain). The results show that the differences in the interaction coefficients between these groups are significant at the 0.1% level for the two lowest-biospheric-values quintiles, while they are not significant at the 5% level in any of the other groups. These additional findings support those presented in Table 6 Panel B indicating that enviro-skeptical customer managers allow environmental scores to have less impact on overall recommendation when it matters for loan outcome than otherwise.

B.4. Loan Officers' Loan Granting Decisions

What explains the loan granting decisions of loan officers? Table 7 evaluates this by presenting results of linear probability model regressions of the loan granted indicator on several predictors. The table follows a similar design to that used in studying overall recommendations made by customer managers (Table 4), with one key difference: we replace the overall recommendation variable with the loan granted indicator, while also including overall recommendation as an additional explanatory variable.

The findings reveal that overall recommendation is overwhelmingly significant in predicting accepted loan applications, with t -values exceeding 15 across all specifications. The bank reports that a predetermined model, which remained constant during the sample period, accounts for approximately 90% of the loan application assessment process, while the remaining 10% is left to the discretion of loan officers. Since we lack specific

information on the bank's model, we must speculate on the variables and estimate the parameters based on the data. Our in-sample R^2 stands at around 84%, which is not far from the 90% included in the bank's model. Incorporating loan officer fixed effects into the model has little impact on regression coefficients or R^2 .

We are particularly interested in the environmental score as an explanatory variable, which we omit in Specification 1, add as a continuous variable in Specification 2, and split into indicators in Specifications 3 and 4. However, none of the environmental score variables are found to be significant in any specification. This suggests that on average, there is no association between environmental scores and loan granting decisions.

There are two possible explanations for this outcome. First, it could be that customer managers' overall recommendations already take into account the environmental score; therefore, loan officers do not need to consider this factor further. However, this explanation seems unlikely given that traditional soft variables, safety score, debt assets ratio, and current ratio remain statistically significant across all specifications with consistent signs (as observed in Table 4). These findings suggest that these variables continue to predict loan acceptance even after accounting for their relationship with overall recommendation. The second potential explanation is that some loan officers may behave in ways that neutralize any association between environmental risk and the dependent variable. We will explore this possibility more closely in our subsequent analysis.

B.5. The Role of the Loan Officers' Green Preferences

Table 8 investigates how the interaction between loan officers' biospheric values and the environmental score is associated with their loan granting decision. Our analysis follows the structure of Table 5, which explores the determinants of overall recommendations as a function of customer managers' biospheric values.

Table 8 Panel A presents the results of regression Specification 2 from Table 7, separately for each biospheric-values quintile of loan officers. The coefficient for the environmental score is monotonically associated with these values. In particular, among top-biospheric-values quintile loan officers, the environmental score takes a highly significant positive coefficient ($t = 4.53$), indicating that environmentally conscious loan officers are more likely to approve loans to companies with high environmental scores. Conversely, among bottom-two biospheric-values quintiles, the environmental score takes a statistically significantly negative coefficient (t -values -2.88 and -1.96 for the bottom and second-to-bottom quintiles, respectively), and the difference between the top and bottom quintile is significant at the 0.1% level.

These findings suggest that for low-biospheric-values loan officers, a higher environmental score is associated with a decrease in the likelihood of loan approval, holding other factors constant. This is consistent with these loan officers expecting the customer manager (who likely has higher biospheric values than the enviro-skeptic loan officer) to have allowed the environmental risk to influence the overall recommendation, which is a significant predictor of loan approval. By allowing the environmental score to have a negative partial correlation with the loan granting decision, the loan officers can potentially offset the effect of what they perceive as too environmentally friendly customer managers.

To summarize, the results suggest that the environmental score appears to have a different meaning for low- and high-biospheric-values loan officers. Some loan officers associate a positive weight to the environmental score, while others assign a negative weight. These opposite forces offset each other on average, which explains the non-significant coefficient for the environmental score in Table 7.

Table 8 Panel B presents standardized coefficients, which reveal that for loan officers belonging to the high-biospheric-values group, the environmental score is the third-most important variable after overall recommendation and willingness to repay. However, for loan officers in the bottom quintile, the environmental score is the fifth-most important variable and has an opposite sign compared with that in the top quintile.

Table 8 Panel C reports results from a pooled regression instead of splitting the sample into quintiles. Specification 1 replicates Table 7 Specification 2 but interacts demeaned environmental scores with loan officer's biospheric-values quintile while adding indicators for biospheric-values quintiles in regression.

We find that the main effects for the biospheric indicators for the three lowest quintiles are positive and significant, at least at the 10% level. This indicates that environmentally unconscious loan officers tend to be more lenient judges of firms than environmentally conscious loan officers. The coefficient for the interaction variable increases monotonically in biospheric-values quintile. The coefficient is highly significantly negative ($t = -3.32$) for the bottom quintile and highly significantly positive for the top quintile ($t = 3.86$). The negative coefficient for the bottom quintile is consistent with the result in Table 8 Panel A, suggesting that enviro-skeptic loan officers take a more critical view of loan applications with higher environmental scores, all other things being equal. These findings remain qualitatively unchanged in Specification 2, which introduces loan officer fixed effects to the model, as well as in Table A8, which estimates the regression using a logit framework.

B.6. Do Green Managers Understand Green Risk Better?

Our analysis up to this point has offered an explanation that suggests green managers and loan officers provide higher ratings and credit recommendations to green firms based on their personal environmental preferences. However, it is also possible that these

bankers possess a greater understanding of environmental risk than their non-green counterparts, leading them to perceive themselves as better qualified to judge the effects of environmental risk on the creditworthiness of loan applicants.

Although we cannot directly observe bankers' understanding of environmental risk, we can test whether they set the environmental scores as expected from well-informed bankers. Existing literature suggests that ESG ratings are primarily determined by hard data (e.g., Berg, Kölbel and Rigobon, 2022; Christensen, Serafeim and Sikochi, 2022), with safety-related variables being core components of such ratings (Berg, Kölbel and Rigobon, 2022). If green managers were better informed, it would be reasonable to expect that hard variables explain more of their environmental scores, and that their environmental and safety scores would be more highly correlated. It is important to note that we have access to all the data collected by the bank on the loan applicants. To the extent that customer managers assess environmental risks similarly to their overall recommendations, they are unlikely to give significant weight to hard data excluded from our model.

Table A9 Panel A examines the contribution of hard variables on the environmental score based on customer managers' biospheric-values quintile. The R^2 s for these models range from 0.155 to 0.234, which is smaller than that reported in Specification 1 in Table 4 for the corresponding overall recommendation regression ($R^2 = 0.430$). This suggests that hard data plays a limited role in evaluating the environmental score. Interestingly, the R^2 s for the two lowest-biospheric-values customer manager quintiles are higher (0.232–0.234) than those for the three highest-biospheric-values customer manager quintiles (0.132–0.155). Following Ohtani (2000), bootstrapping this difference with 5,000 resamples generates a t -value of 1.30 for the R^2 difference, indicating that if anything, hard information would appear to matter more for low- than high-biospheric-values

customer managers. Although only one variable's coefficient (debt-to-assets) differs statistically significantly (at the 10% level) between high-and low-environmental-values quintile managers, a joint test of all of the coefficients in the model (including the industry and firm type fixed effects) indicates they differ significantly at a level of 0.1%.

Table A9 Panel B presents the correlations between environmental and safety scores for each biospheric-values quintile of customer managers. The correlation is highest at 0.34 among customer managers with the lowest biospheric-values quintile, and lowest at only 0.13 among those with the highest biospheric-values quintile; this difference has a p -value of 0.013. These findings suggest that customer managers with lower biospheric values may be more likely to consider safety-related variables when assessing environmental risk.

Overall, our results speak against the conjecture that green managers possess a better understanding of environmental risk and are therefore more adept at assessing its impact on the creditworthiness of loan applicants. If anything, our results suggest the opposite: brown managers may rely more on hard data in their assessments, and they appear to be more likely to recognize the similarities between environmental and safety risks.

B.7. Additional Robustness Checks and Extensions

Thus far, we have demonstrated that bankers' biospheric values interact with the environmental score to generate significant differences in outcomes between those with high and low biospheric values. To ensure that these differences are indeed related to biospheric values rather than other traits, we conduct a placebo test by dividing customer managers into three other sets of personal traits: gender, education, and age. As Table A4 Panel A shows, these traits have low correlations with biospheric values.

Table A10 Panel A reports the results of the placebo test for customer managers' gender. None of the coefficients is significantly different between genders at conventional

levels. Panel B shows that the same is true for education level. In Panel C, two variables differ at the 5% level between age quintiles, but neither of these variables is the environmental score, which is the variable of interest. Overall, the placebo test results are consistent with the idea that the environmental score does not play a special role in the interaction when there is no reason for it to do so.

The biospheric values of customer managers and loan officers are evaluated by averaging four subcomponents, each measuring biospheric values in a slightly different way. The correlations between these subcomponents are shown in Table A11 Panel A, and they are highly correlated, with correlations ranging from 0.52 to 0.63. In Panel B, we reproduce the analysis reported in Table 5 Panel C Specification 1 for each subcomponent, studying how the interaction between customers managers' biospheric-values subcomponents and the environmental score is associated with their overall recommendation. With one exception in Specification 4, a higher biospheric-values quintile is consistently associated with a greater interaction coefficient. These findings support the notion that our results are not sensitive to the way customer managers' and loan officers' biospheric values are assessed.

Finally, Table A12 studies the association of firm characteristics with loan terms conditional on acceptance. None of the soft variables are statistically significantly associated with effective interest rates or loan maturity at conventional levels, while some hard variables are; however, R^2 s remain relatively low. Overall, our results suggest that firm characteristics are strong predictors of loan acceptance but weak predictors of loan terms conditional on acceptance.

C. The Field Experiment

The data for this study was obtained through a field experiment in which 2,994 prospective loan applicants were randomly divided into three equal-sized groups and

exposed to different interventions that aimed to appeal to bankers' personal values. These firms were not already customers of the bank, but were identified by the bank through its own research as potential loan applicants. The bank invited representatives of these firms to a training session, which included presentations by the bank (45 minutes), a local authority (45 minutes), and a finance professor from a local university (45 minutes, the intervention) who conducted the training session designed by us.

The content of these sessions varied depending on the group assigned to each firm. One group ("green" group) received business training focused on environmental and safety issues, while another group ("brown group") received traditional business training. The green group's training was designed to enhance the attractiveness of loan applicants to bankers with an environmental focus, whereas the brown group's training did not specifically cater to any particular group of bankers. The third group ("control group") received Covid-related training designed to serve as a placebo intervention. There were 27 training sessions held between April 2021 and August 2021 at a training center, with an average of 72 participants in each group. During this time period, there were no Covid outbreaks in the province.

