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Abstract

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Keywords: Financial contracts, risk sharing, behavioral bias, culture

JEL Classifications: G3, G21, F4

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Psychologists and management scholars document that national culture affects codes and norms used during negotiations and that, consequently, in simulated negotiations between parties with different national cultures, joint gains are lower than in negotiations between parties that share the same culture (Brett and Okumura, 1998; Adair, Okumura and Brett, 2001). Evidence on whether the outcomes of real life negotiations are indeed affected by cultural differences is sparse. The frequent failures of mergers involving organizations with different national cultures would suggest that they do (e.g., Weber, Shenkar, and Raveh, 1996).[1] An effect of cultural differences between contracting parties on contract terms would also suggest that common codes and norms (or the lack thereof) play an important role in actual negotiation outcomes.

This paper examines whether financial contracts written by parties with different national cultures are affected by the extent of the cultural differences. National cultures may matter for several reasons. First, communication is more effective when the source and the receiver share codes and norms, which is more likely to happen if individuals share the same culture (Rogers and Bhowmik, 1970). Second, national culture is related to the organizational structure of companies and affects, for instance, how centralized they are (Bloom, Sadun, and Van Reenen, 2009). Similar organizations may communicate and cooperate more easily.

In a large sample of international syndicated bank loans, we show that the bigger are the cultural differences between the countries of the syndicate's lead bank and of the borrower, the less favorable are the loan terms for the borrower. *Ceteris paribus*, more culturally distant borrowers are offered loans at a higher interest rate, are more likely to

[11] Indeed, the *Economist* magazine has recently devoted a cover article to difficulties in negotiations between Chinese acquirers and the foreign firms they attempt to buy which are due to cultural and organizational differences (November 12, 2010).

need a guarantor, and receive smaller loans. These effects are economically sizable as a one-standard-deviation increase in cultural distance, approximately the distance between Canada and the U.S. or between Japan and South Korea, is associated with a 6.5 basis point increase in the loan spread; the loan spread increases by about 23 basis points (or about 15% of the sample median) if the bank-firm match involves culturally more distant parties, for example, from Japan and the U.S. Importantly the effects of cultural differences do not disappear if culturally distant banks lend repeatedly to a particular borrower or if the lender has a subsidiary in the country of the borrower.

Since negotiations between lead bank and participant bank parallel negotiations between lead bank and borrower, we also explore the extent to which cultural differences affect the interaction between the banks participating in the syndicate. A one-standard-deviation increase in the cultural distance between participant bank and lead bank increases the difference between the lead bank's portion of the loan and the share of the loan held by the participant bank by 5 percent, suggesting that cultural differences reduce risk sharing within the syndicate. Repeated interaction between banks lowers the impact of cultural differences; however, the negative effect of cultural distance on within-syndicate risk sharing disappears only after more than 30 joint deals. This is a rare occurrence as 75 percent of all banks are involved in 10 joint deals or less.

We thoroughly investigate whether differences in financial contracts may arise from the fact that culturally distant banks attract less creditworthy borrowers using selection models, borrower and lender fixed effects, fixed effects for the borrower's and the bank's nationalities, and comparisons across different subsamples, time periods, and regression specifications. All tests consistently indicate that the more conservative terms

offered by culturally distant banks do not depend on the quality of the borrowers. Moreover, we explore borrowers' *ex post* performance and find no evidence that, after the loan is granted, the performance of firms borrowing from culturally distant banks is worse than that of other borrowers.

An interpretation of our findings is that cultural differences make negotiations more cumbersome and thus increase contracting costs. The effect may be non-pecuniary if interaction with culturally distant borrowers increases the lenders' disutility from writing the contract.[2] The effect may also be pecuniary as more time and resources may be needed in writing contracts between culturally distant parties. What matters is that contracting costs appear to be related to the culture of the parties involved in the negotiations, suggesting that behavioral patterns arising from the use of different codes and norms should be incorporated in contract theory.

