

Lender Trust and Bank Loan Contracts

Jens Hagendorff
King's College London

Sonya S Lim
DePaul University

Duc Duy Nguyen
Durham University

This version: 15 February 2022

Abstract

We examine the contractual implications of a lender's trust in corporate loans. We measure how trusting a lender is using the average trust attitude in the chief executive officer's (CEO) ancestral country of origin. We find that banks with trusting CEOs charge lower interest rates in US syndicated loans. This effect is identified within existing lender-borrower relationships and similar types of loans. Further analyses indicate that trust reduces the cost of credit by boosting the perceived credibility of borrower information and by mitigating contracting problems. We corroborate our findings by conducting a survey of loan officers with experience in loan syndication.

JEL Classification: G21, G32, M14

Keywords: CEOs, Trust, Cultural values, Financial contracts

Jens Hagendorff (jens.hagendorff@kcl.ac.uk) at King's College London, Bush House, 30 Aldwych, London WC2B 4BG, UK. Sonya S Lim (sonya.lim@depaul.edu) is at DePaul University, 1E Jackson Blvd, Chicago, IL 60604, USA. Duc Duy Nguyen (duc.d.nguyen@durham.ac.uk) is at Durham University, Millhill Lane, DH1 3LB Durham, UK. We are grateful to Gustavo Manso (the Editor), an anonymous Associate Editor, and two anonymous referees for many helpful comments and suggestions. We thank Ben Sila for the many helpful conversations and Tobias Berg, Cláudia Custódio, David Dixon, Tarik Driouchi, Paul Guest, Felix Irresberger, Dirk Jenter, Jonathan Karpoff, Kevin Keasey, Kai Li, Ivan Lim, Gerald Lobo, Bill Megginson, Nikos Paltalidis, Dennis Philip, Raghu Rau, Abhishek Srivastav, Rebecca Strätling, Francesco Vallascas, Patrick Verwijmeren, Dmitri Vinogradov, Nick Wilson, and seminar participants at Durham University, King's College London, Roma Tre University, Queen's University Belfast, and the Universities of Glasgow, Leeds, and Nottingham for helpful comments. The usual disclaimer applies.

1. Introduction

Trust is believed to underpin most financial contracts and transactions. A growing literature reports that trust explains a range of financial decisions made by households, investors, and companies (e.g., Duarte et al. 2012; Giannetti and Wang 2016; Guiso et al. 2008; Pevzner et al. 2015). However, identifying the effects of trust on financial contracts is challenging. An individual's level of trust may correlate with wealth, capital market development, or other institutional factors that, similar to trust, vary across countries and regions. As a result, empirical evidence on how trust shapes financial contracts remains sparse to date.

To examine the contractual implications of trust, we relate differences in how trusting bank CEOs are to the pricing of loans underwritten by the banks they lead. Our approach is based on the notion that the personal values of the CEO and the cultural values of an organization may be closely aligned. Survey evidence backs the idea that some CEOs embody the values of an organization and that this has implications that reach far down the corporate hierarchy. In Graham et al. (2021), interviewed executives describe these values as a “coordination mechanism” and an “invisible hand at work inside of each of the employees that helps to guide their decisions.” We argue that how trusting CEOs are is reflected in a bank's general attitude toward trust and its pricing of individual loans.

Building on literature that documents the importance of a CEO's cultural heritage for corporate outcomes (e.g., Lin and Liu 2018; Liu 2016; Nguyen et al. 2018; Pan et al. 2017, 2020), we measure the trust of US CEOs using the attitudes toward trust in their genealogical country of origin. While all US CEOs are exposed to the same legal and institutional influences, our approach assumes that they will differ in terms of how trusting their cultural heritage is. Since differences in genealogically inherited CEO trust are historically rooted and predate a CEO's life experiences or contemporaneous institutional factors, our approach isolates the effects of CEO trust from other confounding factors.

We hypothesize that lenders led by trusting CEOs (henceforth, “trusting lenders”) charge lower loan rates than lenders led by less trusting CEOs. We base this prediction on a literature which defines trust as the subjective belief in a counterparty's reliability (e.g., Carlin et al. 2009; Guiso et al. 2008). In a competitively priced loan market, the expected returns on loans will differ according to their perceived risk.

We argue that lenders differ in their subjective assessment of the likelihood that a borrower behaves opportunistically based on their trust in others. This implies that trusting lenders require lower rates than less trusting lenders, who need to be compensated for the higher perceived likelihood of opportunistic behavior (e.g., when borrowers submit biased or otherwise incorrect information).

Our main analysis focuses on loan rates, rather than the non-price terms of loans, to aid identification of the effects of trust. We assume that all borrowers prefer lower to higher loan rates, such that if trusting lenders offered lower loan rates, loan markets would clear at lower rates. For non-price terms, it is more challenging to distinguish between credit demand and credit supply effects. For instance, even if trusting lenders were to offer loans on different non-price terms than less trusting lenders, credit markets may not clear on those terms if the supply of loans by trusting lenders does not match borrower preferences.¹

To obtain direct evidence on a CEO's influence on the syndicated lending process, we survey loan officers with experience in structuring syndicated loans. More than 90% of the 92 survey respondents agree that the CEO shapes the bank's overall lending strategy, and that the syndication team follows the lending policies set by the CEO. In addition, detailed interviews with industry experts highlight that regular communications between the CEO and the syndication team ensure that the broad lending parameters set by the CEO are followed. Overall, our qualitative evidence suggests that CEOs set top-level lending policies that guide decision-making in the syndicated lending process.

We next explore the effects of CEO trust on loan rates using a sample of loans by US banks to US corporate borrowers. To identify the trust levels of bank CEOs, we hand-collect data on the country of origin of a bank CEO's ancestors from ancestry.com. CEOs who are born outside the US or are the children or grandchildren of immigrants to the US are assigned the trust values prevailing in their ancestral country of origin. By contrast, CEOs who descend from earlier generations of immigrants are assigned the trust

¹ Analyzing loan approvals (rather than loan rates) would also be challenging. Denials are rare in syndication markets. Instead, lenders typically quote higher interest rates to discourage weaker borrowers from taking out a loan. When denials do occur, they mostly follow an internal review and take place *before* the lead arranger seeks external participant banks. Consequently, we can only observe a small and incomplete subset of loan denials.

values prevailing in the US.² Trust values are based on the average response to the following question in the World Value Surveys (WVS): “Generally speaking, would you say that most people can be trusted or that you need to be very careful in dealing with people?”

Our sample of bank loan contracts comes from DealScan and comprises 18,454 loan facilities issued to 3,738 corporate borrowers over 1992–2016. Most loans in DealScan are syndicated, with one or more lead arranger(s) and several participating lenders. We focus our analyses on lead arranger(s) because of their key role in determining loan contract terms. Our regression specifications include bank-borrower, borrower’s credit rating, loan purpose, and quarter-year fixed effects. These allow us to identify the effects of lender trust within the same lender–borrower relationship while controlling for borrower risk and loan purpose. Conceptually, our analysis compares the spreads the same borrower pays to the same bank for similar-risk loans under different CEOs, some more and some less trusting.

We document a negative and statistically significant relationship between a lender’s trust level and loan rates. A one standard deviation increase in lender trust—the equivalent of an increase from the trust level observed in the United States to that in Australia—reduces loan spreads by about 2.7 basis points. This implies a reduction in interest expenses of about \$500,000 for an average loan facility of \$467 million. Our baseline results survive a large set of additional tests. For instance, we follow Giannetti and Wang (2016) and Guiso et al. (2008) and demonstrate that our results remain robust to the inclusion of proxies for risk attitudes and optimism. We further show that trust, but not other cultural values, consistently explains lower loan pricing.

We provide evidence of two non-mutually exclusive channels through which trust may lower the cost of credit. The first channel is that trust boosts the perceived credibility of borrower information. Prior evidence shows that trusting investors perceive a lower likelihood of firms issuing biased or manipulated information (Bhagwat and Liu 2020; Pevzner et al. 2015). Consistent with this channel, we find that the

² This set-up is in line with Nguyen et al. (2018) and a broad body of sociology literature reporting that the distinct cultural heritage effects disappear when an individual’s ancestors immigrated to the US four or more generations ago. Our data collection procedure is detailed in Section 3.2.

effect of CEO trust is more salient in subsamples of borrowers that are relatively opaque. The second channel is that trust mitigates contracting problems. Carlin et al. (2009) argue that an agent's ability to rely on a counterparty arises from two sources: how well contractual obligations are enforced and trust in others. In line with this, we show that lenders with greater trust in others are less likely to include a financial covenant requirement, and that trust plays a salient role in reducing borrowing costs when lenders are *not* protected by these contract provisions.

The effect of trust on loans can be interpreted as reflecting the matching between banks and CEOs based on attitudes toward trust. This is consistent with prior evidence on CEO-firm matching. For instance, Gabaix and Landier (2008) and Pan (2017) present models where managers match with firms according to where their talents are productively deployed. Similarly, Pan et al. (2017) show that firms and CEOs are matched based on CEOs' attitudes toward uncertainty. Our work provides evidence consistent with optimal CEO-bank matching based on CEOs' attitudes toward trust and the growth prospects of banks. When examining bank-level outcomes, we find that banks led by trusting CEOs experience higher loan growth but no difference in loan performance or loan book profitability, relative to banks led by less trusting CEOs. Importantly, interpreting the results through the prism of CEO-bank matching is also consistent with explanations that a CEOs' attitudes toward trust affect contract-level pricing. Indeed, CEO-bank matching may result precisely because boards believe CEOs will imprint their personal attributes on the firm's business policies.

Our paper makes three primary contributions to the literature. First, extant research focuses on how CEO characteristics shape decisions at the corporate level (Bernile et al. 2017; Bushman et al. 2018; Custódio and Metzger 2013; Dittmar and Duchin 2016; Nguyen et al. 2018, Pan et al. 2020). To the best of our knowledge, our paper is the first to link CEO characteristics to a contract-level outcome. Since our findings are consistent with a CEO's personal values reflecting the corporate values that permeate their organization, our paper also contributes to the emerging literature on the importance and consequences of culture in organizations (Bénabou and Tirole 2003; Graham et al. 2021; Guiso et al. 2015; Pan et al., 2017).

Second, we focus on the economic implications of trust. While the link between trust and economic growth is widely documented (for a review, see DuPont and Karpoff (2020); see also Algan and Cahuc 2010; Knack and Keefer 1997; La Porta et al. 1997), relatively few studies have explored the mechanisms underlying this relationship.³ Broadly related to us, Duarte et al. (2012) show that how trustworthy borrowers appear in photographs affects lending outcomes in a peer-to-peer lending market. By contrast, we focus on the trusting attitude of lenders and its effects on how lenders process information. Our results highlight a new channel not previously examined in the literature: trusting lenders lower the cost of credit—an important driver of corporate investment and economic growth.

Finally, our work contributes to the bank loan contracting literature (e.g., Acharya et al. 2018; Berg et al. 2021; Demerjian and Owens 2016; Murfin 2012; Sufi et al. 2007;). In identifying the determinants of loan pricing, the literature focuses on borrower or bank characteristics (Costello and Wittenberg-Moerman, 2011; Ferreira and Matos 2012; Graham et al. 2008; Hasan et al. 2017; Lin et al. 2011; 2012), the characteristics of loan syndicates (Lim et al. 2014), and pricing differentials across global markets (Berg et al. 2017). Similar to us, Bushman et al. (2021) highlight the human touch in loan contracts by illustrating that loan officers generate individual effects on in rates. We complement this work by highlighting the influence of lender CEOs on loan pricing. Our study supplies qualitative and quantitative evidence that links the trust preferences of CEOs to loan rates.

2. Conceptual framework and related literature: Lender trust and loan rates

Corporate loans are multi-period contracts used by lenders to advance funds to borrowers at a rate of interest that reflects their perception of borrower risk. In assessing this risk, lenders conduct research by gathering and processing various information. This study examines the role of lender trust in this process.