Table 9 examines the effectiveness of the treatment. In Specification 1, we regress the environmental score on hard firm variables and indicators for the type of treatment. The coefficients for the indicators for the green and brown treatment are negative, although not significant at conventional levels. Debt to assets is the only hard variable that is significantly associated with the environmental score ($t = -5.40$). These results are also evident in Specification 2, which regresses the safety score on hard firm variables and indicators for the type of treatment.

Specification 3 evaluates whether the green and brown interventions had an impact on customer managers' overall recommendations. This specification is similar to

Specification 3 in Table 4, but includes the green and brown treatment indicators in the regression equation. The coefficient for the green treatment indicator is positive, while the coefficient for the brown treatment indicator is negative. However, neither variable is statistically significant at conventional levels. The other results in Specification 3 are similar to those reported earlier.

Specification 4 reports on the contribution of the green and brown treatment indicators to loan officers' loan granting decisions. We follow the same structure as the corresponding analysis reported in Table 7 Specification 2 but include these variables in the regression equation. Both variables have negative coefficients that are statistically significant at the 10% level (t -values -1.72 and -1.73 , respectively). Thus, if anything, green and brown treated firms have a lower likelihood of being granted a loan than those treated with a placebo treatment, other things being equal.

The unexpected and modestly significant result of Specification 4 could have different possible interpretations. One is that the placebo treatment was unexpectedly more effective than the green and brown treatments. However, this does not explain the similar coefficients for green and brown in Specifications 1 and 2, which have different dependent variables. Another and perhaps more plausible interpretation is that the result is due to chance. Assuming this interpretation holds true, one possibility could be that training efforts were not extensive enough to have any substantial impact on a firm credibility or management's ability as credit applicants; alternatively, it could also indicate that loan officers are not easily influenced by relatively superficial training efforts and can see through them.

III. Conclusion

Our paper documents that bankers exhibit a tendency to favor green firms, particularly when they share the same green values. However, our findings also reveal that a minority of enviro-skeptical bankers may push back against this trend by either downgrading green firms or feigning support for them when their opinions do not hold much weight and working against them when they do.

The strong association between bankers' personal values and their loan evaluations has important implications for bank hiring practices and loan application assessments. If a bank's careful analysis indicates that green firms offer better risk/reward ratios than brown firms on average, it may be in its best interest to include personal skills and preferences in this direction as part of its requirements when recruiting new bankers. This could be particularly relevant for small business loans, where it may not be feasible to have a committee assess potentially differing views on the merits of an application and the contribution of the applicant's green credentials to their business. However, matters may differ with larger loan applications which are typically evaluated by committees consisting of multiple bankers. In such cases, having voices representing more skeptical views towards the environmental merits of an applicant could prove useful in reaching more balanced decisions.

References

- Accetturo, Antonio; Giorgia Barboni; Michele Cascarano; Emilia Garcia-Appendini and Marco Tomasi. 2022. "Credit Supply and Green Investments," Rome IT: Bank of Italy, Mimeo.
- Agarwal, Sumit and Itzhak Ben-David. 2018. "Loan Prospecting and the Loss of Soft Information." *Journal of Financial Economics*, 129, 608-628.
- Agarwal, Sumit and Robert Hauswald. 2010. "Distance and Private Information in Lending." *Review of Financial Studies*, 23(7), 2757-2788.
- Auzepy, Alix; Christina E. Bannier and Fabio Martin. 2022. "Are Sustainability-Linked Loans Designed to Effectively Incentivize Corporate Sustainability? A Framework for Review. Giessen DE: University of Giessen, Mimeo.
- Baele, Lieven; Moazzam Farooq and Steven Ongena. 2014. "Of Religion and Redemption: Evidence from Default on Islamic Loans." *Journal of Banking and Finance*, 44(7), 141-159.
- Bannier, Christina E.; Patrick Behr and Andre Güttler. 2010. "Rating Opaque Borrowers: Why Are Unsolicited Ratings Lower?" *Review of Finance*, 14(2), 263-294.
- Beck, Thorsten; Patrick Behr and Andre Guettler. 2013. "Gender and Banking: Are Women Better Loan Officers?" *Review of Finance*, 17(4), 1279-1321.
- Beck, Thorsten; Patrick Behr and Andreas Madestam. 2018. "Sex and Credit: Do Gender Interactions Matter for Credit Market Outcomes?" *Journal of Banking and Finance*, 87, 380-396.
- Berg, Florian, Julian F. Koelbel, and Roberto Rigobon. 2022. "Aggregate Confusion: The Divergence of ESG Ratings." *Review of Finance* 26(6), 1315-1344.

- Berg, Tobias; Manju Puri and Jörg Rocholl. 2019. "Loan Officer Incentives, Internal Rating Models, and Default Rates." *Review of Finance*, 24(3), 529-578.
- Bouman, Thijs; Linda Steg and Henk A. L. Kiers. 2018. "Measuring Values in Environmental Research: A Test of an Environmental Portrait Value Questionnaire." *Frontiers in Psychology*, 9 (April), 1-24.
- Brown, Martin; Karolin Kirschenmann and Steven Ongena. 2014. "Bank Funding, Securitization, and Loan Terms: Evidence from Foreign Currency Lending." *Journal of Money, Credit and Banking*, 46(7), 1501-1534.
- Brunner, A.; J. P. Krahenen and M. Weber. 2000. "Information Production in Credit Relationships: On the Role of Internal Ratings in Commercial Banking," Frankfurt: Center for Financial Studies, Working Paper, 10.
- Campbell, Dennis; Maria Loumiotis and Regina Wittenberg Moerman. 2019. "Making Sense of Soft Information: Interpretation Bias and Loan Quality." *Journal of Accounting and Economics*, 68(2-3), 101240.
- Carling, Kenneth; Tor Jacobson; Jesper Lindé and Kasper Roszbach. 2007. "Corporate Credit Risk Modeling and the Macroeconomy." *Journal of Banking and Finance*, 31(3), 845-868.
- Cavallo, Eduardo; Andrew Powell and Roberto Rigobon. 2013. "Do Credit Rating Agencies Add Value? Evidence from the Sovereign Rating Business." *International Journal of Finance and Economics*, 18(3), 240-265.
- Cerqueiro, Geraldo; Hans Degryse and Steven Ongena. 2011. "Rules Versus Discretion in Loan Rate Setting." *Journal of Financial Intermediation*, 20(4), 503-529.

- Christensen, Dane M., George Serafeim, and Anywhere Sikochi. 2022. "Why Is Corporate Virtue in the Eye of the Beholder? The Case of ESG Ratings." *Accounting Review* 97(1), 147-175.
- Claessens, Stijn; Steven Ongena and Teng Wang. 2022. "'Out of Sight, out of Mind?'" Banks' Private Information, Distance, and Relationship Length," Basel CH: Bank for International Settlements, Mimeo.
- Cole, Rebel A. 1998. "The Importance of Relationships to the Availability of Credit." *Journal of Banking and Finance*, 22, 959-977.
- Cole, Shawn; Martin Kanz and Leora F. Klapper. 2015. "Incentivizing Calculated Risk-Taking: Evidence from an Experiment with Commercial Bank Loan Officers." *Journal of Finance*, 70(2), 537-575.
- Correa, Ricardo; Kuan-Hui Lee; Horacio Sapriza and Gustavo A. Suarez. 2014. "Sovereign Credit Risk, Banks' Government Support, and Bank Stock Returns around the World." *Journal of Money, Credit and Banking*, 46(1), 93-121.
- Cortés, Kristle; Ran Duchin and Denis Sosyura. 2016. "Clouded Judgment: The Role of Sentiment in Credit Origination." *Journal of Financial Economics*, 121(2), 392-413.
- Cronqvist, Henrik, and Frank Yu. 2017. "Shaped by Their Daughters: Executives, Female Socialization, and Corporate Social Responsibility." *Journal of Financial Economics* 126(3), 543-562.
- Darlington, Richard B. 1968. "Multiple Regression in Psychological Research and Practice." *Psychological Bulletin*, 69, 161-182.

- de Groot, Judith I. M. and Linda Steg. 2008. "Value Orientations to Explain Beliefs Related to Environmental Significant Behavior: How to Measure Egoistic, Altruistic, and Biospheric Value Orientations." *Environment and Behavior*, 40(3), 330-354.
- Degryse, Hans; Jose Maria Liberti; Thomas Mosk and Steven Ongena. 2011. "Is Loan Officer Discretion Advised When Viewing Soft Information?," Tilburg: CentER, Mimeo.
- Delis, Mannthos; Fulvia Fringuellotti and Steven Ongena. 2020. "Credit, Income and Inequality," New York NY: Federal Reserve Bank of New York, Staff Report, 929.
- Di Giuli, Alberta, and Leonard Kostovetsky. 2014. "Are Red or Blue Companies More Likely to Go Green? Politics and Corporate Social Responsibility." *Journal of Financial Economics* 111(1), 158-180.
- Dursun-de Neef, H. Özlem; Steven Ongena and Gergana Tsonkova. 2022. "Green Versus Sustainable Loans: The Impact on Firms' Esg Performance," Zurich CH: Swiss Finance Institute, Research Paper, 22-42.
- Ederington, Louis H. and Jeremy C. Goh. 1998. "Bond Rating Agencies and Stock Analysts: Who Knows What When?" *Journal of Financial and Quantitative Analysis*, 33(4), 569-585.
- Fisman, Raymond; Daniel Paravisini and Vikrant Vig. 2017. "Cultural Proximity and Loan Outcomes." *American Economic Review*, 107(2), 457-492.
- Flannery, Mark J.; Simon H. Kwan and Mahendrarajah Nimalendran. 2013. "The 2007–2009 Financial Crisis and Bank Opaqueness." *Journal of Financial Intermediation*, 22(1), 55-84.