Another interpretation of our results is that cultural dissimilarities increase the cost of information gathering (or make information gathering less efficient).[3] Having less precise information, culturally distant banks consider (identical) borrowers riskier than culturally closer banks do, and therefore offer loans with more restrictive contract terms. The persistence of the effect of cultural differences despite repeated interaction and across institutional environments and borrowers with different levels of opaqueness makes it unlikely that our results are due solely to asymmetric information. In addition,

[2] Non-pecuniary costs are equivalent to taste-based discrimination (Becker, 1971). In a similar vein, individuals may focus on (irrationally) pessimistic scenarios when they deal with culturally dissimilar counterparties. In this respect, our findings are related to a few recent papers showing that ethnic minorities, female borrowers, and less attractive individuals pay higher interest rates and receive smaller loans for reasons that are unrelated to their risk (Alesina, Lotti, and Mistrulli, 2008; Ravina, 2008). However, attributing a focus on irrational scenarios to the large banks active in the syndicated loan market (and to the professionals representing them) is often considered a hypothesis of dubious usefulness (Arrow, 1998). Cumbersome negotiations increasing contracting costs are a more plausible interpretation.

[3] See Hauswald and Marquez (2006) for a model in which information gathering is made less efficient by (physical) distance.

we find no evidence that the variance of contract terms offered by culturally distant banks is lower than for domestic banks, which, together with considerable empirical evidence showing that clients of culturally distant banks are similar to clients of other banks, suggests that culturally distant banks are as discerning as their culturally close peers.

The paper is related to several strands of the literature. The link between culture and economic behavior has fascinated social scientists ever since Max Weber. Guiso, Sapienza and Zingales (2006) present new evidence on the extent to which culture affects aggregate economic outcomes and individual decision-making. Most of this literature explores the effects of culture on macroeconomic outcomes. A few notable exceptions are Guiso, Sapienza, and Zingales (2004), Chui, Titman, and Wei (2008), Griffin, Li, Yue and Zhao (2008), and Hilary and Hui (2009) who use micro data to study the impact of different cultural traits on corporate and individual decision-making. We do not investigate the effects of culture *per se* but focus on cultural differences. In this respect, our paper is closer to the literature on cultural differences and the flows of foreign direct investment and international mergers (Kogut and Singh, 1988; Siegel, Licht and Schwartz, 2007; Ahern, Daminelli and Fracassi, 2010).

A related strand of literature initiated by Guiso, Sapienza and Zingales (2009) explores the effects of "trust" and shows that trade and investment flows are larger between countries that exhibit higher mutual trust. Especially related to us is Bottazzi, Da Rin and Hellmann (2007), who provide evidence that venture capitalists are less likely to fund entrepreneurs in countries whose citizens they trust less and, if they do invest in these countries, they use different contracts than in countries they trust more. Unlike the literature on mutual trust, we ask whether cultural similarity eases economic interaction.

The depth of the syndicated loan market allows us not only to study a much larger set of countries, but also to explore whether any effects of cultural differences disappear following repeated interaction over a twenty-five year period.

Our paper is also related to the literature on the home equity bias. Many studies have shown that lack of familiarity limits investment (Coval and Moskowitz, 1999; Huberman, 2001). Familiarity is enhanced not only by geographical closeness, but also by cultural similarity. For example, Grinblatt and Keloharju (2001) show that investors prefer to hold equity in firms whose CEOs have similar cultural origins even after controlling for the language of corporate reports and the physical distance from the company's headquarters. Our paper contributes to this literature by introducing a new proxy for familiarity and by showing that it enhances financial flows in the form of corporate debt, not only equity. Furthermore, we demonstrate that familiarity affects not only quantities, but also the structure of financial contracts.

Finally, our work is related to papers analyzing the structure of syndicated loans (Sufi 2007; Ivashina, 2009). Typically, these papers investigate the implications of financial imperfections within a country. A few notable exceptions are Esty and Megginson (2003), Qian and Strahan (2007), and Bae and Goyal (2009) who show how creditor protection and law enforcement in the borrower's country shape financial contracts. We contribute to this literature by showing that cultural distance also matters.

The remainder of the paper is organized as follows. Section I describes the institutional background and the data. Section II introduces the main variables and some summary statistics. Section III describes the methodology and presents the main results. Section IV presents the results on the syndicate's composition. Section V concludes.