³ Recent studies have evidenced that trust can boost output by promoting innovation (Xie et al. 2021), facilitating venture capital investments (Bottazzi et al. 2016), enhancing information processing (e.g., Bhagwat and Liu 2020; Pevzner et al. 2015), and improving household financial well-being (Jiang and Lim 2018).

Under a calculative form of trust, as defined by Williamson (1993), agents rationally base trust in others on subjective beliefs about the gambles they face. In line with this, Carlin et al. (2009) and Guiso et al. (2008) model trust as the subjective belief in a counterparty's reliability. In this framework, trust is the probability an agent assigns to the possibility of their counterparty behaving opportunistically. Carlin et al. (2009) argue that this probability assessment is based on objective characteristics that prevent counterparties from behaving opportunistically (e.g., the terms of a contract or their enforcement under the law), as well as cultural and social norms that influence people's tendency to honor their responsibilities. Therefore, how much an individual trusts others will vary with his/her cultural or social background.

Our study examines the effects of a lender's trust in borrowers. Lenders with different trust levels will assign different probabilities to borrowers behaving opportunistically. Among the specific considerations of lenders is the possibility that a borrower cheats (e.g., when firms misuse funds) and that borrowers may submit biased information (e.g., overly optimistic forecasts) to obtain credit on more favorable terms.

Existing evidence supports our expectation that when the suppliers of capital to firms are more trusting, they assign a lower probability to management behaving opportunistically. Pevzner et al. (2015) report stronger market reactions to earnings announcements in countries with higher levels of trust. This implies that trusting investors are less inclined to believe that managers are manipulating financial results. Similarly, Bhagwat and Liu (2020) find that more trusting analysts place greater weight on management forecasts when making their own forecasts. Hilary and Huang (2018) show that firms located in US counties with higher community trust experience fewer forced CEO departures. In the same vein, Lesmeister et al. (2019) find that the percentage of votes cast by shareholders in support of management is higher in countries with greater societal trust.

In a competitively priced loan market, the expected returns on loans will differ according to their perceived risk. Less trusting lenders will seek compensation for the higher perceived likelihood of a borrower behaving opportunistically. Duarte et al. (2012) show that borrowers receive lower interest rates on personal loans on a peer-to-peer lending site if their photographs make them appear more trustworthy.

Our paper focuses on loans to corporations and on whether lenders interpret information according to their trust in others. We conjecture that a lender's culturally inherited trust attitude informs their perception of the risk-return trade-off underlying a loan. If that is the case, rates on loans to a particular borrower by a more trusting lender will be systematically lower compared to loans to the same borrower underwritten by a less trusting lender.

3. Data

3.1 Bank loan sample

We obtain data on loan contracts from the LPC-Reuters DealScan database. Our loan sample includes all dollar-denominated loans by US lenders to US corporate borrowers from 1992 to 2016. We treat each loan facility as a distinct observation because loan terms could differ across different facilities.

We merge the DealScan data with several other databases. We start by merging the loan data with borrower characteristics using the DealScan-Compustat link from Chava and Roberts (2008). The updated version of the link table enables us to match loan data with borrowers' Compustat identifiers. We then manually match DealScan lender names (e.g., PNC Bank NA) to bank holding companies (PNC Financial Services Group). We carefully read each lender's business description, geographical coverage, and manager information to ensure accurate matches. In the final step, we obtain bank characteristics from Call Report data on commercial banks and bank holding companies (FFIEC 031/041 and FR Y-9C).

We focus our analyses on the lead arranger(s) of syndicated loans, as identified by DealScan, because they play a key role in determining the loan contract terms.⁴ We then complement this sample with data from ExecuComp, BoardEx, and Edgar DEF14A forms to retrieve a range of demographic information

⁴ Lead arrangers negotiate loan terms with the borrower before turning to participant lenders to underwrite part of the loan on the agreed terms. Therefore, the trust levels of non-lead-bank CEOs should not affect loan pricing. Appendix 6 confirms that the trust levels of the CEOs of non-lead arrangers have no measurable impact on the pricing of loans in our sample.

on CEOs. This process yields an initial sample of 20,361 loans originated by 68 unique banks under 112 bank CEOs.⁵

3.2 CEO cultural heritage

We compile a detailed dataset on the ancestors of US bank CEOs. The data are hand-collected and based on public records accessed via ancestry.com. Our approach to accessing ancestral information depends on when a CEO was born and follows Nguyen et al. (2018).

For CEOs born before 1940, we retrieve ancestry information from the publicly available census records.⁶ The census data contain demographic information on all members of a household, including names, birth dates, and birthplaces. This enables us to identify a CEO's parents and their birthplaces. If both parents were born outside the US, a CEO is classified as a second-generation immigrant from the country in which their parents were born.

If census records indicate that either parent was born in the US, then the search resumes to locate the CEO's grandparents using earlier census data. If the CEO's grandparents were born outside the US, a CEO is classified as a third-generation immigrant from the country in which his/her grandparents were born. Otherwise, the search resumes using census records as far back as data availability permits, usually to the late-19th century. We are able to obtain ancestry information on all 35 CEOs born before 1940. Figure IA1 in the Internet Appendix provides examples of census records accessed via ancestry.com and illustrates the sequence of data collection steps.

For CEOs born after 1940, we use two approaches to collect ancestry information. The first approach assumes that because all the parents of CEOs in our sample were born before 1940, their census

⁵ Our sample is similarly sized to the sample of lenders in Schwert (2018). The market for lead arrangers is fairly concentrated—a select number of banks repeatedly act as lead arrangers in loans to corporate borrowers. Section 5.1 reveals substantial variation within the same bank-borrower relationships, which form the basis for our identification. About two-thirds of our bank-borrower relationships experience at least two different bank CEOs per lead bank over the sample period.

⁶ The US Census Bureau conducts a population count every 10 years in years ending in zero. However, to protect the privacy of living people, census records are only made publicly available 72 years after the original census day; hence, the most recent publicly available data are from the 1940 census.

records are accessible. If we know the names of a CEO's parents, we are able to locate their ancestors using the same technique we use for CEOs born before 1940. We search ancestry.com for a CEO's birth and marriage certificates, which, depending on the staff who completes the form, occasionally list parents' names. If we cannot identify a CEO's parents from ancestry.com, we manually search biographies, interviews, and obituaries for such information.

If the first approach fails, we employ a second approach that infers a CEO's ancestral background using the census records of families sharing the same surname and birth county with the CEO. To illustrate this, assume that we need to find the ancestors of a CEO with the surname Schaefer who was born in 1943 in Pemiscot County, Missouri. To do this, we search census records for all Schaefer families that lived in Pemiscot County in 1940, finding two families matching these criteria, both of which emigrated from Germany. Therefore, it is reasonable to assume that the CEO was born to one of these two families in 1943 and is of German ancestry. By contrast, if we discover inconsistencies regarding a CEO's origins (e.g., one Schaefer family emigrated from Germany and the other from Denmark), we remove that CEO from the sample. We are able to obtain ancestry information for 60 of the 77 CEOs born after 1940.

[Table 1 around here]

We further exclude seven CEOs with mixed ancestry whose paternal and maternal ancestors originate from different countries. These CEOs may have inherited values from either or both cultures, depending on unobservable cultural and personal factors. Fortunately for our analysis, cross-cultural intermarriages were not common among 20th century immigrants (e.g., Kalmijn 1999).⁷

Our final sample includes 18,454 loans originated to 3,738 borrowers by 58 unique banks under 88 unique bank CEOs.⁸ Panel A of Table 1 classifies CEOs by immigrant generation. Two CEOs are (foreign-

⁷ In Internet Appendix IA10, we additionally include loans originated by CEOs with mixed ancestry in the sample. Our results are robust to using either paternal cultural origin (Column (1)) or maternal cultural origin (Column (2)) as proxies for the cultural origin of mixed-heritage CEOs.

⁸ We lose 24 CEOs due to missing CEO ancestry data or mixed ancestry cases. To account for potential self-selection, we use a standard Heckman two-step procedure (1979) and report the results in Internet Appendix IA11. This procedure ensures that our conclusions are not driven by unobservable factors that make sample inclusion more likely. Our results are qualitatively similar after controlling for self-selection bias.

born) first-generation immigrants, ten CEOs are second-generation immigrants, 28 CEOs are third-generation immigrants, and 48 CEOs are fourth- or later-generation immigrants.

3.3 Measuring trust and other cultural values

We construct a trust index based on the percentage of survey respondents in each country who answer “most people can be trusted” in response to the WVS question, “Generally speaking, would you say that most people can be trusted or that you need to be very careful when dealing with people?” For countries not covered by the WVS, we use survey data from the European Value Surveys (EVS). We select WVS Wave 5 (2005–2009) and EVS Wave 4 (2008–2010) as these survey periods offer the most comprehensive coverage.

Nguyen et al. (2018) find that bank CEOs who are first-, second-, or third-generation immigrants exhibit distinct behavior based on the countries their ancestors immigrated from, but that this effect disappears for CEOs whose ancestors immigrated to the US four or more generations ago. These findings indicate that the fourth generation marks the point of cultural assimilation. Following Nguyen et al. (2018), we assign first- to third-generation immigrants the trust values of the countries their ancestors emigrated from and assign fourth- and later-generation immigrants the trust level of the US. For example, a CEO who is a second-generation immigrant from Italy is assigned the trust index associated with Italy (0.27), whereas a CEO who is a fourth- (or later-) generation immigrant from Italy is assigned the US trust index (0.39). In Section 5.3.1, we also control for risk aversion, optimism, and Hofstede’s cultural dimensions, to show that trust exerts a distinct effect on loan spreads over and beyond other cultural values.

Panel B of Table 1 displays the ancestral countries of origin for CEOs classed as first- to third-generation immigrants. There are 20 different countries of origin in our sample. The top five are Germany (20%), Ireland (12.5%), Scotland (10%), Poland (10%), and England (5%).

4. Survey evidence

A key assumption underlying our empirical approach is that bank CEOs set the tone at the top which then affects the design of individual loans. Since we cannot observe the interactions between CEOs and members of the syndication team, it is challenging to test this assumption. Instead, we obtain evidence on a CEO's influence on the syndicated lending process by surveying loan officers with significant experience in structuring syndicated loans.

We develop our survey by considering questions about the role of CEOs and teams of loan officers in the syndication process. The precise wording of the survey questions is presented in Internet Appendix IA1. We use LinkedIn to identify individuals with experience in loan syndication at large US banks.⁹ In total, we sent requests to approximately 1,200 email addresses and received 92 responses (representing a 7.7% response rate).¹⁰

Panel A of Table 2 describes our survey participants. The respondents have significant experience in loan syndication: 73% have worked for more than five years in credit syndication, 80% have worked in at least two banks, and nearly 48% currently work in credit syndication. Approximately 56% of participants most recently worked for a bank with book assets above \$100 billion. For comparison, 55% of banks in our sample had book assets above \$100 billion in 2016 (the most recent year in our sample).

[Table 2 around here]

A common concern with a survey methodology is that some respondents may answer questions strategically or untruthfully. For instance, some may be hesitant to reveal that the CEO is not involved in their institution's lending strategy, fearing it may portray the CEO in an unflattering light (and that disclosure may harm the respondents' own career prospects). Others may be tempted to overplay their personal discretion by downplaying the influence of others, including that of the CEO, in the syndication

⁹ An advantage of surveying loan officers rather than CEOs or other executives is that it mitigates the selection concern that CEOs who believe they shape loan outcomes are more likely to respond to our survey.