- Frame, W. Scott; Ruidi Huang; Erik J. Mayer and Adi Sunderam. 2022. "The Impact of Minority Representation at Mortgage Lenders," University Park TX: SMU Cox School of Business, Research Paper, 22-08.
- Gropp, Reint; Christian Gruendl and Andre Guettler. 2012. "Does Discretion in Lending Increase Bank Risk? Borrower Self-Selection and Loan Officer Capture Effects," Wiesbaden: European Business School, Mimeo.
- Hand, John, R. M.; Robert W. Holthausen and Richard W. Leftwich. 1992. "The Effect of Bond Rating Agency Announcements on Bond and Stock Prices." *Journal of Finance*, 47(2), 733-752.
- Harris, Allison P., and Maya Sen. 2019. "Bias and Judging." *Annual Review of Political Science* 22, 241-259.
- Hau, Harald; Yi Huang; Hongzhe Shan and Zixia Sheng. 2021. "Fintech Credit and Entrepreneurial Growth," Geneva CH: Swiss Finance Institute, Research Paper, 21-47.
- He, Wen, and Maggie Rong Hu. 2016. "Religion and Bank Loan Terms." *Journal of Banking & Finance* 64, 205-215.
- He, Zhongda; Guannan Qiao; Le Zhang and Wenrui Zhang. 2021. "Regulator Supervisory Power and Bank Loan Contracting." *Journal of Banking & Finance* 126, 106062.
- Herpfer, Christoph. 2021. "The Role of Bankers in the U.S. Syndicated Loan Market." *Journal of Accounting and Economics*, 71(2), 101383.
- Hertzberg, Andrew; Jose Maria Liberti and Daniel Paravisini. 2010. "Information and Incentives inside the Firm: Evidence from Loan Officer Rotation." *Journal of Finance*, 65(3), 795–828.

- Hirtle, Beverly. 2006. "Stock Market Reaction to Financial Statement Certification by Bank Holding Company Ceos." *Journal of Money, Credit and Banking*, 38(5), 1263-1291.
- Hong, Harrison, and Marcin Kacperczyk. 2009. "The Price of Sin: The Effects of Social Norms on Markets." *Journal of Financial Economics* 93(1), 15-36.
- Iannotta, Giuliano. 2011. "Market Discipline in the Banking Industry: Evidence from Spread Dispersion." *European Journal of Finance*, 17(2), 111-131.
- Iannotta, Giuliano. 2006. "Testing for Opaqueness in the European Banking Industry: Evidence from Bond Credit Ratings." *Journal of Financial Services Research*, 30(3), 287-309.
- Jiang, Erica Xuewei; Yeonjoon Lee and Will Shuo Liu. 2022. "The Role of Loan Officers in the Fintech Era: Implications for Disparities in Consumer Credit," Los Angeles CA: USC Marshall School of Business, Research Paper.
- Jiménez, Gabriel; Steven Ongena; José-Luis Peydró and Jesús Saurina. 2012. "Credit Supply and Monetary Policy: Identifying the Bank Balance-Sheet Channel with Loan Applications." *American Economic Review*, 102(5), 2301-2326.
- Jiménez, Gabriel; Steven Ongena; José-Luis Peydró and Jesús Saurina. 2014. "Hazardous Times for Monetary Policy: What Do Twenty-Three Million Bank Loans Say About the Effects of Monetary Policy on Credit Risk-Taking?" *Econometrica*, 82(2), 463-505.
- Jones, Jeffrey S.; Wayne Y. Lee and Timothy J. Yeager. 2012. "Opaque Banks, Price Discovery, and Financial Instability." *Journal of Financial Intermediation*, 21(3), 383-408.

- King, Michael R.; Steven Ongena and Nikola Tarashev. 2020. "Bank Standalone Credit Ratings." *International Journal of Central Banking*, 16(3), 101-144.
- Kliger, Doron and Oded Sarig. 2000. "The Information Value of Bond Ratings." *Journal of Finance*, 55(6), 2879-2902.
- Krueger, Philipp; Zacharias Sautner and Laura T Starks. 2020. "The Importance of Climate Risks for Institutional Investors." *Review of Financial Studies*, 33(3), 1067-1111.
- Liberti, Jose M. and Atif R. Mian. 2009. "Estimating the Effect of Hierarchies on Information Use." *Review of Financial Studies*, 22, 4057-4090.
- Liberti, José María. 2017. "Initiative, Incentives, and Soft Information." *Management Science*, 64(8), 3714-3734.
- Livingston, Miles; Andy Naranjo and Lei Zhou. 2007. "Asset Opacity and Split Bond Ratings." *Financial Management*, 36(3), 49-62.
- Machauer, A. and M. Weber. 1998. "Bank Behavior Based on Internal Credit Ratings of Borrowers." *Journal of Banking and Finance*, 22, 1355-1383.
- Mishra, Mrinal and Steven Ongena. 2022. "The Conflict Induced Costs of Lending," Zurich CH: Swiss Finance Institute, Research Paper, 20-50.
- Morales Acevedo, Paola and Steven Ongena. 2020. "Fear, Anger and Credit. On Bank Robberies and Loan Conditions." *Economic Inquiry*, 50(2), 921-952.
- Morgan, Donald. 2002. "Rating Banks: Risk and Uncertainty in an Opaque Industry." *American Economic Review*, 92, 874-888.
- Nakamura, Leonard I. and Kasper Roszbach. 2018. "Credit Ratings, Private Information, and Bank Monitoring Ability." *Journal of Financial Intermediation*, 36, 58-73.

- Ohtani, Kazuhiro. 2000. "Bootstrapping R^2 and Adjusted R^2 in Regression Analysis." *Economic Modelling* 17(4), 473-483.
- Pástor, Ľuboš, Robert F. Stambaugh, and Lucian A. Taylor. 2021. "Sustainable Investing in Equilibrium." *Journal of Financial Economics* 142(2), 550-571.
- Pástor, Ľuboš, Robert F. Stambaugh and Lucian A. Taylor. 2022. "Dissecting Green Returns." *Journal of Financial Economics* 146(2), 403-424.
- Pedersen, Lasse Heje, Shaun Fitzgibbons, and Lukasz Pomorski. 2021. "Responsible Investing: The ESG-Efficient Frontier." *Journal of Financial Economics* 142(2), 572-597.
- Puri, Manju; Jörg Rocholl and Sascha Steffen. 2011. "Rules Versus Discretion in Bank Lending Decisions," Berlin: ESMT, Mimeo.
- Riedl, Arno, and Paul Smeets. 2017. "Why Do Investors Hold Socially Responsible Mutual Funds?" *Journal of Finance* 72(6), 2505-2550.
- Sironi, Andrea. 2003. "Testing for Market Discipline in the European Banking Industry: Evidence from Subordinated Debt Issues." *Journal of Money, Credit and Banking*, 35(3), 443-472.
- Wang, Xiao, Ellen Van der Werff, Thijs Bouman, Marie K. Harder, and Linda Steg. 2021. "I Am vs. We Are: How Biospheric Values and Environmental Identity of Individuals and Groups Can Influence Pro-Environmental Behaviour." *Frontiers in Psychology* 12, 618956.
- Washington, Ebonya L. 2008. "Female Socialization: How Daughters Affect Their Legislator Fathers' Voting on Women's Issues." *American Economic Review* 98(1), 311-332.

Figure 1. The loan granting process

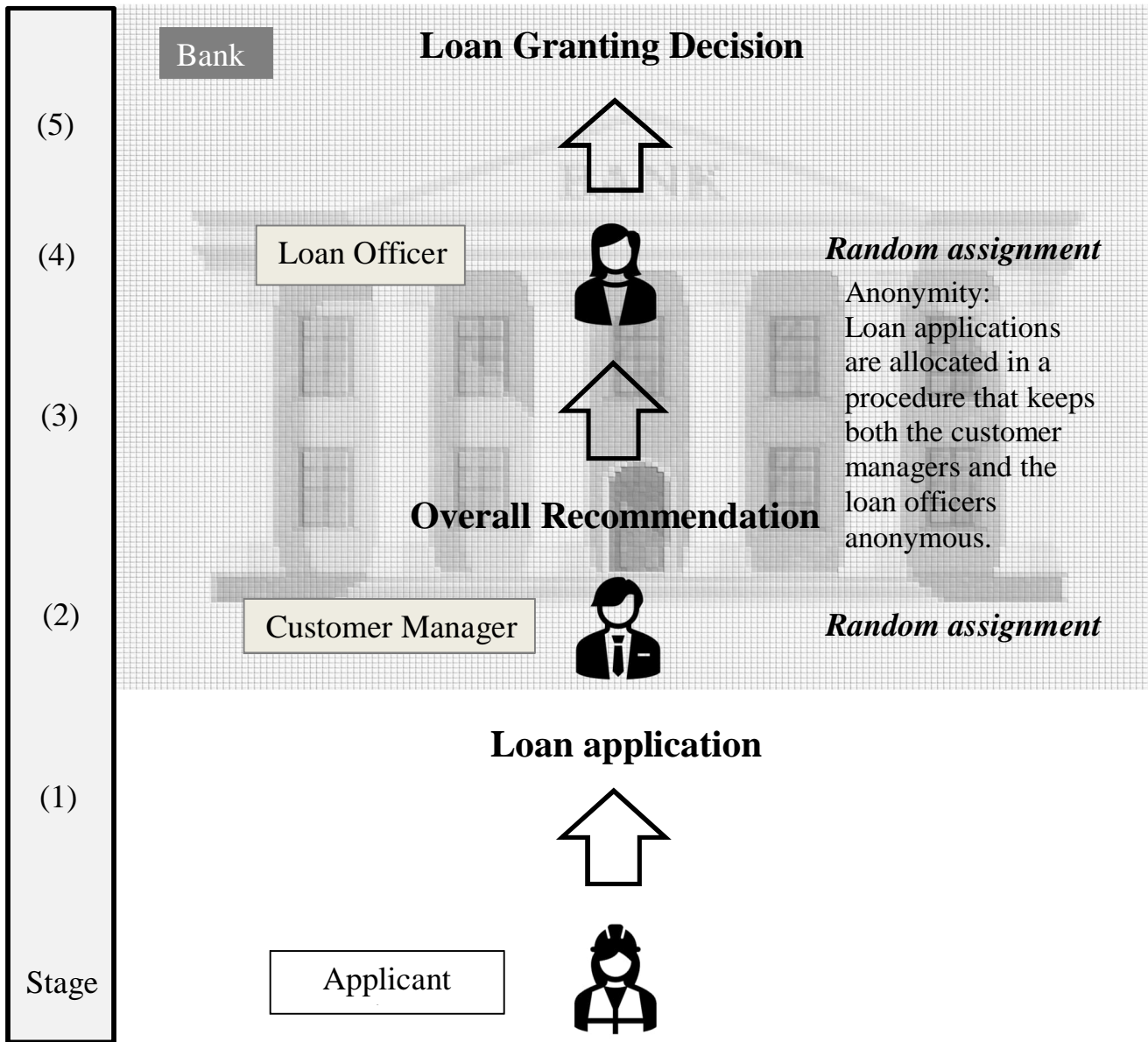


Table 1. Descriptive statistics on firms

This table presents descriptive statistics for 1436 loan applicants and 831 loan recipients. Total assets and Approved loan amount are expressed in thousands of RMB (1 RMB \approx 0.15 USD). Current ratio, Debt assets ratio, Net profit ratio, and Sales growth are winsorized at the 5th and 95th percentiles. Truthfulness refers to truthfulness and reasonableness of the loan application. Truthfulness and Willingness to repay are assessed on a scale 1–3, with higher scores indicating more favorable applications. Ability to repay is assessed on a scale of 1–4, and Environmental score, Safety score, and Overall recommendation are assessed on a scale of 1–5. Annual effective interest rate includes interest rate and fees. Maturity is expressed in years. Soft variables related to loan applicants are assessed by the customer manager, while outcome variables related to loan recipients are determined by the loan officer.

Panel A. Descriptive statistics on hard variables for firms

Variable	Mean	Median	Std. dev.	Min	Max	N
Firm age	7.68	7	2.23	4	15	1,436
Total assets	1,405	632	2,250	200	23,900	1,436
Current ratio	2.44	1.53	2.39	0.51	10.35	1,436
Debt assets ratio	0.53	0.55	0.26	0.08	0.94	1,436
Net profit ratio	0.22	0.18	0.17	0.03	0.67	1,436
Sales growth	0.53	0.21	1.15	-0.48	4.78	1,436

Panel B. Descriptive statistics on soft variables for firms and loan outcomes

Variable	Mean	Median	Std. dev.	Min	Max	N
Truthfulness	2.47	3	0.75	1	3	1,436
Ability to repay	2.53	3	1.02	1	4	1,436
Willingness to repay	2.38	3	0.84	1	3	1,436
Environmental score	4.19	5	0.99	1	5	1,436
Safety score	3.74	4	1.00	1	5	1,436
Overall recomm.	3.86	5	1.38	1	5	1,436
Loan granted	0.58	1	0.49	0	1	1,436
Ann. eff. interest rate	0.059	0.057	0.005	0.049	0.074	831
Maturity	1.73	2	0.44	1	2	831
Appr. loan amount	358	280	234	130	2,100	831

Panel C. Distributions of overall recommendations, environmental scores, and safety risk scores

Score	Number of observations			Percent		
	Overall recommendation	Environmental score	Safety score	Overall recommendation	Environmental score	Safety score
1 (Low)	87	10	1	6.1	0.7	0.1
2	255	112	246	17.8	7.8	17.1
3	196	195	206	13.6	13.6	14.3
4	139	395	652	9.7	27.5	45.4
5 (High)	759	724	331	52.9	50.4	23.1
Total	1,436	1,436	1,436	100.0	100.0	100.0

Table 2. Descriptive statistics on customer managers and loan officers

Table 2 presents descriptive statistics for two groups of bank employees: 202 customer managers and 64 loan officers. Experience indicates the length of time each employee has worked in the bank. Biospheric values are determined by averaging four subcomponents: respect for the Earth, unity with nature, protecting the environment, and preventing pollution. Each subcomponent is rated on a scale ranging from -1 to 7, with -1 indicating “opposed to my principles,” 0 indicating “not important,” and 7 indicating “extremely important.”

Panel A. Customer managers

Variables	Mean	Median	Std. dev.	Skew.	Min	Max	N
Age	34.02	33	5.69	0.65	20	55	202
Experience	5.18	5	2.22	0.12	1	10	202
Biospheric values	4.91	5.25	1.66	-1.30	-1	7	202
Female dummy	0.27		0	1			202
High school or equiv.	0.18		0	0			202
Bachelor's	0.75		0	1			202
Master's or higher	0.07		0	1			202

Panel B. Loan officers

Variables	Mean	Median	Std. dev.	Skew.	Min	Max	N
Age	34.73	35	7.16	0.25	21	53	64
Experience	5.33	5	2.71	-0.04	1	10	64
Biospheric values	5.46	5.75	1.36	-1.40	0	7	64
Female dummy	0.31		0	1			64
High school or equiv.	0.13		0	0			64
Bachelor's	0.83		0	1			64
Master's or higher	0.05		0	1			64

Table 3. Correlations

Panel A. Correlations between loan grant decision and firm soft information variables

Variables	Loan granted	Overall recom.	Truthfulness	Ability to repay	Willing. to repay	Env. score	Safety score
Loan granted	1						
Overall recommendation	0.88	1					
Truthfulness	0.81	0.80	1				
Ability to repay	0.77	0.79	0.63	1			
Willingness to repay	0.85	0.85	0.84	0.76	1		
Environmental score	0.27	0.42	0.18	0.16	0.16	1	
Safety score	0.20	0.24	0.15	0.15	0.15	0.21	1

Panel B. Correlations between loan grant decision and biospheric values

Variables	Loan granted	Overall recom.	Env. score	Safety score	Cust. m. biosph. values	Loan o. biosph. values
Loan granted	1					
Overall recommendation	0.88	1				
Environmental score	0.27	0.42	1			
Safety score	0.20	0.24	0.21	1		
Cust. m. biosph. values	0.00	-0.02	0.00	-0.05	1	
Loan o. biosph. values	-0.01	0.01	0.01	0.01	0.03	1

Table 4. Modeling overall recommendations

Table 4 presents the results of regressing customer managers' overall recommendation on a loan application on the environmental score and other variables. Specification 3 treats environmental score as a continuous variable, while Specifications 4 and 5 represent it using dummies for different environmental score values. *t*-values based on robust standard errors are reported in parentheses below coefficients. Standard errors assume clustering at the customer manager level. ***, **, and * denote statistical significance at the 1%, 5%, and 10% levels, respectively.

Dep. variable Specification	Customer manager's overall recommendation				
	(1)	(2)	(3)	(4)	(5)
Firm age	0.007 (0.55)	-0.008 (-0.93)	-0.009 (-1.26)	-0.009 (-1.31)	-0.010 (-1.30)
ln (Total assets)	0.043 (1.43)	-0.002 (-0.09)	-0.007 (-0.42)	-0.006 (-0.37)	-0.010 (-0.52)
Current ratio	-0.039*** (-2.64)	-0.035*** (-3.89)	-0.029*** (-3.32)	-0.029*** (-3.38)	-0.025** (-2.57)
Debt assets ratio	-3.699*** (-26.59)	-0.473*** (-3.73)	-0.366*** (-3.23)	-0.372*** (-3.35)	-0.314** (-2.57)
Net profit ratio	0.190 (1.20)	0.011 (0.11)	-0.028 (-0.31)	-0.022 (-0.24)	-0.102 (-0.94)
Sales growth	0.022 (0.72)	-0.028 (-1.57)	-0.006 (-0.42)	-0.005 (-0.36)	-0.014 (-0.87)
Truthfulness		0.531*** (8.53)	0.464*** (8.93)	0.459*** (8.90)	0.462*** (8.38)
Ability to repay		0.355*** (8.49)	0.337*** (9.71)	0.334*** (9.71)	0.370*** (9.57)
Will. to repay		0.589*** (8.59)	0.602*** (10.77)	0.617*** (11.07)	0.597*** (9.78)
Safety score		0.113*** (5.44)	0.091*** (4.96)	0.092*** (5.05)	0.088*** (4.25)
Env. score			0.364*** (14.83)		
Env. score = 2				0.983*** (4.58)	1.024*** (4.37)
Env. score = 3				1.060*** (5.06)	1.119*** (4.89)
Env. score = 4				1.612*** (7.87)	1.667*** (7.33)
Env. score = 5				1.902*** (9.12)	1.958*** (8.67)
Industry FE	Yes	Yes	Yes	Yes	Yes
Firm type FE	Yes	Yes	Yes	Yes	Yes
Cust. manager FE	No	No	No	No	Yes
N	1,436	1,436	1,436	1,436	1,436
R ²	0.430	0.790	0.848	0.851	0.876

Table 5. Customer managers' biospheric-values–environmental-score interaction and their overall recommendations

Table 5 investigates the association between the interaction of customer managers' biospheric values and environmental score and their overall recommendations. Panel A presents the results of Specification 3 from Table 4, which is separated into each quintile of customer managers' biospheric values. The rightmost column reports the p -value of a χ^2 test that tests whether the coefficients for a given variable are equal between the top- and bottom-biospheric-values quintiles. Panel B reports the standardized coefficients. Panel C reports the results of a pooled regression that interacts biospheric-values quintile dummies with demeaned environmental risk. t -values based on robust standard errors are reported in parentheses below coefficients. Standard errors assume clustering at the customer manager level. ***, **, and * denote statistical significance at the 1%, 5%, and 10% levels, respectively.

Panel A. Customer managers' overall recommendations by biospheric-values quintile

Dep. variable	Customer manager's overall recommendation					$p(Q1 = Q5)$
	(1) Low	(2)	(3)	(4)	(5) High	
Firm age	0.012 (0.85)	-0.008 (-0.56)	-0.011 (-1.00)	-0.000 (-0.02)	-0.023 (-1.44)	0.083*
ln (Total assets)	-0.063 (-1.41)	-0.021 (-0.55)	-0.014 (-0.42)	0.013 (0.29)	-0.008 (-0.33)	0.261
Current ratio	-0.041** (-2.32)	-0.024 (-1.50)	-0.021 (-1.19)	-0.024 (-1.13)	-0.031 (-1.63)	0.680
Debt assets ratio	-0.266 (-0.94)	-0.171 (-0.68)	-0.327 (-1.41)	-0.360 (-1.31)	-0.496** (-2.34)	0.489
Net profit ratio	0.075 (0.30)	0.235 (1.14)	-0.286 (-1.67)	-0.369* (-1.72)	-0.007 (-0.03)	0.787
Sales growth	0.003 (0.12)	-0.033 (-0.80)	0.020 (0.68)	-0.046* (-1.74)	0.025 (1.22)	0.441
Truthfulness	0.391*** (2.98)	0.601*** (5.14)	0.440*** (5.26)	0.314** (2.36)	0.526*** (5.98)	0.362
Ability to repay	0.459*** (5.04)	0.386*** (5.15)	0.322*** (5.36)	0.365*** (4.14)	0.283*** (4.44)	0.092*
Will. to repay	0.679*** (4.12)	0.519*** (3.75)	0.651*** (6.38)	0.641*** (4.62)	0.521*** (5.87)	0.367
Safety score	-0.005 (-0.11)	0.110** (2.48)	0.114*** (3.09)	0.075 (1.57)	0.113*** (3.13)	0.027**
Env. score	0.049 (1.13)	0.230*** (4.75)	0.405*** (9.61)	0.459*** (10.53)	0.536*** (12.10)	0.000***
Industry FE	Yes	Yes	Yes	Yes	Yes	
Firm type FE	Yes	Yes	Yes	Yes	Yes	
N	214	275	353	259	335	
R ²	0.903	0.846	0.860	0.885	0.871	