¹⁰ Our sample size is comparable to those in recent studies that also surveyed specialist financial decision-makers. For instance, Gompers et al. (2016) surveyed 79 buyout investors, McCahery et al. (2016) surveyed 143 institutional investors, and Bodnaruk and Simonov (2016) surveyed 68 fund managers.

process. To mitigate this, we phrase the questions to ask about impressions of lenders' general practices, rather than any personal behavior. In unreported analyses, we obtain very similar results using a subsample of survey participants who no longer work in syndicated lending (and should be immune to career concerns of this nature).

Panels B and C of Table 2 summarize the responses to our main questions. We use a six-point scale, where responses range from *Totally Disagree* (= 1) to *Totally Agree* (= 6). Overall, the respondents show broad agreement with the statement that CEOs exert influence on a bank's lending policies. In total, 99% of respondents agree that the CEO takes an interest in the bank's lending strategy (Question 1), and 91% agree that the CEO shapes the bank's overall lending strategy (Question 2).¹¹

Next, we confirm that the effects exerted by CEOs on lending go through loan officers. In our survey, 97% agree that syndication teams follow the overall lending strategy set out by the CEO (Question 3). In a follow-up question on why loan officers implement the bank's overall strategy (Question 4), the most frequent responses are that loan officers agree with the lending strategy (31%), feel that senior leadership is responsible for shaping the lending strategy (30%), and are concerned about their job security if they do not follow the strategy (14%).

In an open-ended question (Question 7), we invite respondents to describe how a CEO influences decision-making in loan syndications. Most respondents indicate that CEOs set some of the return parameters on loans, e.g., the CEO sets limits on lending to firms of a given risk and in particular industries. Several respondents mention that the risk and profitability requirements affect the spreads they quote.

We corroborate these findings in detailed interviews with three industry experts, including two former managing directors of syndications at top-10 US lenders, who spent a minimum of 15 years in senior managerial roles. One confirms that "the CEO sets pricing which is tied to risk" and "determines risk limits which would affect loan pricing." Another interviewee elaborates that "as the strategy setter and budget

¹¹ Agreement is calculated as the proportion of respondents who indicate they either *Totally Agree* (=6), *Agree* (=5), or *Somewhat Agree* (=4) with a given statement.

approver, the CEO uses his position to drive the results he expects each division to achieve. The CEO uses weekly, sometimes daily, reports of the loan syndication team to push the team to meet lending parameters. He also uses bank-wide communication to put pressure on the department.”

Finally, we explore the specific channels through which CEOs exert their influence on the decision-making process in loan syndications. We find that communication is key to this process. In total, 51% of respondents mention that the CEO maintains direct communications with the syndication team and/or the corporate banking group (Question 5), and 55% mention that the CEO communicates with the syndication team on at least a quarterly basis (Question 6). One interviewee remarks “[t]he CEO meets with the Head of Syndications at least quarterly, who then passes the message on to the staff.”

To summarize, our survey and interviews show that CEOs set some of the lending parameters that have implications for loan pricing. Regular communications between the CEO and the lending teams ensure that the latter take these parameters into consideration when pricing loans. Therefore, the effects of a CEO’s values manifest through the loan officers who make operational decisions over individual loans. By demonstrating a CEO’s influence on the syndicated lending process, our results complement those of Bushman et al. (2021), who find that loan officers exhibit individual effects on the terms and performance of syndicated loans. Internet Appendices IA2 and IA3 further validate the influence of bank CEOs on loan contracting by showing that CEOs significantly influence various bank-level lending outcomes and the design of syndicated loan contracts.¹²

5. Bank CEO trust and loan pricing

5.1 Model

To estimate the effect of *Bank CEO Trust* on loan spreads, we use the following empirical model:

$$\text{Log}\left(\text{Spread}_{i,j,t}\right) = \Phi\left(\beta_0 + \beta_1 \text{Bank CEO Trust}_{i,t} + \text{Controls}_{i,j,t} \mathbf{\Gamma} + \text{Fixed effects}_{i,j,t} \mathbf{\Gamma} \varepsilon_{i,j,t}\right) \quad (1)$$

¹² Arguably, a limitation of our survey is that we do not ask loan officers about their impression of a CEOs’ trust or other subjective elements of a CEO’s assessment of individual borrowers. However, this would require personal knowledge of the CEO, and we assume that most loan officers do not possess such knowledge. Therefore, our survey is designed to a CEO’s influence on the syndicated lending process in broad terms. The regression analyses in the subsequent sections explore whether the reported CEO influence can be explained by CEO trust.

where j indexes borrowers, t indexes time, and i indexes banks. The dependent variable $Ln(Spread)$ is the natural logarithm of the all-in-spread-drawn (defined as the spread over LIBOR plus the facility fee) for a loan facility.¹³

Our main specification includes bank-borrower, borrower's credit rating, loan purpose, and quarter-year fixed effects. In this empirical set-up, identification of the effects of CEO trust comes from the same borrower experiencing different CEOs in the same lead bank, while holding constant a borrower's credit risk, the purpose of the loan, and other loan contract provisions. The power of these tests stems from the substantial variation in CEOs within a bank-borrower relationship. Specifically, 66% of bank-borrower relationships experience at least two different CEOs per lead bank over the sample period. The average (median) borrower in our sample experiences 1.97 (2) CEOs per lead bank. If we further restrict the sample to lenders led by CEOs with a different cultural heritage, the average (median) borrower experiences 1.63 (2) CEOs with different cultural heritage per lead bank during the sample period.

Following the literature, we include borrower-level variables to control for the borrower's size, profitability, leverage, asset structure (*Borrower Tangibility*), R&D expenditures (*Borrower R&D*), and working capital management (*Borrower Current Ratio*). Syndicated loans are characterized by both pricing (interest rate spreads) and non-pricing features (e.g., loan maturity, size, covenant, and collateral requirements). To account for the joint determination of loan spreads and other loan attributes, all regressions control for a large set of loan-level characteristics, including maturity, size, and dummy variables indicating whether the loan is originated by only one lender (*Sole Lender*), whether the loan refinances a previous loan (*Refinancing*), and whether the loan's base rate is the prime rate rather than LIBOR (*Base is Prime*). We also control for formal contract provisions embedded in the loan facility, including collateral (*Secured Loan*) and financial covenant requirements (*Financial Covenant*, dummy).

¹³ In line with some prior studies (e.g., Graham et al. 2008; Hasan et al. 2017), we use $Ln(Spread)$ to minimize the effects of outliers. Appendix 4 shows that our main results are robust to using $Spread$ instead.

Finally, we control for *Relationship Borrower*, a dummy that equals one if the borrower has taken out a prior loan from the same lead bank’s CEO in the last three years, and zero otherwise.

[Table 3 around here]

Table 3 provides descriptive statistics on borrowers, loans, banks, and bank CEOs. The average trust level of lender CEOs in our sample is 0.367 (the median is 0.393). The average loan is priced at 182 basis points above LIBOR, valued at \$467 million, and has an average maturity of four years. Less than half of our sample loans are secured (49.5%) and have at least one financial covenant requirement (62.2%). The summary statistics of our sample are similar to those reported by Bushman et al. (2021) and Hasan et al. (2017).

5.2 Baseline results

In Table 4, we estimate the baseline OLS regressions that examine the impact of lender trust on loan spreads. We compute *t-statistics* based on robust standard errors that are double-clustered at the bank-CEO-origin and bank level. Model specifications vary across columns in terms of the set of fixed effects we include.

[Table 4 around here]

Consistent with our hypothesis that trusting lenders charge lower rates, we find that the coefficient on *Bank CEO Trust* is negative and statistically significant across all columns. Our most conservative estimate in Column (5) indicates that a one standard deviation increase in *Bank CEO Trust* reduces loan spreads by about 2.7 basis points.¹⁴ This is equivalent to the difference in trust levels between the US and Australia (the latter being higher). Given the average loan size (\$467 million) and time to maturity (4 years), this implies that a one standard deviation increase in *Bank CEO Trust* reduces total interest expenses by approximately \$500,000 per loan facility ($=\$467\text{m} \times 0.027\% \times 4$).

¹⁴A one standard deviation increase in *Bank CEO Trust* leads to a reduction in $\text{Log}(\text{Spread})$ of -0.0151 ($= -0.156 \times 0.097$). This, in turn, implies a reduction of 2.7 basis points based on the sample’s average loan spread of 182 basis points ($-2.7 = 182 \times e^{-0.0151} - 182$). For a 2.07 standard deviation difference in trust, equivalent to the difference between Italy (0.275) and Australia (0.476), the reduction in loan spreads is 5.6 basis points (equating to \$1 million per loan facility).

Our findings hold under different sets of fixed effects. Columns (1)–(2) include borrower-quarter-year fixed effects to control for time-varying borrower characteristics and thus hold the demand side constant. Under this specification, variation in spreads stems from the supply side only. This makes alternative explanations for our findings less plausible, as they would have to explain why the same borrower with identical characteristics receives lower loan spreads from high-trust lenders than from low-trust lenders in the same time period.¹⁵ Columns (3)–(5) include bank-borrower fixed effects. Thus, β_1 compares the spreads the same borrower pays the same lender on similar-risk loans under different CEOs with different levels of trust.

It is also comforting to note that the coefficients on the control variables have the expected signs. For instance, loan spreads are lower for borrowers that are larger, less risky (i.e., having lower leverage ratios), and have more tangible assets.

5.3 Identification concerns

In this subsection, we construct additional tests to demonstrate that our findings are robust to a range of identification concerns. Before detailing the tests, it is important to emphasize that the bar for alternative explanations is already high, given that we identify the effects of trust within the same bank-borrower relationship after controlling for time-varying bank and borrower characteristics.

We start by addressing the concern that our results could be driven by CEOs of recent immigrant heritage. Several studies document that descendants of immigrants show distinct behavior over several generations (e.g., Nguyen et al. 2018; Pan et al. 2020). Panel A of Table 5 performs two tests. First, in Column (1) we focus on CEOs of relatively recent immigrant heritage but different trust levels and, thus, restrict the sample to loans originated by banks whose CEOs are first- to third-generation immigrants. Second, in Column (2) we control for *Immigrant Generation*, a variable that indicates to which immigrant-

¹⁵ On average, borrowers in our sample obtain loans from 1.2 lead banks in a given quarter-year, leaving us with limited variations across banks within the same borrower-quarter-year. Consequently, we choose the specification in Column (5) of Table 4 with bank-borrower, borrower credit rating, loan purpose, and quarter-year fixed effects as the main specification in the paper.

generation group a CEO belongs (e.g., a value of one indicates that a CEO was born outside the US). In both columns, the coefficients on *Bank CEO Trust* remain negative and statistically significant.¹⁶

[Table 5 around here]

After establishing that our results are indeed due to cultural values and not the recency of immigrant heritage, we further investigate whether cultural dimensions other than (but potentially correlated with) trust could drive our findings. For instance, Guiso et al. (2008) argue that an individual's general trust levels could be related to their risk attitudes and optimism levels. We therefore control for Gallagher et al.'s (2013) measure of *Optimism*, which is the difference between individuals' expectations of the future and their current evaluations of life satisfaction. We further control for a measure of *Risk aversion* adopted from Rieger et al. (2015). Both variables are measured at the CEO-country-of-origin level.

In addition, we control for Hofstede et al.'s (2010) cultural dimensions: *Long-term Orientation* describes long-term pragmatic cultures; *Individualism* describes cultures that emphasize self-reliance; *Uncertainty Avoidance* measures the extent to which an individual is uncomfortable with unpredictability and ambiguity; *Masculinity* emphasizes competition and assertiveness; and *Power Distance* and *Indulgence* measure the importance of hierarchy and gratification of human desires in a society, respectively. Because the individual cultural indices are highly correlated with each another, we use a principal component analysis (PCA) to construct a single variable that captures the primary sources of variation among all the Hofstede indices.¹⁷ Specifically, *Bank CEO Hofstede (PCI)* is the first principal component of a PCA based on the six Hofstede dimensions.