Panel B. Standardized coefficients by biospheric-values quintile

Dependent variable Biosph.-values q.	Customer manager's overall recommendation				
	(1) Low	(2)	(3)	(4)	(5) High
Firm age	0.020	-0.013	-0.019	-0.000	-0.034
ln (Total assets)	-0.044	-0.015	-0.011	0.009	-0.006
Current ratio	-0.081	-0.034	-0.041	-0.038	-0.055
Debt assets ratio	-0.053	-0.030	-0.065	-0.066	-0.092
Net profit ratio	0.010	0.029	-0.036	-0.046	-0.001
Sales growth	0.002	-0.027	0.017	-0.039	0.020
Truthfulness	0.209	0.314	0.242	0.174	0.287
Ability to repay	0.369	0.281	0.235	0.269	0.204
Will. to repay	0.429	0.317	0.406	0.393	0.305
Safety score	-0.003	0.080	0.085	0.055	0.081
Env. score	0.036	0.156	0.302	0.328	0.385

Panel C. Pooled regression interacting biospheric-values quintile dummies with environmental score

Dependent variable Specification	Overall recommendation	
	(1)	(2)
Biospheric-values quintile 1	0.147*** (3.41)	
Biospheric-values quintile 2	0.020 (0.41)	
Biospheric-values quintile 3	0.071* (1.73)	
Biospheric-values quintile 4	0.050 (1.12)	
Biosph.-values q. 1 x Env. score	0.064* (1.71)	0.066* (1.68)
Biosph.-values q. 2 x Env. score	0.234*** (5.21)	0.247*** (4.66)
Biosph.-values q. 3 x Env. score	0.399*** (10.24)	0.393*** (9.04)
Biosph.-values q. 4 x Env. score	0.455*** (10.99)	0.456*** (10.30)
Biosph.-values q. 5 x Env. score	0.528*** (12.26)	0.541*** (10.25)
Firm controls	Yes	Yes
Other soft variables	Yes	Yes
Customer manager FE	No	Yes
N	1,436	1,436
R ²	0.862	0.884

Table 6. Customer managers' gaming behavior

Table 6 investigates the extent to which customer managers manipulate their overall recommendation as a function of environmental score when it matters. Panel A displays the joint distribution of customer managers' predicted overall recommendation decile and loan granted dummy. The predicted values for these recommendations are estimated using Specification 3 from Table 4. Panel B runs Table 5 Panel C regressions separately for the bottom-3 and the middle-3 deciles. *t*-values based on robust standard errors are reported in parentheses below coefficients. Standard errors assume clustering at the customer manager level. ***, **, and * denote statistical significance at the 1%, 5%, and 10% levels, respectively.

Panel A. Joint distribution of customer managers' predicted overall recommendation decile and loan granted dummy

Predicted decile	Loan granted dummy		Total
	0	1	
1 (Low)	143	0	143
2	144	0	144
3	143	0	143
4	132	12	144
5	31	113	144
6	11	131	142
7	0	145	145
8	1	142	143
9	0	144	144
10 (High)	0	144	144
Total	605	831	1,436

Panel B. Customer managers' biospheric-values–environmental-score interaction as a function of predicted overall recommendation value group

Dependent variable	Overall recommendation		<i>p</i> (Bottom-3 = Middle-3)
	Bottom-3 deciles	Middle-3 deciles	
Subsample			
Biospheric-values quintile 1	0.278*** (2.89)	0.180* (1.78)	
Biospheric-values quintile 2	0.081 (0.91)	-0.002 (-0.02)	
Biospheric-values quintile 3	0.024 (0.27)	0.123 (1.52)	
Biospheric-values quintile 4	0.035 (0.38)	0.097 (1.06)	
Biosph.-values q. 1 x Env. score	0.197** (2.45)	-0.106 (-1.35)	0.020**
Biosph.-values q. 2 x Env. score	0.339*** (4.96)	0.087 (1.11)	0.032**
Biosph.-values q. 3 x Env. score	0.463*** (7.58)	0.560*** (9.07)	0.256
Biosph.-values q. 4 x Env. score	0.577*** (9.52)	0.708*** (9.27)	0.177
Biosph.-values q. 5 x Env. score	0.667*** (10.07)	0.680*** (11.05)	0.868
Firm controls	Yes	Yes	
Other soft variabes	Yes	Yes	
N	430	430	
R ²	0.463	0.674	

Table 7. Modeling loan granting decisions

Table 7 presents the results of a linear probability model of the loan granted dummy on environmental score and other covariates. Specification 2 treats environmental score as a continuous variable, while Specifications 3 and 4 represent it using dummies for different environmental score values. *t*-values based on robust standard errors are reported in parentheses below coefficients. Standard errors assume clustering at the loan officer level. ***, **, and * denote statistical significance at the 1%, 5%, and 10% levels, respectively.

Dep. variable Specification	Loan granted dummy			
	(1)	(2)	(3)	(4)
Firm age	-0.000 (-0.08)	-0.000 (-0.09)	0.000 (0.07)	0.000 (0.13)
ln (Total assets)	0.001 (0.10)	0.001 (0.09)	0.000 (0.02)	-0.002 (-0.26)
Current ratio	-0.008** (-2.58)	-0.008** (-2.62)	-0.007** (-2.50)	-0.007** (-2.32)
Debt assets ratio	-0.275*** (-6.93)	-0.276*** (-6.97)	-0.268*** (-6.69)	-0.276*** (-6.89)
Net profit ratio	-0.051 (-1.32)	-0.052 (-1.33)	-0.053 (-1.36)	-0.041 (-1.07)
Sales growth	0.012** (2.51)	0.012** (2.58)	0.013*** (2.66)	0.015*** (2.85)
Overall recomm.	0.147*** (16.71)	0.142*** (15.58)	0.149*** (17.11)	0.146*** (16.07)
Truthfulness	0.121*** (6.64)	0.122*** (6.88)	0.119*** (6.73)	0.119*** (6.13)
Ability to repay	0.058*** (5.40)	0.059*** (5.55)	0.057*** (5.40)	0.057*** (5.05)
Will. to repay	0.107*** (5.94)	0.110*** (5.79)	0.104*** (5.41)	0.107*** (5.34)
Safety score	0.017** (2.57)	0.017** (2.61)	0.016** (2.38)	0.016** (2.20)
Env. score		0.006 (0.63)		
Env. score = 2			-0.026 (-0.40)	-0.042 (-0.60)
Env. score = 3			0.084 (1.23)	0.070 (0.97)
Env. score = 4			0.006 (0.09)	-0.006 (-0.09)
Env. score = 5			0.036 (0.52)	0.024 (0.33)
Industry FE	Yes	Yes	Yes	Yes
Firm type FE	Yes	Yes	Yes	Yes
Loan officer FE	No	No	No	Yes
N	1,436	1,436	1,436	1,436
R ²	0.841	0.841	0.844	0.850

Table 8. Loan officers' biospheric-values–environmental-score interaction and their loan granting decision

Table 8 examines how the interaction between loan officers' biospheric values and the environmental score is related to the loan granting decision. Panel A reports the results of Specification 2 from Table separately for each biospheric-values quintile for loan officers. The rightmost column reports the p -value of a χ^2 test, testing whether the coefficients for a given variable are equal between the top- and bottom-biospheric-values quintiles. Panel B presents standardized coefficients. Panel C reports the results of a pooled regression that interacts biospheric-values quintile dummies with demeaned environmental score. t -values based on robust standard errors are reported in parentheses below coefficients. Standard errors assume clustering at the loan officer level. ***, **, and * denote statistical significance at the 1%, 5%, and 10% levels, respectively.

Panel A. Loan officers' loan granting regression, by biospheric-values quintile

Dep. variable Biosph.-values quintile	Loan granted dummy					<i>p</i> (Q1=Q5)
	(1) Low	(2)	(3)	(4)	(5) High	
Firm age	-0.001 (-0.31)	-0.003 (-0.79)	0.003 (0.52)	-0.007 (-1.19)	0.007 (1.04)	0.273
ln (Total assets)	-0.021 (-1.36)	0.014 (1.04)	-0.017 (-1.14)	0.013 (1.04)	0.008 (0.51)	0.153
Current ratio	-0.013* (-2.05)	-0.007 (-1.52)	-0.018** (-2.54)	0.002 (0.25)	-0.011* (-1.78)	0.835
Debt assets ratio	-0.399*** (-3.45)	-0.315*** (-3.29)	-0.296*** (-3.77)	-0.132 (-1.05)	-0.311*** (-7.11)	0.447
Net profit ratio	-0.038 (-0.40)	-0.073 (-1.22)	-0.039 (-0.95)	0.061 (0.76)	-0.123 (-1.28)	0.501
Sales growth	0.013 (1.48)	0.015 (0.96)	0.006 (0.40)	0.016* (1.90)	0.007 (0.66)	0.689
Overall recomm.	0.149*** (5.41)	0.177*** (7.22)	0.113*** (4.16)	0.153*** (10.86)	0.119*** (6.95)	0.314
Truthfulness	0.149*** (3.98)	0.089 (1.56)	0.122*** (4.27)	0.118** (2.69)	0.094*** (3.45)	0.202
Ability to repay	0.074** (2.30)	0.033 (1.06)	0.114** (3.00)	0.041** (2.27)	0.059*** (3.42)	0.654
Will. to repay	0.044 (1.09)	0.124* (2.16)	0.108** (2.50)	0.131** (2.81)	0.146*** (4.14)	0.044**
Safety score	0.006 (0.48)	0.004 (0.26)	0.016** (2.26)	0.039* (2.08)	-0.000 (-0.05)	0.656
Env. score	-0.041** (-2.88)	-0.032* (-1.96)	-0.008 (-0.55)	0.004 (0.38)	0.083*** (4.53)	0.000***
Industry FE	Yes	Yes	Yes	Yes	Yes	
Firm type FE	Yes	Yes	Yes	Yes	Yes	
N	269	218	254	341	354	
R ²	0.858	0.890	0.901	0.840	0.822	

Panel B. Standardized coefficients by biospheric-values quintile

Dependent variable Biosph.-values q.	Loan granted dummy				
	(1) Low	(2)	(3)	(4)	(5) High
Firm age	-0.006	-0.013	0.012	-0.032	0.031
ln (Total assets)	-0.042	0.028	-0.034	0.025	0.014
Current ratio	-0.060	-0.031	-0.090	0.008	-0.056
Debt assets ratio	-0.205	-0.162	-0.161	-0.071	-0.161
Net profit ratio	-0.013	-0.026	-0.013	0.021	-0.043
Sales growth	0.027	0.038	0.013	0.037	0.017
Overall recomm.	0.429	0.497	0.317	0.427	0.323
Truthfulness	0.221	0.134	0.189	0.177	0.142
Ability to repay	0.150	0.068	0.239	0.085	0.120
Will. to repay	0.075	0.209	0.186	0.226	0.245
Safety score	0.013	0.009	0.033	0.080	-0.001
Env. score	-0.082	-0.065	-0.016	0.008	0.166