Panel B of Table 5 reports the pairwise correlations between trust and other cultural variables, measured at the country-of-origin level. This analysis is based on 19 countries of origin, fewer than the full

¹⁶ In Appendix 3, we interact *Immigrant Generation* with *Bank CEO Trust* to examine how the effect of lender trust changes across generations of immigrants. Our estimates show that lender trust negatively affects loan spread for each immigrant generation, and that this effect is stronger among earlier generations of immigrant CEOs, consistent with Pan et al. (2020).

¹⁷ This approach is commonly used to circumvent issues caused by the high correlations between individual variables. For instance, Hasan et al (2017) use a PCA to construct a county-level measure of social capital based on four distinct but highly correlated variables that capture the strength of local cooperative norms. We obtain similar results when we control for all individual Hofstede cultural indices.

sample due to missing risk-aversion data. Trust has low correlations with optimism (-0.10) and risk aversion (-0.17), both are not significant at the 5% level.

Panel C of Table 5 displays the regression results. We gradually include more cultural variables in Columns (1) to (3). The coefficients on trust remain statistically negative in all regressions, suggesting that the explanatory power of trust is not subsumed when additional cultural variables are included in the model. By contrast, the coefficients on all other cultural variables are not statistically significant at conventional levels.¹⁸

The evidence in Panel C of Table 5 gives us confidence that that our baseline findings can be explained by CEO trust and not by risk attitudes or other cultural variables. Additionally, the results in this section also suggest that the effects of a CEO's cultural attitudes manifest differently depending on the nature of the corporate decisions. For instance, while Pan et al. (2020) show that a CEO's attitudes toward risk affect major strategic decisions such as mergers and acquisitions, our results suggest that CEO risk attitudes can be linked to a micro, contract-level outcome. The implications of culture are thus context dependent. Cultural values that are demonstrably important for one set of decisions may not be relevant for another.

Additionally, Internet Appendix IA4 shows that our results are robust to the inclusion of additional control variables at the level of bank CEOs (including CEO compensation, age, and tenure, and whether the CEO is an Ivy League graduate, was born during depression years, is overconfident, and also serves as chair of the board), banks (the proportion of outside directors and the E-Index developed by Bebchuk et al. (2009)), and borrowers (county-level measures of religiosity and social capital of the borrower's headquarters location). Internet Appendix IA5 shows that our results are also robust to using one-to-one propensity-score-matching between loans originated by high-trust CEOs and loans originated by low-trust CEOs. Internet Appendix IA6 uses a methodology developed by Oster (2019) to assess the extent to which

¹⁸ Importantly, for alternative cultural variables to offer a credible alternative explanation for our findings based on trust, the variables must not only explain loan spreads but also each of the results of the mechanism test we document in Tables 6 and 7. In unreported tests, we re-estimate the split sample analyses in Tables 6 and 7 using the alternative cultural variables and find that they do not consistently explain loan spreads.

unobserved omitted variables could bias our results. We find that to explain away the entire effect of lender trust on loan spreads, selection on unobservables would need to be at least five times larger than selection on observables. This is highly unlikely as our regression specifications already include a large set of fixed effects and control variables.

Finally, in Internet Appendix IA7, we use a set-up that brings some exogenous variation to the selection of the incoming CEO by focusing on banks in our sample that merge. As a result of these mergers, borrowers from target banks experience a CEO change that is outside their immediate control. As shown in Internet Appendix IA7, when the incoming acquirer's CEO is more trusting than the outgoing target's CEO, borrowers pay lower loan spreads. This gives further confidence in the robustness of our results.

6. Economic mechanisms

This section identifies two main economic mechanisms through which trust may affect loan rates. Our results show that trust (i) boosts the perceived credibility of borrower information and (ii) mitigates contracting problems.

6.1 Perceived credibility of borrower information

The first channel through which trust could reduce borrowing costs is by boosting the credibility of information submitted by borrowers. Existing evidence confirms that trusting investors assign a lower probability to firms manipulating financial results (Bhagwat and Liu 2020; Pevzner et al. 2015). The credibility of borrower information is particularly salient for loan rates because self-serving borrowers may obfuscate firm performance to secure lending at lower loan rates. Duarte et al. (2012) highlight the importance of credibility for interest rates by showing that borrowers who appear more trustworthy pay lower rates on personal loans on a peer-to-peer lending site.

If trust boosts the perceived credibility of borrower information, we expect the effect of trust to be more salient in the subsamples of borrowers that are relatively opaque. We partition our sample based on several different proxies of borrowers' opacity: (1) borrowers with below-sample-median tangibility

(Property, plant and equipment/Assets) ratios; (2) borrowers reporting positive research and development (R&D) expenses; (3) borrowers who have not borrowed from the lead bank CEO in the past three years (applies to 49% of the loan facilities in our sample); and (4) borrowers with above-sample-median discretionary accruals. We re-estimate the regression specification in Column (5) of Table 4 for each resulting subsample of borrowers.

[Table 6 around here]

Consistent with our expectation, Table 6 indicates that CEO trust exerts a statistically significant effect on loan spreads in the subsamples of opaque borrowers. By contrast, CEO trust does not affect loan spreads in subsamples of relatively transparent borrowers. The p-values on the test of equal coefficients indicate that the coefficients on *Bank CEO Trust* are significantly different between the subsamples.

6.2 Contracting problems

Knack and Keefer (1997) show high growth and investment rates in Scandinavian countries with high levels of trust, despite local laws offering only weak protection to investors. Carlin et al. (2009) model the ability to rely on a counterparty as arising from two sources: the enforceability of the counterparty's contractual obligations and the cultural tendency of people to honor their responsibilities. This implies that trust should become more relevant when contracts are less complete and lenders have to deal with more contingencies that are unforeseeable or cannot be contracted for.

[Table 7 around here]

Our data allow us to test whether trust mitigates contracting problems. While all loan contracts in our sample are governed by US laws with consistent enforcement, our sample offers cross-sectional heterogeneity in terms of lender trust and the contractual provisions used by lenders to protect their claims. We test whether: (i) lenders with greater trust in others employ fewer contract provisions; and (ii) trust plays a salient role in reducing borrowing costs when lenders are *not* protected by formal contract provisions.

Panel A of Table 7 re-estimates our baseline specification to predict the use of contract provisions. The results show that trusting lenders are less likely to include a financial covenant requirement. Further, loans underwritten by trusting lenders are also associated with fewer financial covenants, although the effect is not statistically significant at conventional levels (p-value=0.12).

Panel B shows that trust matters in reducing borrowing costs in the absence of formal contract provisions that would otherwise protect lenders. We partition the sample according to whether loans have a financial covenant (62% of our sample) or a collateral requirement (50%). We then re-estimate the regression specification in Column (5) of Table 4 for each subsample. The coefficient estimates on *Bank CEO Trust* are significantly negative in the subsamples of loans not including a financial covenant requirement (Column (2)) or a collateral requirement (Column (4)). As expected, CEO trust does not exert a statistically significant effect in the subsamples of loans with financial covenant or collateral requirements (Columns (1) and (3)).¹⁹

7. Additional tests

7.1. CEO trust and bank outcomes

Having shown that banks with trusting CEOs charge lower interest rates, we next study the bank outcomes linked to having a trusting CEO. We analyze the effect of lender trust on a bank's loan growth, profitability, and non-performing loans. These tests also allow us to explore whether our results reflect matching between banks and CEOs based on trust. For instance, high-trust CEOs may be matched with banks that have higher growth prospects. In equilibrium, banks with higher growth prospects would be more likely to appoint a trusting CEO whose lower spreads attract new borrowers but offset any increases in loan profitability that would otherwise result from loan growth. We perform the following bank-level equation:

$$y_{i,t} = \beta_0 + \beta_1 \text{Bank CEO Trust}_{i,t} + \text{Controls}_{i,t} \mathbf{\Gamma} + \varepsilon_{i,t} \quad (2)$$

¹⁹ While the test of equal coefficients indicates that CEO trust is not significantly different between Columns (1) and (2), the results are still consistent with our hypothesis that trust matters *when* formal contract provision are absent.

where i indexes bank and t indexes years. The sample covers banks included in the DealScan database with data on CEO ancestors. $y_{i,t}$ is one of the following dependent variables: *C&I Loan Growth*, the one-year growth in commercial and industrial (C&I) loans; *Loan Book Profitability*, as interest income divided by C&I loans; and *Bad Loans*, the non-performing loans divided by C&I loans. All models include bank and state-year fixed effects. We also include a large set of control variables. First, we control for bank size using the natural logarithm of the book value of total assets. Since the size distribution of US banks is highly skewed, we also include its square term, $Asset^2$, to account for possible non-linearity between bank size and performance. Further, we control for heterogeneity in banks' balance sheets using the ratios *Deposits/Assets*, *Loans/Assets*, *Liabilities/Assets*, and *Risk-weighted Assets/Assets*. Finally, we control for bank profitability. Standard errors are double-clustered at the bank-CEO-origin and bank level.

[Table 8 around here]

The results in Table 8 indicate that CEO trust is linked to higher loan growth (Column (1)), but not to loan book profitability or bad loans (Columns (2) and (3)). This suggests equilibrium matching when the positive effect of higher loan growth on performance is offset by the lower loan spreads associated with trusting CEO. The results are consistent with CEO-bank matching based on the growth prospects of the bank and CEOs' attitudes toward trust.

7.2 CEO trust and loan performance

If trusting lenders are more likely to lend to marginal borrowers who could have been turned down by less trusting lenders, one may expect that loans underwritten by trusting lenders have a poorer ex-post performance relative to the average loan. We test this using two measures of ex-post loan performance: (i) *Borrower Default Rating*, a dummy variable that equals one if a borrower is downgraded to a default rating within the first three years of loan origination (e.g., Altman and Suggitt, 2000) and (ii) *Borrower Covenant Violations*, a dummy variable that equals one if a borrower violates covenant conditions within the first

three years of loan origination.²⁰ We focus on the early years of a loan’s life to ensure that the borrower’s characteristics still resemble those at the time of loan origination.

[Table 9 around here]

Consistent with our expectation, Column (1) of Table 9 shows that firms borrowing from trusting lenders are more likely to default. The results in Column (2) indicate a statistically insignificant relation between lender trust and borrower’s probability of violating covenant requirements.

7.3. Validation and robustness tests

Validating the trust measure. We measure CEO trust using the trust level in the CEO’s genealogical country of origin. One criticism of this proxy is that trust levels could differ between, for instance, Italians living in Italy and US-born descendants of Italian immigrants. However, this is not the case in our data. Figure IA2 in the Internet Appendix displays a strong positive correlation (0.71) between the trust level in a country (WVS data) and the trust level of US residents whose ancestors came from that country (General Social Surveys data).

To further validate our trust measure, we examine how high-trust vs. low-trust lenders revise their assessment of a counterparty’s reliability when faced with fraud by borrowers. We expect high-trust lenders to respond more strongly than low-trust lenders when borrowers act in a way that betrays their trust. Because high-trust lenders assign a higher prior probability to the borrower’s reliability compared to low-trust lenders, it has more room to fall when they downwardly revise their assessment of a counterparty’s reliability following a fraud case (see Hilary and Huang 2018).

We examine the response of high-trust vs. low-trust lenders to borrowers restating their earnings due to fraud. Data on earning restatements are obtained from the Audit Analytics “Non-Reliance Restatements” database. We focus solely on earning restatements arising due to fraud and exclude

²⁰ Data on covenant violations are obtained from Nini, Smith, and Sufi (2012) and are available on Amir Sufi’s website: <http://faculty.chicagobooth.edu/amir.sufi/>.

restatements due to clerical errors. Corresponding to the fraud data, the sample period for this analysis is 2002–2016. To test our hypothesis, we regress $\ln(\text{Spread})$ on the interaction term between *Bank CEO Trust* and *Fraudulent Restatement*, a dummy variable that equals one in the year when the borrower announces its restatement due to fraud, and zero otherwise.