Panel C: Modelling the decisions of loan officers with biospheric-values interactions

Dependent variable Specification	Loan granted dummy	
	(1)	(2)
Biospheric-values quintile 1	0.024* (1.78)	
Biospheric-values quintile 2	0.037*** (2.75)	
Biospheric-values quintile 3	0.024* (1.81)	
Biospheric-values quintile 4	0.017 (1.13)	
Biosph.-values q. 1 x Env. score	-0.035*** (-3.32)	-0.034*** (-3.20)
Biosph.-values q. 2 x Env. score	-0.018 (-1.32)	-0.016 (-1.11)
Biosph.-values q. 3 x Env. score	-0.018* (-1.74)	-0.018 (-1.62)
Biosph.-values q. 4 x Env. score	0.009 (0.93)	0.011 (1.08)
Biosph.-values q. 5 x Env. score	0.065*** (3.86)	0.063*** (3.60)
Firm controls	Yes	Yes
Other soft variables	Yes	Yes
Loan officer FE	No	Yes
N	1,436	1,436
R ²	0.847	0.852

Table 9. Treatment effects on environmental score, safety score, overall recommendation, and loan granting decision

Table 9 presents the results of regressions analyzing the effect of treatment on environmental score, safety score, overall recommendation, and loan granting decision. *t*-values based on robust standard errors are reported in parentheses below coefficients. Standard errors assume clustering at the customer manager level (environmental score, safety score, and overall recommendation) or loan officer level (loan granting decision). ***, **, and * denote statistical significance at the 1%, 5%, and 10% levels, respectively.

Dep. variable	Env. score	Safety score	Overall recomm.	Loan granted
Firm age	0.005 (0.42)	-0.000 (-0.01)	-0.009 (-1.22)	-0.000 (-0.11)
ln (Total assets)	0.016 (0.61)	0.023 (0.93)	-0.008 (-0.48)	0.001 (0.11)
Current ratio	-0.019 (-1.49)	-0.020 (-1.61)	-0.028*** (-3.32)	-0.008** (-2.65)
Debt assets ratio	-0.700*** (-5.40)	-0.665*** (-5.27)	-0.364*** (-3.21)	-0.276*** (-6.97)
Net profit ratio	0.160 (1.11)	0.109 (0.89)	-0.026 (-0.28)	-0.051 (-1.33)
Sales growth	-0.056** (-2.10)	-0.040* (-1.84)	-0.007 (-0.46)	0.012** (2.53)
Overall recomm.				0.142*** (15.61)
Truthfulness			0.465*** (8.94)	0.121*** (6.80)
Ability to repay			0.337*** (9.74)	0.060*** (5.49)
Will. to repay			0.602*** (10.77)	0.110*** (5.76)
Safety score			0.091*** (4.94)	0.016** (2.58)
Env. score			0.364*** (14.83)	0.006 (0.62)
Green	-0.046 (-0.74)	-0.068 (-1.27)	0.021 (0.61)	-0.020* (-1.72)
Brown	-0.056 (-0.89)	-0.057 (-1.01)	-0.020 (-0.55)	-0.018* (-1.73)
Industry FE	Yes	Yes	Yes	Yes
Firm type FE	Yes	Yes	Yes	Yes
N	1,436	1,436	1,436	1,436
R ²	0.129	0.314	0.848	0.842

Internet appendix

Appendix 1. Testing randomization

The bank claims to employ a sophisticated system for randomly assigning customer managers and loan officers to firms. The analysis in this appendix uses data from firm characteristics and the identity of the bankers handling these firms' loan applications to test whether we can reject the null hypothesis of randomized matching. The analysis is implemented using the `randcmd.ado` command in Stata, developed by Young (2020).

The null hypothesis in the randomization test posits that the sample outcome is unrelated to treatment assignment. Treatment assignments are presumed to be random, making all assignments equally likely. In our context, this means testing whether the identity of the customer manager or loan officer (the treatment) is related to the characteristics of the firm assigned to them (the outcome). The distribution of test statistics is approximated by iterating over different permutations of the treatment labels.

Our randomization test for the 202 customer managers examines five firm outcomes: age, total assets, and current, debt assets, and net profit ratios. The randomization test for the 64 loan officers additionally considers overall recommendation, truthfulness, ability to repay, willingness to repay, environmental score, and safety score. Overall, the randomization tests are highly multi-dimensional. We perform the tests using the Westfall (1993) multiple testing method, recommended by Young (2019) for test setups with high dimensionality.

Our tests do not reject the null hypothesis of random assignment of customer managers and loan officers to firms at conventional levels. For customer managers, the Westfall-Young test generates a p -value of 0.29 for the randomization-c test and a p -value of 0.60 for the randomization-t test. For loan officers, the corresponding p -values are 0.41

and 0.15, respectively. Overall, these results lend further support to the bank's assertion that it allocates bankers to loan applicants using random assignment.

References for Appendix 1

Westfall, Peter H. and S. Stanley Young. 1993. *Resampling-Based Multiple Testing: Examples and Methods for P-Value Adjustment*. New York NY: John Wiley & Sons.

Young, Alwyn. 2019. "Channeling Fisher: Randomization Tests and the Statistical Insignificance of Seemingly Significant Experimental Results." *Quarterly Journal of Economics*, 134(2), 557-98.

Young, Alwyn. 2020. *Randcmd: Stata Module to Compute Randomization Inference P-Values*. Boston MA: Boston College Department of Economics, Statistical Software Components, S458774.

Appendix 2. Definition of variables

Variables	Definition
<i>Hard firm information</i>	
Industry	Indicator for the ten industries represented in the sample, listed in Table A1 Panel A.
Company registration type	Indicator for one of the seven company registration types represented in the sample, listed in Table A1 Panel B.
Firm age	Age of the loan applicant firm.
Total assets	Total assets of the loan applicant in the most recent financial statement in RMB.
Current ratio	Current ratio of the loan applicant in the most recent financial statement.
Debt assets ratio	Debt asset ratio of the loan applicant in the most recent financial statement.
Net profit ratio	Net profit ratio of the loan applicant in the most recent financial statement.
Sales growth	Sales growth of the loan applicant calculated from the two most recent financial statements.
<i>Soft firm information</i>	
Truthfulness	Categorical variable representing a customer manager's subjective assessment of the truthfulness and reasonableness of the loan application's stated purpose. 3=True and reasonable; 2=Not true and not reasonable; 1=Can't judge.
Ability to repay	Categorical variable representing a customer manager's subjective assessment of the loan applicant's loan repayment ability. 4=Very strong; 3=Normal; 2=Weak; 1=No.
Willingness to repay	Categorical variable representing a customer manager's subjective assessment of the loan applicant's loan repayment willingness. 3=Strong; 2=Normal; 1=Weak.
Safety score	Categorical variable representing a customer manager's subjective assessment of the loan applicant's safety risk. 5=Negligible risk; 4=Low risk; 3=Moderate risk; 2=High risk; 1=Can't judge.
Environmental score	Categorical variable representing a customer manager's subjective assessment of the loan applicant's environmental risk. 5=Negligible risk; 4=Low risk; 3=Moderate risk; 2=High risk; 1=Can't judge.

Overall recommendation	Categorical variable representing the likelihood that a customer manager would suggest that the loan application be approved. 5=Strongly recommend; 4=Recommend; 3=Neither recommend nor not recommend; 2=Not recommend; 1=Strongly not recommend.
<i>Outcome variables</i>	
Loan granted	Dummy variable indicating the loan application has been granted.
Annual effective interest rate	Annual effective interest rate of the granted loan.
Maturity	Loan maturity in years.
Approved loan amount	Approved loan amount in RMB.

Variables	Definition
<i>Customer managers and loan officers</i>	
Age	Age of the customer manager or loan officer at the time of the bankers' survey.
Experience	Number of years the customer manager or loan officer has worked for the bank at the time of the bankers' survey.
Biospheric values	Measured by the average score for the attitude of the customer manager or loan officer towards four statements: 1) Respecting the Earth; 2) Unity with nature; 3) Protecting the environment; and 4) Preventing pollution. Scores range from -1 to 7, with -1 representing strong disagreement and 7 indicating strong agreement.
Female dummy	Dummy variable indicating that the customer manager or loan officer is female.
High school or equivalent	Dummy variable indicating that the customer manager's or loan officer's highest education is a high school degree.
Bachelor's	Dummy variable indicating that the customer manager's or loan officer's highest education is a bachelor's degree.
Master's or higher	Dummy variable indicating that the customer manager's or loan officer's highest education is a master's degree or higher.
<i>Field experiment variables</i>	
Green	Dummy variable equal to one if the loan applicant participated in a treatment group receiving green training, and zero otherwise.
Brown	Dummy variable equal to one if the loan applicant participated in a treatment group receiving traditional business training, and zero otherwise.

Table A1. Additional descriptive statistics on firms

Panel A. Distribution of sample by industry

Industry	Frequency	Percent
Accommodation and catering	58	4.0
Agriculture	44	3.1
Construction	385	26.8
IT	21	1.5
Leasing and business serv.	47	3.3
Manufacturing	299	20.8
Other	38	2.7
Residents and repair serv.	24	1.7
Transport, warehouse, postal	52	3.6
Wholesale and retail	468	32.6
Total	1,436	100

Panel B. Distribution of sample by company registration type

Company registration type	Frequency	Percent
Other organizations	21	1.5
Private LLC	4	0.3
Private co., LTD	22	1.5
Private owned enterprise	170	11.8
Private partnership	29	2.0
Sole proprietorship	1,115	77.7
State-owned	75	5.2
Total	1,436	100

Panel C. Distribution of truthfulness and reasonableness scores

Truthful, reasonable	Frequency	Percent
1	220	15.3
2	319	22.2
3	897	62.5
Total	1,436	100.0

Panel D. Distribution of repayment ability scores

Ability to repay	Frequency	Percent
1	327	22.8
2	256	17.8
3	615	42.8
4	238	16.6
Total	1,436	100.0

Panel E. Distribution of repayment willingness scores

Willingness to repay	Frequency	Percent
1	339	23.6
2	217	15.1
3	880	61.3
Total	1,436	100.0

Table A2. Joint distribution of environmental score, safety score, and truthfulness score with overall recommendation and loan acceptance

Panel A. Joint distribution of environmental score and overall recommendation

Env. score	Overall recomm.					Total
	1	2	3	4	5	
1	7	2	0	1	0	10
2	30	15	7	38	22	112
3	44	37	7	54	53	195
4	6	134	100	15	140	395
5	0	67	82	31	544	724
Total	87	255	196	139	759	1,436

Panel B. Joint distribution of safety score and overall recommendation

Safety score	Overall recomm.					Total
	1	2	3	4	5	
1	1	0	0	0	0	1
2	20	69	28	36	93	246
3	16	56	23	22	89	206
4	42	116	108	59	327	652
5	8	14	37	22	250	331
Total	87	255	196	139	759	1,436

Panel C. Joint distribution of truthfulness and reasonableness score and overall recommendation

Truthfulness	Overall recomm.					Total
	1	2	3	4	5	
1	35	130	44	10	1	220
2	46	110	122	29	12	319
3	6	15	30	100	746	897
Total	87	255	196	139	759	1,436

Panel D. Joint distribution of environmental score and loan acceptance

Env. score	Outcome		Total
	0	1	
1	10	0	10
2	68	44	112
3	96	99	195
4	244	151	395
5	187	537	724
Total	605	831	1,436

Panel E. Joint distribution of safety score and loan acceptance

Safety score	Outcome		Total
	0	1	
1	1	0	1
2	130	116	246
3	104	102	206
4	298	354	652
5	72	259	331
Total	605	831	1,436

Panel F. Joint distribution of truthfulness and reasonableness score and loan acceptance

Truthfulness	Outcome		Total
	0	1	
1	219	1	220
2	308	11	319
3	78	819	897
Total	605	831	1,436

Table A3. Descriptive statistics on other bankers' biospheric values

Table A3 provides descriptive statistics on the biospheric values held by 618 bankers who are not customer managers or loan officers, collectively referred to as “All other bankers,” along with their subgroups. Biospheric values are computed as the average of the four biospheric-values subcomponents, namely respect for the Earth, unity with nature, protecting the environment, and preventing pollution. The values of these subcomponents range from –1 to 7, with –1 indicating “opposed to my principles,” 0 indicating “not important,” and 7 indicating “extremely important.”

Group	Mean	Median	Std. dev.	Skewness	Min	Max
All other bankers	5.36	5.75	1.38	-1.13	-0.25	7
Subgroups						
Accounting Department	5.30	5.50	1.44	-1.13	0.75	7
Audit Department	5.32	5.75	1.57	-1.90	-0.25	7
Bank Asset Preservation Dept.	5.60	5.75	0.72	-0.03	4.75	6.5
Bank Product Management Dept.	4.90	5.63	1.88	-1.14	0.25	7
Bank Teller	5.37	5.75	1.42	-1.16	-0.25	7
Credit Card Center	5.33	5.75	1.40	-0.84	1.50	7
General Office	5.03	5.25	1.36	-0.46	1.75	7
Human Resources Department	5.46	5.75	1.47	-1.36	1.00	7
Interbank Department	5.72	6.00	1.08	-0.71	3.50	7
Legal Compliance Department	5.34	5.50	1.37	-0.80	2.00	7
Private Finance Department	5.58	5.75	1.08	-0.81	2.50	7
Purchasing Department	5.38	5.75	1.33	-0.94	1.75	7
Technology Operations Dept.	5.55	5.88	1.17	-0.78	2.50	7

Table A4. Correlations between biospheric values, gender, education, and age

Panel A. Matrix of correlations for customer managers

Variables	Biosph. values	Female	High school or eq.	Age
Biosph. values	1			
Female	-0.02	1		
High school or eq.	-0.03	0.15	1	
Age	-0.07	-0.14	-0.11	1

Panel B. Matrix of correlations for loan officers

Variables	Biosph. values	Female	High school or eq.	Age
Biosph. values	1			
Female	-0.05	1		
High school or eq.	-0.23	0.05	1	
Age	0.17	-0.12	-0.35	1

Table A5. Modeling the decisions of customer managers using biospheric-values interactions: ordered logit specification

Table A5 presents the results of the ordered logit model used to analyze the decisions of customer managers, as specified in Table 5 Panel C. *t*-values based on robust standard errors are reported in parentheses below coefficients. Standard errors assume clustering at the customer manager level. ***, **, and * denote statistical significance at the 1%, 5%, and 10% levels, respectively.

Dependent variable Specification	Overall recommendation	
	(1)	(2)
Biospheric-values quintile 1	0.159 (0.66)	
Biospheric-values quintile 2	-0.377 (-1.37)	
Biospheric-values quintile 3	-0.062 (-0.30)	
Biospheric-values quintile 4	0.125 (0.52)	
Biosph.-values q. 1 x Env. score	0.386** (2.07)	0.435* (1.87)
Biosph.-values q. 2 x Env. score	1.037*** (5.11)	1.375*** (4.35)
Biosph.-values q. 3 x Env. score	1.995*** (9.91)	2.423*** (7.93)
Biosph.-values q. 4 x Env. score	2.444*** (10.24)	3.037*** (9.68)
Biosph.-values q. 5 x Env. score	2.513*** (11.08)	3.271*** (8.75)
Firm controls	Yes	Yes
Other soft variables	Yes	Yes
Customer manager FE	No	Yes
N	1,436	1,436

Table A6. Joint distribution of customer managers' predicted overall recommendation decile and their overall recommendation

Table A6 displays the joint distribution of customer managers' predicted overall recommendation decile and their actual overall recommendation. The predicted values for overall recommendations are estimated using Table 4 Specification 3.

Predicted decile	Overall recommendation					Total
	1 (Low)	2	3	4	5 (High)	
1 (Low)	46	89	8	0	0	143
2	20	98	24	2	0	144
3	18	41	66	18	0	143
4	3	22	79	33	7	144
5	0	4	15	73	52	144
6	0	1	4	13	124	142
7	0	0	0	0	145	145
8	0	0	0	0	143	143
9	0	0	0	0	144	144
10 (High)	0	0	0	0	144	144
Total	87	255	196	139	759	1,436

Table A7. Customer managers' gaming behavior: Triple interactions

Table A7 presents the results of an analysis similar to that in Table 6 Panel B, using triple interactions between customer managers' biospheric-values quintile indicators, demeaned environmental score, and an indicator for bottom-3 or middle-3 predicted overall recommendation value deciles. The p -values of χ^2 tests that the coefficients for a given variable at the bottom-3- and middle-3 predicted overall recommendation value deciles are equal are reported at the bottom of the table. t -values based on robust standard errors are reported in parentheses below coefficients. Standard errors assume clustering at the customer manager level. ***, **, and * denote statistical significance at the 1%, 5%, and 10% levels, respectively.

Dependent variable	Overall recommendation
Biospheric-values quintile 1	0.220*** (3.03)
Biospheric-values quintile 2	0.037 (0.49)
Biospheric-values quintile 3	0.082 (1.28)
Biospheric-values quintile 4	0.100 (1.44)
Biosph.-values q. 1 x Env. score * Middle-3 decile	-0.169** (-2.59)
Biosph.-values q. 2 x Env. score * Middle-3 decile	-0.004 (-0.04)
Biosph.-values q. 3 x Env. score * Middle-3 decile	0.467*** (5.88)
Biosph.-values q. 4 x Env. score * Middle-3 decile	0.573*** (7.20)
Biosph.-values q. 5 x Env. score * Middle-3 decile	0.600*** (7.74)
Biosph.-values q. 1 x Env. score * Bottom-3 decile	0.255*** (3.17)
Biosph.-values q. 2 x Env. score * Bottom-3 decile	0.407*** (5.07)
Biosph.-values q. 3 x Env. score * Bottom-3 decile	0.532*** (9.19)
Biosph.-values q. 4 x Env. score * Bottom-3 decile	0.597*** (7.41)
Biosph.-values q. 5 x Env. score * Bottom-3 decile	0.738*** (9.80)
Middle-3 decile dummy	0.036 (0.30)
Firm controls	Yes
Other Softs	Yes
$p(\text{Bottom-3} = \text{Middle-3})(\text{Biosph.-values q. 1})$	0.0003***
$p(\text{Bottom-3} = \text{Middle-3})(\text{Biosph.-values q. 2})$	0.0004***
$p(\text{Bottom-3} = \text{Middle-3})(\text{Biosph.-values q. 3})$	0.459
$p(\text{Bottom-3} = \text{Middle-3})(\text{Biosph.-values q. 4})$	0.827
$p(\text{Bottom-3} = \text{Middle-3})(\text{Biosph.-values q. 5})$	0.099*
N	860
R ²	0.784

Table A8. Modelling the decisions of loan officers using biospheric-values interactions: logit specification

Table A8 presents the results of modeling the decisions of loan officers using a logit specification, as specified in Table 8 Panel C Specification 1. Specification 2 did not converge and therefore is not included in the table. *t*-values based on robust standard errors are reported in parentheses below coefficients. Standard errors assume clustering at the loan officer level. ***, **, and * denote statistical significance at the 1%, 5%, and 10% levels, respectively.

Dependent variable	Loan granted
Biospheric-values quintile 1	-1.990*** (-2.75)
Biospheric-values quintile 2	-1.509* (-1.90)
Biospheric-values quintile 3	-1.291* (-1.79)
Biospheric-values quintile 4	-0.834 (-0.71)
Biosph.-values q. 1 x Env. score	-1.114** (-2.17)
Biosph.-values q. 2 x Env. score	-0.928 (-1.48)
Biosph.-values q. 3 x Env. score	0.090 (0.22)
Biosph.-values q. 4 x Env. score	2.207*** (3.56)
Biosph.-values q. 5 x Env. score	3.639*** (6.57)
Firm controls	Yes
Other soft variables	Yes
N	1,436

Table A9. Do customer manager’s biospheric values affect evaluation of the environmental score?

Table A9 studies the role customer managers’ biospheric values play in the evaluation of environmental scores. Panel A presents results from regressing the environmental score on hard variables separately for each biospheric-values quintile of customer managers. Panel B reports bivariate correlations between the environmental and safety score by customer managers’ biospheric-values quintile. The rightmost column of Panel A reports the p -value of a χ^2 test that the coefficients for a given variable at the top- and bottom-biospheric-values quintiles are equal. t -values based on robust standard errors are reported in parentheses below coefficients. Standard errors assume clustering at the customer manager level. ***, **, and * denote statistical significance at the 1%, 5%, and 10% levels, respectively.