Appendix 2 reports the results. The statistically positive coefficient on *Fraudulent Restatement*Bank CEO Trust* indicates that high-trust lenders impose significantly higher costs of borrowing on firms that restate their earnings compared to low-trust lenders. Incidentally, this offers an additional explanation for why it is suboptimal for some borrowers to seek loans from high-trust lenders. Since trusting CEOs take a harsher view of breaches of their trust, this may deter problematic borrowers from approaching banks with high-trust CEOs for a loan.

Persistence across immigrant generations. Nguyen et al. (2018) and Pan et al. (2020) show a gradual decline in the cultural origin effects over time following the immigration of CEOs' ancestors to the US. In light of this, we examine the persistence of the lender trust effect over immigrant generations. We regress $\ln(\text{Spread})$ on the interaction term between *Bank CEO Trust* and *Immigrant Generation*, a variable that indicates to which immigrant-generation group a CEO belongs (e.g., a value of one indicates that a CEO was born outside the US). The results reported in Appendix 3 suggest that the effect of lender trust on loan spreads is indeed significantly weaker for CEOs of later immigration generations. Therefore, our results are consistent with prior studies showing that the cultural origin effect declines over immigrant generations.

Alternative dependent variable. In Appendix 4, we use an alternative explanatory variable *Spread*, which is the all-in-spread-drawn for a loan facility. Consistent with our baseline findings, Appendix 4 indicates that our results continue to hold using *Spread*.

Data dimensionality. Are our results driven by a small set of bank CEOs who underwrite many loans? To address this concern, Appendix 5 performs aggregated loan pricing regressions at the bank-year (Panel A) and bank CEO-borrower level (Panel B). The bank-level regression uses a similar specification as in Table 8. The bank CEO-borrower level regressions include bank-borrower and borrower credit rating

fixed effects and similar control variables (aggregated at the bank CEO-borrower level) as in Table 4. Appendix 5 confirms that our results continue to hold using aggregated data.

Placebo tests using non-lead arranger banks. As a placebo test, we use the trust levels of CEOs at lenders that do not act as lead arrangers in a loan facility. Lead arrangers negotiate the terms of the loan before turning to participant lenders to underwrite part of the loan on terms previously agreed with the borrower. Therefore, we do not expect the trust levels of non-lead-bank CEOs to affect loan pricing. We collect data on non-lead-bank CEOs' countries of origin using the approach described in Section 3.2. We are able to obtain clearly identified cultural heritage data for 131 of the 164 non-lead-bank CEOs. These CEOs come from 24 different countries of origin. The results reported in Appendix 6 confirm that the trust levels of non-lead-bank CEOs do not have any significant impact on loan rates.

8. Conclusion

This paper explores the relationship between the personal values of CEOs and outcomes that are observable in the contracts issued by the organizations they lead. We show that banks with trusting CEOs issue loans at lower interest rates. This effect is statistically significant, economically meaningful, and identified within existing lender-borrower relationships and similar types of loans.

We confirm the role of CEOs in the design of loans by surveying loan officers with experience in structuring syndicated loans. More than 90% of respondents agreed that the CEO shapes the bank's overall lending strategy, and that the syndication team follows lending policies set by the CEO. Moreover, the respondents indicated that the CEO sets broad risk and return parameters on loans, which directly affect loan pricing.

Our sample of syndicated loans also shows that lenders with greater trust in others demand fewer covenant requirements, and that trust plays a salient role in reducing borrowing costs when lenders are not protected by these contract provisions. Overall, our results indicate that personal trust helps contractual counterparties overcome some of the inefficiencies created by incomplete contracts.

REFERENCES

- Acharya, V. V., Eisert, T., Eufinger, C., & Hirsch, C., 2018. Real effects of the sovereign debt crisis in Europe: Evidence from syndicated loans. *Review of Financial Studies* 31:2855-2896.
- Algan, Y., & Cahuc, P. Inherited Trust and Growth. 2010. *American Economic Review* 100: 2060-2092.
- Altman, E. I., & Suggitt, H. J. 2000. Default rates in the syndicated bank loan market: A mortality analysis. *Journal of Banking and Finance* 24: 229-253.
- Bebchuk, L., Cohen, A. & Ferrell, A. 2009. What matters in corporate governance? *Review of Financial Studies* 22:783-827.
- Bénabou, R., Tirole, J., 2003. Intrinsic and extrinsic motivation. *Review of Economic Studies* 70: 489–520.
- Bernile, G., Bhagwat, V. & Rau. P. R. 2017. What doesn't kill you will make you more risk-loving: Early-life disasters and CEO behavior. *Journal of Finance* 72:167–206.
- Berg, T., Saunders, A., Schäfer, L., & Steffen, S., 2021. Brexit and the contraction of syndicated lending. *Journal of Financial Economics*, forthcoming.
- Berg, T., Saunders, A., Steffen, S., & Streitz, D., 2017. Mind the gap: The difference between US and European loan rates. *Review of Financial Studies* 30: 948-987.
- Bhagwat, V. & Liu, X., 2020. The role of trust in information processing: Evidence from Security Analysts. *The Accounting Review* 95: 59-83
- Bodnaruk, A., & Simonov, A. 2016. Loss-averse preferences, performance, and career success of institutional investors. *Review of Financial Studies* 29: 3140-3176.
- Bottazzi, L., Da Rin, M., & Hellmann, T. F. 2016. The importance of trust for investment: Evidence from venture capital. *Review of Financial Studies* 29: 2283–2318.
- Bushman, R. M., Davidson, R. H., Dey, A., & Smith, A. 2018. Bank CEO materialism: Risk controls, culture and tail risk. *Journal of Accounting and Economics* 65: 191-220.
- Bushman, R., Gao, J., Martin, X., & Pacelli, J. 2021. The influence of loan officers on loan contract design and performance. *Journal of Accounting and Economics* 71(2-3), 101384
- Carlin, B. I., Dorobantu, F., & Viswanathan, S. 2009. Public trust, the law, and financial investment. *Journal of Financial Economics* 92: 321-341.
- Chava, S., & Roberts, M. R. 2008. How does financing impact investment? The role of debt covenants. *Journal of Finance* 63: 2085–2121.
- Custódio, C., & Metzger, D. 2013. How do CEOs matter? The effect of industry expertise on acquisition returns. *Review of Financial Studies* 26: 2008–2047.
- Costello, A. M., & Wittenberg-Moerman, R., 2011. The impact of financial reporting quality on debt contracting: Evidence from internal control weakness reports. *Journal of Accounting Research*, 49: 97-136
- Demerjian, P.R. & Owens, E.L., 2016. Measuring the probability of financial covenant violation in private debt contracts. *Journal of Accounting and Economics* 61: 433-447.
- Dittmar, A., & Duchin, R. 2016. Looking in the rearview mirror: The effect of managers' professional experience on corporate financial policy. *Review of Financial Studies* 29: 565-602.
- Duarte, J., Siegel, S., & Young, L. 2012. Trust and credit: The role of appearance in peer-to-peer lending. *Review of Financial Studies* 25: 2455-2484.
- DuPont, Q., & Karpoff, J. 2020. The trust triangle: Laws, reputation, and culture in empirical finance research. *Journal of Business Ethics* 163: 217–238.
- Ferreira, M. A., & Matos, P., 2012. Universal banks and corporate control: Evidence from the global syndicated loan market. *Review of Financial Studies*, 25: 2703-2744.
- Gabaix, X. and Landier, A., 2008. Why has CEO pay increased so much? *Quarterly Journal of Economics* 123: 49-100.
- Gallagher, M. W., Lopez, S. J., & Pressman, S. D. 2013. Optimism is universal: Exploring the presence and benefits of optimism in a representative sample of the world. *Journal of Personality* 81: 429-440.
- Giannetti, M. & Wang, T.Y., 2016. Corporate scandals and household stock market participation. *Journal of Finance*, 71(6), pp.2591-2636.

- Gompers, P. A., Mukharlyamov, V., & Xuan, Y. 2016. The cost of friendship. *Journal of Financial Economics* 119: 626-644.
- Graham, J., Harvey, C., Popadak, J., & Rajgopal, S. 2021. Corporate culture: Evidence from the field. *Working paper*
- Graham, J., Li, S., & Qiu, J. 2008. Corporate misreporting and bank loan contracting. *Journal of Financial Economics* 89: 44-61
- Guiso, L., Sapienza, P. & Zingales, L., 2015. The value of corporate culture. *Journal of Financial Economics* 117: 60-76.
- Guiso, L., Sapienza, P., & Zingales, L. 2008. Trusting the stock markets. *Journal of Finance* 63: 2557–2600
- Hasan, I., Hoi, C.K., Wu Q., & Zhang, W. 2017. Social capital and debt contracting: Evidence from bank loans and public bonds. *Journal of Financial and Quantitative Analysis* 52: 1017-1047.
- Heckman, J. J. 1979. Sample selection bias as a specification error. *Econometrica* 47: 153-161.
- Hilary, G. & Huang, S. 2018. Trust and contracting. *Working Paper*.
- Hofstede, G., Hofstede, G. J. & Minkov, M. 2010. Cultures and organizations: software of the mind, 3rd edition. New York: McGraw-Hill.
- Jiang, D., & Lim, S.S. 2018. Trust and household debt. *Review of Finance* 22: 783-812
- Knack S, & Keefer, S. 1997. Does social capital have an economic payoff? A cross-country investigation. *Quarterly Journal of Economics* 112:1251-1288
- Kalmijn, M., 1999, Father involvement in childrearing and the perceived stability of marriage, *Journal of Marriage and Family*, 61: 409–421.
- La Porta, R., Lopez-de-Silanes, F., Shleifer, A. & Vishny, R.W., 1997. Trust in large organizations. *American Economic Review* 87, 333-338.
- Lesmeister, S., Limbach, P. & Goergen, M., 2019. Trust and shareholder voting, European Corporate Governance Institute Working Paper No. 569/2018.
- Lim, J., Minton, B.A. and Weisbach, M.S., 2014. Syndicated loan spreads and the composition of the syndicate. *Journal of Financial Economics* 111: 45-69.
- Lin, C. & Liu, X. 2018. CEO saving culture and corporate cash holdings. *Working paper*
- Lin, C., Ma, Y., Malatesta, P., & Xuan, Y., 2011. Ownership Structure and the Cost of Corporate Borrowing, *Journal of Financial Economics* 100: 1-23.
- Lin, C., Ma, Y., Malatesta, P., & Xuan, Y., 2012. Corporate ownership structure and bank loan syndicate structure. *Journal of Financial Economics* 104: 1-22.
- Liu, X. 2016. Corruption Culture and Corporate Misconduct. *Journal of Financial Economics* 122: 307-327.
- McCahery, J. A., Sautner, Z., & Starks, L. T. 2016. Behind the scenes: The corporate governance preferences of institutional investors. *Journal of Finance* 71: 2905-2932.
- Murfin, J., 2012. The supply-side determinants of loan contract strictness. *Journal of Finance*, 67: 1565-1601.
- Nguyen, D. D., Hagendorff, J., & Eshraghi, A. 2018. Does a CEO's cultural heritage affect performance under competitive pressure? *Review of Financial Studies* 31: 97–141
- Nini, G., Smith, D. C., & Sufi, A. 2012. Creditor control rights, corporate governance, and firm value. *Review of Financial Studies* 25: 1713-1761.
- Oster, E. 2019. Unobservable selection and coefficient stability: Theory and evidence. *Journal of Business and Economic Statistics* 37: 187-204.
- Pan, Y., 2017. The determinants and impact of executive-firm matches. *Management Science* 63: 185-200.
- Pan, Y., Siegel, S. & Wang, T.Y. 2017. Corporate risk culture. *Journal of Financial and Quantitative Analysis*, 52(6): 2327-2367.
- Pan, Y., Siegel, S. & Wang, T.Y. 2020. The cultural origin of CEOs' attitudes toward uncertainty: Evidence from corporate acquisitions. *Review of Financial Studies* 33(7): 2977-3030.
- Pevzner, M., Xie, F., & Xin, X. 2015. When firms talk, do investors listen? The role of trust in stock market reactions to corporate earnings announcements. *Journal of Financial Economics* 117: 190-223

- Rieger, M. O., Wang, M., & Hens, T. 2015. Risk preferences around the world. *Management Science* 61: 637-648.
- Schwert, M. 2018. Bank capital and lending relationships. *Journal of Finance* 72: 787-830.
- Sufi, A., 2007. Information asymmetry and financing arrangements: Evidence from syndicated loans. *Journal of Finance*, 62: 629-668.
- Williamson, O.E. 1993. Calculativeness, trust, and economic organization. *The Journal of Laws and Economics* 36(1): 453-486
- Xie, F., Zhang, B. & Zhang, W. 2021. Trust, incomplete contracting, and corporate innovation. *Management Science*, forthcoming

Table 1: The ancestry of bank CEOs

Panel A classifies our sample CEOs according to immigrant generation. We search public records via ancestry.com to identify how many generations ago a CEO's ancestors emigrated to the US, e.g., *Generation 1* are first-generation CEOs. Panel B lists the countries from which a CEO's ancestors emigrated from for Generation 1 to Generation 3 CEOs.