Panel A. Regressing environmental score on hard variables by biospheric-values quintile

Dep. variable	Environmental score					$p(Q1=Q5)$
	(1) Low	(2)	(3)	(4)	(5) High	
Firm age	0.015 (0.47)	0.048** (2.68)	0.007 (0.25)	-0.006 (-0.21)	-0.006 (-0.20)	0.616
ln (Total assets)	0.122* (1.96)	-0.039 (-0.63)	-0.015 (-0.27)	-0.014 (-0.22)	0.069 (1.06)	0.536
Current ratio	-0.003 (-0.10)	-0.032 (-0.89)	-0.037 (-1.58)	-0.002 (-0.07)	-0.033 (-1.12)	0.434
Debt assets ratio	-0.423 (-1.57)	-0.879*** (-2.76)	-0.353 (-1.32)	-0.728** (-2.07)	-1.087*** (-4.20)	0.062*
Net profit ratio	0.006 (0.02)	0.213 (0.62)	0.472 (1.44)	0.215 (0.54)	-0.117 (-0.39)	0.795
Sales growth	-0.031 (-0.44)	-0.075 (-1.39)	-0.153** (-2.34)	0.011 (0.22)	-0.017 (-0.30)	0.878
Industry FE	Yes	Yes	Yes	Yes	Yes	
Company type FE	Yes	Yes	Yes	Yes	Yes	
N	214	275	353	259	335	
R ²	0.232	0.234	0.132	0.152	0.155	

Panel B. Correlation between environmental and safety scores by biospheric-values quintile

Biospheric-values quintile	Correlation
Quintile 1 (Low)	0.34
Quintile 2	0.17
Quintile 3	0.19
Quintile 3	0.26
Quintile 5 (High)	0.13
$p(Q1=Q5)$	0.013**

Table A10. Placebo tests

Table A10 reruns Table 5 Panel A Specification 1 using different cuts of customer manager data. Panel A divides the sample based on customer managers' gender, Panel B based on their education, and Panel C based on their age. *t*-values based on robust standard errors are reported in parentheses below coefficients. Standard errors assume clustering at the customer manager level. ***, **, and * denote statistical significance at the 1%, 5%, and 10% levels, respectively.

Panel A. Customer managers' overall recommendations by gender

Dependent variable	Customer manager's overall recomm.		
	Men	Women	<i>p</i> (Men = Women)
Firm age	-0.002 (-0.20)	-0.029* (-1.84)	0.105
ln (Total assets)	0.007 (0.41)	-0.043 (-1.08)	0.231
Current ratio	-0.028*** (-2.74)	-0.033** (-2.21)	0.772
Debt assets ratio	-0.303** (-2.42)	-0.581** (-2.21)	0.320
Net profit ratio	-0.016 (-0.15)	-0.136 (-0.76)	0.551
Sales growth	-0.014 (-0.85)	0.021 (0.64)	0.321
Truthfulness	0.449*** (7.68)	0.488*** (4.14)	0.761
Ability to repay	0.352*** (8.82)	0.291*** (4.13)	0.434
Willingness to repay	0.623*** (9.98)	0.569*** (4.42)	0.695
Safety score	0.086*** (4.38)	0.110** (2.52)	0.603
Environmental score	0.376*** (13.67)	0.328*** (6.15)	0.404
Industry FE	Yes	Yes	
Firm type FE	Yes	Yes	
N	1,065	371	
R ²	0.857	0.830	

Panel B. Customer managers' overall recommendations by education

Dependent variable	Customer manager's overall recomm.			
	Cust. manager's education	College or higher	High school	<i>p</i> (College or higher = High school)
Firm age		-0.008 (-1.04)	0.001 (0.09)	0.526
ln (Total assets)		-0.002 (-0.12)	-0.010 (-0.27)	0.838
Current ratio		-0.027*** (-2.65)	-0.038** (-2.26)	0.551
Debt assets ratio		-0.375*** (-3.18)	-0.316 (-0.90)	0.864
Net profit ratio		-0.002 (-0.02)	-0.100 (-0.39)	0.701
Sales growth		-0.014 (-0.95)	0.048 (1.06)	0.166
Truthfulness		0.439*** (8.00)	0.597*** (3.95)	0.297
Ability to repay		0.340*** (8.84)	0.308*** (3.80)	0.713
Willingness to repay		0.619*** (10.12)	0.536*** (3.66)	0.577
Safety score		0.089*** (4.66)	0.112** (2.05)	0.681
Environmental score		0.379*** (14.66)	0.293*** (4.32)	0.206
Industry FE		Yes	Yes	
Firm type FE		Yes	Yes	
N		1,186	250	
R ²		0.854	0.836	

Panel C. Customer managers' overall recommendations by age quintile

Dep. variable	Customer manager's overall recommendation					$p(Q1 = Q5)$
	(1) Low	(2)	(3)	(4)	(5) High	
Firm age	-0.024 (-1.39)	0.006 (0.35)	-0.014 (-1.15)	-0.002 (-0.13)	-0.006 (-0.38)	0.443
ln (Total assets)	-0.023 (-0.51)	0.006 (0.14)	0.026 (0.79)	-0.016 (-0.31)	-0.046 (-1.43)	0.674
Current ratio	-0.087*** (-4.32)	-0.019 (-0.93)	-0.032* (-1.92)	0.023 (1.39)	-0.031 (-1.62)	0.032**
Debt assets ratio	-0.853** (-2.71)	-0.553*** (-3.07)	-0.267 (-1.15)	0.098 (0.34)	-0.098 (-0.47)	0.035**
Net profit ratio	-0.068 (-0.28)	-0.312 (-1.25)	0.017 (0.12)	0.185 (1.16)	0.177 (0.93)	0.401
Sales growth	-0.019 (-0.56)	-0.011 (-0.29)	0.006 (0.20)	-0.002 (-0.11)	-0.019 (-0.52)	0.996
Truthfulness	0.289** (2.14)	0.410*** (3.31)	0.668*** (6.70)	0.504*** (3.54)	0.435*** (4.54)	0.352
Ability to repay	0.339*** (4.56)	0.317*** (4.22)	0.334*** (5.57)	0.185** (2.29)	0.470*** (6.64)	0.180
Will. to repay	0.696*** (5.06)	0.630*** (5.16)	0.428*** (3.70)	0.789*** (5.80)	0.535*** (4.46)	0.355
Safety score	0.120** (2.34)	0.141*** (3.77)	0.116*** (3.25)	0.096** (2.39)	0.046 (1.16)	0.233
Env. score	0.371*** (6.07)	0.376*** (6.79)	0.351*** (6.79)	0.276*** (5.89)	0.406*** (7.89)	0.644
Industry FE	Yes	Yes	Yes	Yes	Yes	
Firm type FE	Yes	Yes	Yes	Yes	Yes	
N	266	262	304	268	336	
R ²	0.825	0.863	0.885	0.884	0.837	

Table A11. Subcomponents of biospheric values

Table A11 examines the four subcomponents of biospheric values: respect for the Earth, unity with nature, protecting the environment, and preventing pollution. Panel A reports the correlations between each subcomponent and their mean value. Panel B replicates the analysis in Table 5 Panel C Specification 1 for each subcomponent. *t*-values based on robust standard errors are reported in parentheses below coefficients. Standard errors assume clustering at the customer manager level. ***, **, and * denote statistical significance at the 1%, 5%, and 10% levels, respectively.

Panel A. Correlations between customer managers' mean biospheric values and its subcomponents

Variables	Mean	Respect	Unity	Protecting	Preventing
Mean	1				
Respect	0.73	1			
Unity	0.80	0.53	1		
Protecting	0.80	0.58	0.53	1	
Preventing	0.83	0.52	0.60	0.63	1

Panel B. Modelling customer managers' biospheric-values–environmental-score interaction using different measures of biospheric values

Dependent variable	Overall recommendation			
	Respecting the Earth	Unity w. nature	Protecting environment	Preventing pollution
Specification	(1)	(2)	(3)	(4)
Biospheric-values quintile 1	0.122*** (2.71)	0.081* (1.91)	0.146*** (3.48)	0.093* (1.80)
Biospheric-values quintile 2	0.030 (0.57)	-0.016 (-0.34)	0.084* (1.77)	0.077* (1.82)
Biospheric-values quintile 3		0.012 (0.29)	0.082* (1.88)	0.027 (0.60)
Biospheric-values quintile 4	0.006 (0.16)	-0.056 (-1.22)	-0.024 (-0.63)	0.002 (0.04)
Biosph.-values q. 1 x Env. score	0.125*** (2.62)	0.115** (2.59)	0.111*** (2.62)	0.123** (2.34)
Biosph.-values q. 2 x Env. score	0.306*** (6.98)	0.277*** (5.22)	0.221*** (4.56)	0.185*** (5.27)
Biosph.-values q. 3 x Env. score		0.362*** (9.09)	0.371*** (8.96)	0.414*** (9.56)
Biosph.-values q. 4 x Env. score	0.400*** (12.41)	0.455*** (11.39)	0.446*** (10.30)	0.506*** (13.64)
Biosph.-values q. 5 x Env. score	0.502*** (10.79)	0.481*** (12.20)	0.535*** (14.78)	0.499*** (11.37)
Firm controls	Yes	Yes	Yes	Yes
Other Softs	Yes	Yes	Yes	Yes
N	1,436	1,436	1,436	1,436
R ²	0.857	0.857	0.862	0.861

Table A12. Loan outcomes conditional on loan approval

Table A12 presents the results of regression analyses on interest rate and loan maturity outcomes conditional on having been granted a loan. *t*-values based on robust standard errors are reported in parentheses below coefficients. Standard errors assume clustering at the loan officer level. ***, **, and * denote statistical significance at the 1%, 5%, and 10% levels, respectively.

Dependent variable	Interest rate	Maturity
Firm age	-0.00006 (-0.65)	-0.015** (-2.39)
ln (Total assets)	-0.00044* (-1.87)	-0.002 (-0.13)
Current ratio	-0.00014* (-1.70)	-0.009 (-1.03)
Debt assets ratio	-0.00128 (-1.13)	0.033 (0.24)
Net profit ratio	0.00098 (0.88)	0.146 (1.35)
Sales growth	-0.00031** (-2.29)	0.007 (0.48)
Overall recommendation	-0.00014 (-0.22)	0.073 (1.30)
Truthfulness	-0.00044 (-0.43)	0.097 (0.78)
Ability to repay	0.00026 (0.63)	0.024 (0.79)
Willingness to repay	0.00170 (0.93)	-0.079 (-0.71)
Environmental score	0.00027 (1.18)	0.003 (0.12)
Safety score	0.00018 (0.80)	-0.017 (-0.92)
Industry FE	Yes	Yes
Company type FE	Yes	Yes
N	831	831
R ²	0.071	0.034