	Number	Share of total
<i>Panel A: CEO's immigrant generation</i>		
Generation 1	2	
Generation 2	10	
Generation 3	28	
Generation 1 – 3	40	45.50%
Generation 4+	48	54.50%
Total	88	100.00%
<i>Panel B: CEO's ancestral country of origin (for Generation 1 – 3)</i>		
Germany	8	20.00%
Ireland	5	12.50%
Scotland	4	10.00%
Poland	4	10.00%
England	2	5.00%
Canada	2	5.00%
Norway	2	5.00%
All others	13	32.50%
Total	40	100.00%

Table 2: Survey results

This table shows the results of a survey of 92 loan officers with experience in structuring syndicated loans at US banks. The survey questions are shortened questions for ease of display. The precise wording of the survey questions is provided in Internet Appendix IA1. Panel A reports statistics on the survey participants. Panels B and C summarize the responses to the main questions.

Panel A: The survey respondents' experience and roles

	N	Mean	Median	St. Dev.
More than five years of experience in credit syndication (0/1)	92	0.728	1.000	0.447
Experience in at least two banks (0/1)	92	0.804	1.000	0.399
Currently in credit syndication (0/1)	92	0.478	0.000	0.502
Size of most recent bank above \$100 billion (0/1)	91	0.560	1.000	0.499

Panel B: Do CEOs affect lending strategy?

	N	% Agree	Mean	St. Dev.
1. CEOs take an interest in the bank's lending strategy	92	99%	5.315	0.725
2. CEOs influence the bank's lending strategy	92	91%	4.761	1.142
3. The syndication team follows the bank's lending strategy	92	97%	5.022	0.889

Panel C: Why and how do CEOs affect loan outcomes?

	Frequency	Percentage
4. Why does the syndication team follow the lending strategy?		
Agreement with the strategy	57	31%
Improved career prospects for loan officers	19	10%
The senior leadership is responsible for the strategy	55	30%
Increased pay for loan officers	13	7%
Loan officers avoid being fired	26	14%
Other reasons	16	8%
5. How does the CEO influence decision-making in syndications?		
Communications targeted at the entire bank	33	14%
Communications targeted at the corporate banking division	62	25%
Communications targeted at the loan syndication team	63	26%
Divisional performance reviews	33	14%
CEOs have the final say on selected loans	25	10%
CEOs build or maintain relationships with selected borrowers	19	8%
Other reasons	8	3%
6. How frequently do CEOs communicate with the syndication team?		
Every quarter	51	55%
Every six months	10	11%
Once a year	10	11%
Less than once a year	21	23%

Table 3: Summary statistics

This table reports summary statistics for loan, borrower, bank, and bank CEO characteristics. Definitions are available in Appendix 1.

Variables	N	Mean	St. Dev.	P1	p50	p99
<i>Loan characteristics</i>						
Spread (basis points over LIBOR)	18,454	182.117	124.967	16.000	162.500	600.000
Ln(Spread)	18,454	4.941	0.809	2.833	5.097	6.399
Financial Covenant (dummy)	18,454	0.622	0.485	0.000	1.000	1.000
Ln(Financial Covenants+1)	18,454	0.706	0.598	0	0.693	1.792
Refinancing	18,454	0.678	0.467	0.000	1.000	1.000
Secured Loan	18,454	0.495	0.500	0.000	0.000	1.000
Loan Maturity (months)	18,454	48.110	22.870	6.000	61.000	97.000
Ln(Loan Maturity)	18,454	3.703	0.665	1.792	4.111	4.575
Base is Prime	18,454	0.030	0.172	0.000	0.000	1.000
Sole Lender	18,454	0.043	0.203	0.000	0.000	1.000
Loan Amount (\$M)	18,454	467.50	996.60	2.00	200.00	4000.00
Ln(Loan Amount)	18,454	18.940	1.609	14.510	19.110	22.110
Relationship Borrower	18,454	0.515	0.500	0.000	1.000	1.000
<i>Borrower characteristics</i>						
Borrower Size	18,454	7.356	1.843	2.972	7.387	11.290
Borrower ROA	18,454	0.118	0.101	-0.207	0.119	0.331
Borrower Tangibility	18,454	0.316	0.236	0.018	0.252	0.900
Borrower R&D	18,454	0.017	0.047	0.000	0.000	0.207
Borrower Current Ratio	18,454	1.738	1.048	0.316	1.531	5.488
Borrower Leverage	18,454	0.650	0.275	0.221	0.627	1.538
Borrower Abnormal Accruals	17,479	0.224	0.793	0.001	0.063	2.888
<i>Bank CEO characteristics (at CEO level)</i>						
Bank CEO Trust	88	0.367	0.097	0.186	0.393	0.750
Gen1-3 CEO	88	0.443	0.500	0.000	0.000	1.000
Bank CEO Optimism	88	0.680	0.268	0.200	0.670	1.890
Bank CEO Risk Aversion	86	0.758	0.061	0.440	0.780	0.880
Bank CEO Long-term Orientation	88	0.390	0.199	0.240	0.260	0.860
Bank CEO Individualism	88	0.797	0.171	0.220	0.910	0.910
Bank CEO Uncertainty Avoidance	88	0.522	0.170	0.230	0.460	1.000
Bank CEO Masculinity	88	0.598	0.127	0.080	0.620	0.880
Bank CEO Power Distance	88	0.425	0.137	0.110	0.400	0.930
Bank CEO Indulgence	88	0.596	0.154	0.140	0.680	0.830
Bank CEO Hofstede (PC1)	88	-1.107	1.345	-2.621	-1.908	3.623
<i>Bank characteristics (at bank-year level)</i>						
Assets	850	17.160	1.725	13.900	16.880	21.480
Leverage	850	0.906	0.028	0.809	0.911	0.948
Lending	850	0.603	0.166	0.056	0.652	0.835
Deposits	850	0.686	0.128	0.107	0.698	0.887
RWA/Total Assets	850	0.751	0.140	0.390	0.757	1.099
ROA	850	1.094	0.858	-0.384	1.114	3.002
Bad Loans	705	0.108	0.294	0.003	0.048	0.786
Loan Book Profitability	850	1.859	15.210	0.105	0.390	30.680
C&I Loan Growth	826	0.128	0.250	-0.304	0.094	1.275

Table 4: Bank CEO trust and loan spreads

This table examines the relation between bank CEO trust and $\ln(\text{Spread})$, the natural logarithm of the all-in spread drawn in basis points. Standard errors are double-clustered at the bank CEO origin and the bank level. The sample covers the period 1992–2016. Definitions of all variables are in Appendix 1. *T-Statistics* are reported in brackets. ***, **, and * indicate significance at the 1, 5 and 10% level, respectively.

Dependent variable: $\ln(\text{Spread})$	(1)	(2)	(3)	(4)	(5)
Bank CEO Trust	-0.299** [-2.298]	-0.299** [-2.313]	-0.210*** [-3.070]	-0.170** [-2.407]	-0.156** [-2.358]
Bank Size	0.060** [2.295]	0.066*** [3.027]	-0.114** [-2.343]	-0.095** [-2.418]	-0.073** [-2.092]
Borrower Size	-	-	-0.084*** [-3.412]	-0.037 [-1.659]	-0.046** [-2.284]
Borrower ROA	-	-	-0.521 [-1.278]	-0.465 [-1.305]	-0.411 [-1.241]
Borrower Tangibility	-	-	-0.421*** [-4.057]	-0.358** [-2.825]	-0.300** [-2.569]
Borrower R&D	-	-	-0.447 [-1.448]	-0.284 [-1.031]	-0.271 [-1.137]
Borrower Current Ratio	-	-	-0.01 [-1.266]	-0.012* [-1.951]	-0.011* [-1.881]
Borrower Leverage	-	-	0.347*** [5.504]	0.328*** [5.294]	0.295*** [5.792]
Financial Covenant (dummy)	0.003 [0.038]	-0.003 [-0.031]	0.007 [0.611]	0.017* [1.750]	0.004 [0.373]
Refinancing	-0.114* [-1.962]	-0.118 [-1.691]	-0.058*** [-3.937]	-0.062*** [-4.737]	-0.029*** [-3.104]
Secured Loan	-0.047 [-0.729]	-0.05 [-0.692]	0.275*** [10.123]	0.236*** [10.669]	0.213*** [8.896]
$\ln(\text{Loan Maturity})$	0.011 [1.038]	0.006 [0.549]	0.026*** [2.886]	0.016* [1.804]	-0.005 [-0.752]
Base is Prime	0.447* [2.018]	0.453 [1.286]	0.583*** [7.723]	0.604*** [8.044]	0.602*** [7.987]
Sole Lender	0.05 [0.901]	0.043 [0.699]	0.064 [1.183]	0.063 [1.167]	0.059 [1.131]
$\ln(\text{Loan Amount})$	-0.015** [-2.472]	-0.016 [-1.694]	-0.043*** [-10.942]	-0.038*** [-8.334]	-0.044*** [-9.943]
Relationship Borrower	-0.021 [-1.715]	-0.020 [-1.220]	0.000 [-0.034]	-0.003 [-0.436]	0.005 [0.869]
Quarter-year fixed effects	No	No	Yes	Yes	Yes
Borrower credit rating fixed effects	No	No	No	Yes	Yes
Loan purpose fixed effects	No	Yes	No	No	Yes
Borrower-quarter-year fixed effects	Yes	Yes	No	No	No
Bank fixed effects	Yes	Yes	No	No	No
Bank-borrower fixed effects	No	No	Yes	Yes	Yes
Observations	18,454	18,454	18,454	18,454	18,454
Adjusted R-squared	0.940	0.940	0.803	0.816	0.823

Table 5: Controlling for omitted cultural variables

This table controls for additional cultural variables. Panel A focuses on CEOs with relatively recent immigrant heritage. We restrict the sample to loans originated by banks led by Gen1-3 CEOs (Column (1)) and control for *Immigrant Generation*, which indicates the CEO’s generation of immigrants (Column (2)). Panel B reports the pairwise correlations between the cultural variables measured at the country-of-origin level. Bold coefficients indicate significance at the 5% level. Panel C reports the regression results that control for other cultural-related variables. The number of observations in Columns (2)-(3) is lower than those in Column (1) due to missing risk-aversion data. *Bank CEO Optimism* is obtained from Gallagher et al (2013), which is the difference between individuals’ expectations for the future and their current evaluations of life satisfaction in a CEO’s country of origin. *Bank CEO Risk Aversion* captures the relative risk premium in gains and is obtained from Reiger et al (2015). *Bank CEO Hofstede PCI* is the first principal component of the six Hofstede dimensions *Long-term Orientation*, *Uncertainty Avoidance*, *Individualism*, *Masculinity*, *Power Distance*, and *Indulgence*. The dependent variable is *Ln(Spread)*, the natural logarithm of the all-in spread drawn in basis points. Standard errors are double clustered at the bank CEO origin and the bank level. The sample covers the period 1992–2016. Control variables are identical to those in Table 4 and are collapsed for brevity. Definitions of all variables are in Appendix 1. *t-Statistics* are reported in brackets. ***, **, and * indicate significance at the 1, 5 and 10% level, respectively.

Panel A: CEOs of more recent immigrant heritage

Dependent variable: Ln(Spread)		
	(1)	(2)
Bank CEO Trust	-1.521** [-2.445]	-1.501** [-2.551]
Immigrant Generation		-0.026 [-0.985]
Control variables	Yes	Yes
Quarter-year fixed effects	Yes	Yes
Borrower credit rating fixed effects	Yes	Yes
Loan purpose fixed effects	Yes	Yes
Bank-borrower fixed effects	Yes	Yes
Observations	8,842	8,842
Adjusted R-squared	0.837	0.837

Panel B: Pairwise correlations trust and other cultural dimensions (N=19)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(1)
(1) Bank CEO Trust	1.000									
(2) Bank CEO Optimism	-0.100	1.000								
(3) Bank CEO Risk Aversion	-0.171	-0.094	1.000							
(4) Bank CEO Long-term Orientation	-0.371	-0.089	-0.075	1.000						
(5) Bank CEO Individualism	0.148	-0.425	0.137	-0.312	1.000					
(6) Bank CEO Uncertainty Avoidance	-0.604	-0.368	0.247	0.407	-0.311	1.000				
(7) Bank CEO Masculinity	-0.620	0.051	0.392	0.065	0.033	0.194	1.000			
(8) Bank CEO Power distance	-0.560	0.551	0.110	0.320	-0.574	0.456	0.011	1.000		
(9) Bank CEO Indulgence	0.546	0.103	-0.474	-0.425	0.245	-0.701	-0.179	-0.578	1.000	
(10) Bank CEO Hofstede (PC1)	-0.657	0.097	0.223	0.638	-0.618	0.803	0.187	0.790	-0.829	1.000

Panel C: Controlling for other cultural dimensions

Dependent variable: Ln(Spread)	(1)	(2)	(3)
Bank CEO Trust	-0.264*** [-3.131]	-0.210** [-2.425]	-1.398** [-2.630]
Bank CEO Optimism	0.053 [1.637]	0.042 [1.143]	0.008 [0.229]
Bank CEO Risk Aversion		-0.059 [-0.566]	0.118 [1.453]
Bank CEO Hofstede PC1			-0.063* [-2.072]
Control variables	Yes	Yes	Yes
Quarter-year fixed effects	Yes	Yes	Yes
Borrower credit rating fixed effects	Yes	Yes	Yes
Loan purpose fixed effects	Yes	Yes	Yes
Bank-borrower fixed effects	Yes	Yes	Yes
Observations	18,454	18,281	18,281
Adjusted R-squared	0.823	0.823	0.824

Table 6: Trust boosts the perceived credibility of borrower information

This table splits the sample based on the borrower's opacity by: *Tangibility* (PPE/Assets) by the sample median (Columns (1) and (2)), positive *R&D* expenditure (Columns (3) and (4)), whether the borrower borrowed from the same lender CEO within the past three years (Columns (5) and (6)), and *Abnormal Accruals* by the sample median (Columns (7) and (8)). The dependent variable is *Ln(Spread)*, the natural logarithm of the all-in spread drawn in basis points. Standard errors are double-clustered at the bank CEO origin and the bank level. The sample covers the period 1992–2016. Control variables are identical to those in Table 4 and are collapsed for brevity. Definitions of all variables are in Appendix 1. *t-Statistics* are reported in brackets. ***, **, and * indicate significance at the 1, 5 and 10% level, respectively.

Dependent variable: Ln(Spread)								
	Tangibility High	Tangibility Low	R&D =0	R&D >0	Relationship Borrower=1	Relationship Borrower =0	Abnormal Accruals Low	Abnormal Accruals High
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Bank CEO Trust	0.041 [0.264]	-0.369*** [-5.155]	0.078 [1.031]	-0.484*** [-6.332]	-0.097 [-1.179]	-0.722*** [-5.262]	-0.043 [-0.538]	-0.315** [-2.571]
Control variables	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Quarter-year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Borrower CR fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Loan purpose fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Bank-borrower fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Test of equal coefficients	<i>p</i> -value=0.014**		<i>p</i> -value=0.000***		<i>p</i> -value=0.002***		<i>p</i> -value=0.014**	
Observations	9,227	9,227	11,462	6,992	9,513	8,941	8,739	8,740
Adjusted R-squared	0.831	0.831	0.810	0.850	0.850	0.842	0.856	0.823

Table 7: Trust mitigates contracting problems

Panel A uses bank CEO trust to predict non-price loan terms. The dependent variables are *Financial Covenant* (dummy), a dummy variable that equals one if the loan has a financial covenant requirement (Column (1)), $\ln(\text{Financial Covenants}+1)$, the natural logarithm of one plus the number of financial covenants on a loan (Column (2)), and *Secured Loan* is a dummy that equals one if the loan has a collateral requirement (Column (3)). Panel B splits the sample based on whether the borrower is required to meet at least one financial covenant condition (Columns (1) and (2)) and whether the borrower is asked to offer collateral to secure the loan (Columns (3) and (4)). The dependent variable is $\ln(\text{Spread})$, the natural logarithm of the all-in spread drawn in basis points. Standard errors are double-clustered at the bank CEO origin and the bank level. The sample covers the period 1992–2016. Control variables in Panel B are identical to those in Table 4 and are collapsed for brevity. Definitions of all variables are in Appendix 1. *t*-Statistics are reported in brackets. ***, **, and * indicate significance at the 1, 5 and 10% level, respectively.

Panel A: Lender trust predicts contract provisions			
Dependent variables:	Financial Covenant (dummy)	Ln(Financial Covenants+1)	Secured Loan
	(1)	(2)	(3)
Bank CEO Trust	-0.203** [-2.193]	-0.210 [-1.612]	0.136 [1.697]
Bank Size	-0.079** [-2.111]	-0.088* [-1.975]	-0.008 [-0.773]
Borrower Size	0.017 [1.324]	0.024 [1.580]	-0.041** [-2.191]
Borrower ROA	0.079* [1.957]	-0.005 [-0.084]	-0.223 [-1.236]
Borrower Tangibility	0.159* [1.943]	0.114 [1.246]	-0.104 [-1.531]
Borrower R&D	-0.120 [-0.377]	-0.282 [-0.667]	0.239* [2.032]
Borrower Current Ratio	0.004 [1.383]	0.014** [2.747]	-0.023** [-2.374]
Borrower Leverage	-0.063* [-2.060]	-0.08 [-1.569]	0.138*** [7.207]
Financial Covenant (dummy)	-	-	0.178*** [12.633]
Refinancing	0.258*** [10.816]	0.293*** [11.694]	0.061*** [5.590]
Secured Loan	0.229*** [14.409]	0.325*** [22.566]	-
Ln(Loan Maturity)	0.031*** [6.560]	0.038*** [4.553]	0.034*** [5.898]
Base is Prime	-0.093*** [-3.278]	-0.131*** [-3.821]	0.064** [2.532]
Sole Lender	-0.019 [-0.839]	-0.060* [-1.965]	0.01 [0.520]
Ln(Loan Amount)	0.012*** [3.363]	0.011** [2.464]	-0.011*** [-4.615]
Relationship Borrower	-0.046*** [-5.513]	-0.044*** [-3.828]	0.006 [1.360]
Control variables	Yes	Yes	Yes
Quarter-year fixed effects	Yes	Yes	Yes
Borrower CR fixed effects	Yes	Yes	Yes
Loan purpose fixed effects	Yes	Yes	Yes
Bank-borrower fixed effects	Yes	Yes	Yes
Observations	18,454	18,454	18,454
Adjusted R-squared	0.558	0.611	0.678

Panel B: The effects of lender trust on spreads under formal contract provisions

Dependent variable: Ln(Spread)				
	Financial Covenants ≥ 1	Financial Covenants =0	Collateral =1	Collateral =0
	(1)	(2)	(3)	(4)
Bank CEO Trust	-0.023 [-0.285]	-0.561*** [-3.534]	-0.010 [-0.061]	-0.238** [-2.667]
Control variables	Yes	Yes	Yes	Yes
Quarter-year fixed effects	Yes	Yes	Yes	Yes
Borrower CR fixed effects	Yes	Yes	Yes	Yes
Loan purpose fixed effects	Yes	Yes	Yes	Yes
Bank-borrower fixed effects	Yes	Yes	Yes	Yes
Test of equal coefficients	p -value=0.237		p -value=0.037**	
Observations	11,486	6,968	9,141	9,313
Adjusted R-squared	0.818	0.866	0.689	0.825

Table 8: Lender trust and bank outcomes

This table examines the effect of CEO trust on the ex-post performance of banks. The dependent variables are *C&I Loan Growth*, one-year growth in Commercial and Industrial (C&I) loans (Column (1)), *Loan Book Profitability*, interest income divided by C&I loans (Column (2)), and *Bad Loans*, non-performing loans divided by C&I loans (Column (3)). Standard errors are double-clustered at the bank CEO origin and the bank level. The sample covers the period 1992–2016. Definitions of all variables are in Appendix 1. *t-Statistics* are reported in brackets. ***, **, and * indicate significance at the 1, 5 and 10% level, respectively.

Dependent variables:	C&I Loan Growth	Loan Book Profitability	Bad Loans
	(1)	(2)	(3)
Bank CEO Trust	0.613** [2.138]	0.120 [0.124]	0.210 [0.891]
Assets	-0.013 [-0.062]	0.546 [0.512]	-0.424 [-1.373]
Assets ²	0.007 [1.091]	-0.016 [-0.463]	0.013 [1.467]
Leverage	-0.174 [-0.096]	-4.657 [-1.188]	-0.644 [-1.054]
Lending	0.083 [0.152]	-0.821 [-0.804]	0.158 [0.918]
Deposits	0.524 [1.216]	1.030 [0.780]	0.072 [0.483]
RWA/Total Assets	0.070 [0.152]	-2.045 [-1.256]	-0.418 [-1.625]
ROA	-0.031 [-1.171]	0.063 [1.101]	-0.004 [-0.374]
Bank fixed effects	Yes	Yes	Yes
State-year fixed effects	Yes	Yes	Yes
Observations	826	850	705
Adjusted R-squared	0.256	0.996	0.909

Table 9: Lender trust and ex-post loan outcomes

This table examines the effect of bank CEO trust on ex-post loan outcomes. The dependent variables are *Borrower Default Rating*, a dummy variable that equals one if a borrower is downgraded to a default rating within the first three years of loan origination (Column (1)) and *Borrower Covenant Violations*, a dummy variable that equals one if a borrower violates covenant conditions within the first three years of loan origination (Column (2)). Control variables are identical to those in Table 4 and are collapsed for brevity. Definitions of all variables are in Appendix 1. *t-Statistics* are reported in brackets. ***, **, and * indicate significance at the 1, 5 and 10% level, respectively.

Dependent variables:	Borrower Default Rating	Borrower Covenant Violations
	(1)	(2)
Bank CEO Trust	0.030*** [3.329]	-0.020 [-0.303]
Control variables	Yes	Yes
Quarter-year fixed effects	Yes	Yes
Borrower CR fixed effects	Yes	Yes
Loan purpose fixed effects	Yes	Yes
Bank-borrower fixed effects	Yes	Yes
Observations	7,241	8,320
Adjusted R-squared	0.775	0.681

Appendix 1: Variable definitions

Variable	Definition	Source
Main explanatory variables		
Bank CEO Trust	The average response in the CEO's genealogical country of origin to the following question in the World Values Surveys (WVS) and European Values Surveys (EVS): " <i>Generally speaking, would you say most people can be trusted or that you need to be very careful when dealing with people?</i> "	Ancestry.com
Other lender CEO's cultural generations and immigrant characteristics		
Gen1-3	A dummy variable that equals one if the CEO is an immigrant, or a child or grandchild of immigrants	Ancestry.com
Immigrant Generation	A variable that indicates to which immigrant-generation group a CEO belongs (e.g., a value of one indicates that a CEO was born outside the US).	Ancestry.com
Bank CEO Optimism	The difference between individuals' expectations for the future and their current evaluations of life satisfaction in a CEO's country of origin.	Gallagher et al. (2013)
Bank CEO Risk Aversion	The relative risk premium in gains. It is standardized to have a mean of zero and a standard deviation of one.	Reiger et al (2015)
Bank CEO Long-term Orientation	Long-term origination index in the CEO's genealogical country of origin.	
Bank CEO Individualism	Individualism index in the CEO's genealogical country of origin	
Bank CEO Uncertainty Avoidance	Uncertainty Avoidance index in the CEO's genealogical country of origin.	Geert Hofstede's website
Bank CEO Masculinity	Masculinity index in the CEO's genealogical country of origin.	
Bank CEO Power Distance	Power distance index in the CEO's genealogical country of origin	
Bank CEO Indulgence	Indulgence index in the CEO's genealogical country of origin.	
Bank CEO Hofstede PC1	The first principal component of the six Hofstede dimensions of Long-term Orientation, Uncertainty Avoidance, Individualism, Masculinity, Power Distance, and Indulgence.	
Bank characteristics		
Bank Size	Natural logarithm of bank total assets (BHCK2170)	FR Y-9C
Leverage	Book value of total liabilities divided by book value of total assets	FR Y-9C
Lending	Total loans (BHCK2122) divided by total assets	FR Y-9C
Deposits	Total deposits (BHDM6631+BHDM6636+BHFN6631+BHFN6636) divided by total assets	FR Y-9C
RWA/Total Assets	Risk-weighted assets (BHCKA223) divided by total assets	FR Y-9C
ROA	Earnings before interest and tax (BHCK4300) divided by book value of total assets	FR Y-9C
C&I Loan Growth	The percentage change in Commercial and Industrial (C&I) loans (BHDM1766) relative to the prior year	FR Y-9C
Bad Loans	Non-performing loans (BHCK5525 + BHCK5526) divided by C&I loans	FR Y-9C
Loan Book Profitability	Interest Income (BHCK4107) divided by C&I loans	FR Y-9C
Borrower characteristics		
Borrower Size	Natural logarithm of total assets	Compustat
Borrower ROA	Earnings before interest and taxes (EBIT) divided by book value of total assets	Compustat
Borrower Tangibility	Property, Plant and Equipment (PPE) divided by total assets	
Borrower Current Ratio	Current assets divided by current liabilities	Compustat
Borrower Leverage	Book value of liabilities divided by book value of total assets	Compustat

Borrower R&D	Research and development expenditures scaled by total assets.	Compustat
Borrower Abnormal Accruals	Absolute value of the residuals from the regression of total accruals on change in revenue and value of property, plant, and equipment (Jones, 1991). The dependent variable and all regressors are scaled by total assets.	Compustat
Borrower Fraudulent Restatement	A dummy variable that equals one if the borrower announced an earning restatement that arises from fraud in the past 12 months	AuditAnalytics
Borrower Default Rating	A dummy variable that equals one if a borrower is downgraded to a default rating within the first three years of loan origination.	Compustat
Borrower Covenant Violations	A dummy variable that equals one if a borrower violates covenant conditions within the first three years of loan origination	Amir Sufi's website
Syndicate loan characteristics		
Ln(Spread)	The natural logarithm of the drawn-all-in spreads, which is the coupon spread over LIBOR rate on the drawn amount plus the annual rate.	DealScan
Financial Covenant (dummy)	A dummy variable that equals one if the loan facility has a financial covenant requirement	DealScan
Ln(Financial Covenants+1)	The natural logarithm of one plus the number of financial covenants on a loan	DealScan
Refinancing	A dummy variable that equals one if the loan refinances a previous loan	DealScan
Secured Loan	A dummy variable that equals one if the loan facility is secured	DealScan
Ln(Loan Maturity)	The natural logarithm of the number of months between the loan origination date and loan maturity date.	DealScan
Base is Prime	A dummy variable that equals one if the base rate for a loan is the prime rate rather than LIBOR	DealScan
Sole Lender	A dummy variable that equals one if the loan facility only has one lender	DealScan
Ln(Loan Amount)	The natural logarithm of loan amount	DealScan
Relationship Lender	A dummy variable that equals one if the borrower borrows from the same lead bank's CEO within the last three years	DealScan

Appendix 2: Breaches of trust

This appendix examines the response of lenders to borrowers restating their earnings as a result of fraud. The dependent variable is $\ln(\text{Spread})$, the natural logarithm of the all-in spread drawn in basis points for a loan a borrower obtains in year t . *Borrower Fraudulent Restatement* is a dummy variable that equals one if the borrower announced an earning restatement that arises from fraud in year t . Standard errors are double-clustered at the bank CEO origin and the bank level. The sample covers the period 1992–2016. Control variables are identical to those in Table 4 and are collapsed for brevity. Definitions of all variables are in Appendix 1. *t-Statistics* are reported in brackets. ***, **, and * indicate significance at the 1, 5 and 10% level, respectively.

Dependent variable: Ln(Spread)	(1)	(2)	(3)
Borrower Fraudulent Restatement*Bank CEO Trust	1.451*** [3.148]	1.050*** [3.461]	0.726** [2.866]
Bank CEO Trust	-0.385*** [-4.088]	-0.322** [-2.372]	-0.268* [-1.795]
Borrower Fraudulent Restatement	-0.259 [-1.364]	-0.177 [-1.682]	-0.068 [-0.753]
Control variables	Yes	Yes	Yes
Quarter-year fixed effects	Yes	Yes	Yes
Borrower credit rating fixed effects	No	Yes	Yes
Loan purpose fixed effects	No	No	Yes
Bank-borrower fixed effects	Yes	Yes	Yes
Observations	10,942	10,942	10,942
Adjusted R-squared	0.807	0.819	0.828

Appendix 3: CEO's generation of immigrants

This appendix examines whether the lender trust effect varies with the CEO's generation of immigrations. The dependent variable is $\ln(\text{Spread})$, the natural logarithm of the all-in spread drawn in basis points for a loan a borrower obtains in year t . *Immigrant Generation* is a variable that indicates to which immigrant-generation group a CEO belongs (e.g., a value of one indicates that a CEO was born outside the US). Standard errors are double-clustered at the bank CEO origin and the bank level. The sample covers the period 1992–2016. Control variables are identical to those in Table 4 and are collapsed for brevity. Definitions of all variables are in Appendix 1. *t-Statistics* are reported in brackets. ***, **, and * indicate significance at the 1, 5 and 10% level, respectively.

Dependent variable: Ln(Spread)			
	(1)	(2)	(3)
Immigrant Generation*Bank CEO Trust	0.796*** [6.195]	0.612*** [4.095]	0.472*** [3.328]
Bank CEO Trust	-2.966*** [-6.944]	-2.315*** [-3.938]	-1.889*** [-3.241]
Immigrant Generation	-0.220*** [-5.183]	-0.165*** [-4.294]	-0.110*** [-3.451]
Control variables	Yes	Yes	Yes
Quarter-year fixed effects	Yes	Yes	Yes
Borrower credit rating fixed effects	No	Yes	Yes
Loan purpose fixed effects	No	No	Yes
Bank-borrower fixed effects	Yes	Yes	Yes
Observations	18,454	18,454	18,454
Adjusted R-squared	0.804	0.816	0.824

Appendix 4: CEO trust and loan spread

This appendix examines the relation between bank CEO trust and loan spreads. The dependent variable is *Spread*, the all-in spread drawn in basis points for a loan a borrower obtains in year t . Standard errors are double-clustered at the bank CEO origin and the bank level. The sample covers the period 1992–2016. Control variables are identical to those in Table 4 and are collapsed for brevity. Definitions of all variables are in Appendix 1. *t-Statistics* are reported in brackets. ***, **, and * indicate significance at the 1, 5 and 10% level, respectively.

Dependent variable: Spread	(1)	(2)	(3)
Bank CEO Trust	-29.617** [-2.290]	-28.797** [-2.400]	-25.298** [-2.319]
Control variables	Yes	Yes	Yes
Quarter-year fixed effects	Yes	Yes	Yes
Borrower credit rating fixed effects	No	Yes	Yes
Loan purpose fixed effects	No	No	Yes
Bank-borrower fixed effects	Yes	Yes	Yes
Observations	18,454	18,454	18,454
Adjusted R-squared	0.697	0.709	0.717

Appendix 5: Aggregated loan pricing analyses

This appendix examines the relation between bank CEO trust and loan spreads using data aggregated at the bank-year level (Panel A) and bank CEO-borrower level (Panel B). The dependent variable is $\ln(\text{Spread})$, the natural logarithm of the all-in spread drawn in basis points for a loan a borrower obtains in year t . The control variables in Panel B are identical to those in Table 4, aggregated at the bank CEO-borrower level. Standard errors are double-clustered at the bank CEO origin and the bank level. The sample covers the period 1992–2016. Definitions of all variables are in Appendix 1. t -Statistics are reported in brackets. ***, **, and * indicate significance at the 1, 5 and 10% level, respectively.

Panel A: Bank-year level

Dependent variables: $\ln(\text{Spread})$

	(1)
Bank CEO Trust	-1.414**
	[-2.214]
Assets	-0.366*
	[-2.009]
Assets ²	0.008
	[1.525]
Leverage	1.958
	[0.499]
Lending	0.209
	[0.476]
Deposits	0.116
	[0.167]
RWA/Total Assets	-0.395
	[-1.347]
ROA	0.048
	[0.676]
Bank fixed effects	Yes
State-year fixed effects	Yes
Observations	328
Adjusted R-squared	0.142

Panel B: Bank CEO-borrower level

Dependent variables: $\ln(\text{Spread})$

	(1)
Bank CEO Trust	-0.309***
	[-2.858]
Control variables	Yes
Bank-borrower fixed effects	Yes
Borrower credit rating fixed effects	Yes
Observations	7,854
Adjusted R-squared	0.668

Appendix 6: CEO trust of non-lead banks and loan pricing

This appendix presents a placebo test where we examine the relation between the trust levels of CEOs of the non-lead arrangers and loan spread. The dependent variable is $\ln(\text{Spread})$, the natural logarithm of the all-in spread drawn in basis points for a loan a borrower obtains in year t . The sample covers the period 1992–2016. Standard errors are double-clustered at the bank CEO origin and the bank level. Control variables are identical to those in Table 4 and are collapsed for brevity. Definitions of all variables are in Appendix 1. *t*-Statistics are reported in brackets. ***, **, and * indicate significance at the 1, 5 and 10% level, respectively.

Dependent variable: Ln(Spread)	(1)	(2)	(3)
CEO Trust (Non-lead Arrangers)	0.135 [1.658]	0.124 [1.008]	0.169 [1.695]
Control variables	Yes	Yes	Yes
Quarter-year fixed effects	Yes	Yes	Yes
Borrower credit rating fixed effects	No	Yes	Yes
Loan purpose fixed effects	No	No	Yes
Bank-borrower fixed effects	Yes	Yes	Yes
Observations	13,230	13,230	13,230
Adjusted R-squared	0.825	0.830	0.837