I. Background and data sources

A. The syndicated loan market and the possible role of cultural differences

We study whether cultural distance affects financial contracts within the context of the syndicated loan market. A syndicated loan is jointly extended by a group of banks, including one or sometimes a few lead banks and many participant banks. Prior to signing the loan contract, lead banks assess the quality of the borrowers and negotiate terms and conditions. Once the key terms are in place, participant banks are invited to buy a stake of the loan. As a consequence, the issuance of a syndicated loan is preceded by lengthy negotiations between borrowers and lead banks first, and between lead banks and participant banks afterwards.

We focus on the borrower-lender (lead bank) relation; however, since the negotiations between the lead bank and each participant bank parallel the negotiations between the lead bank and the borrower, to sharpen the interpretation of our results, in Section IV, we also explore whether the cultural distance between the lead bank and each of the participant banks has an effect on contractual outcomes in terms of reduced risk sharing between them.

The syndicated loan market is an appropriate context to explore the effects of cultural differences on financial contracts for several reasons. First, as Duffie, Garleanu and Pedersen (2005 and 2007) highlight, obtaining a syndicated bank loan presents search and bargaining frictions. Due to the length of the negotiations involved, borrowers cannot approach multiple potential lenders contemporaneously and cannot compare multiple offers. Banks may have an upward sloping cost of supplying funds or some capacity constraints and are not always available to extend loans. Thus, because of their

opportunity cost of waiting, borrowers are not necessarily matched to the most suitable counterparties.[4]

Second, negotiations are important to establish the variety of terms that characterize a syndicated bank loan. As psychologists and management scholars point out (Brett and Okumura, 1998; Adair, Okumura and Brett, 2001), sharing similar norms and codes facilitates communication and the exploration of alternatives (for instance, a borrower may need long maturity, but may be willing to concede on the loan amount).

Negotiations may be made less effective also by the fact that, in different cultures, organizations are represented by individuals with different skills and roles. For instance, in Anglo-Saxon individualistic cultures, companies tend to select the most energetic members for the negotiations; Chinese or Japanese teams are often led by a senior person, who has a high status in the organization and may lose face when dealing with the younger representatives of the counterparty. Also, negotiators from individualistic and egalitarian cultures have the power to accept and reject offers, while in more hierarchical cultures the members of the organization with actual decision power are not present at the meetings. Cultural values also affect corporate policies such as gender equality, diversity, and (attitudes towards) environmental policies. Ethnic and gender stereotypes or expectations on environmental standards may affect how comfortable negotiators are with the counterparties.

All these factors have the effect of making negotiations lengthier and less effective and of increasing contracting costs (Mead and Andrews, 2009). Since the gain from a loan is appropriated by the borrower (after the bank obtains a fair remuneration on

[4] Ashcraft and Duffie (2007) show that in the Federal Funds market, the matching of counterparties may be inefficient and that prices are influenced by imperfect search.

its investment), higher contracting costs are manifest in less favorable loan terms for the borrower. Importantly, contracting costs may be either pecuniary or non-pecuniary. Longer negotiations may increase the opportunity cost of issuing a loan (e.g., employees have to take longer hours in drafting the contract) and the lender may thus offer more restrictive terms to cover its costs. Alternatively, lenders may feel less comfortable with culturally distant borrowers and offer more restrictive contract terms; in this case, stricter contract terms would arise in a way that is similar to taste discrimination models (e.g., Becker, 1971).[5] In either case, what matters is that culture, by affecting the extent to which the parties share codes and norms, has an effect on financial contracts in a way that is not captured in neoclassical contracting frameworks.

It is also possible that cultural dissimilarities increase the cost of information gathering and that, as a consequence, an identical borrower may be considered riskier by a culturally distant bank. This mechanism would also suggest that cultural similarity facilitates negotiation by enhancing information sharing. While information asymmetry is known to play a role in the syndicated loan market (Dennis and Mullineaux, 2000), the results we present below lend stronger support to a story based on contracting costs.

B. Syndicated loan data

Data on syndicated loans are from Dealogic's Loanware Database, which provides information on borrowers, lenders, and loan price and non-price terms at origination. This database is widely used for studying the international syndicated loan market (Esty and Megginson, 2003; Carey and Nini, 2007).

[5] The line of demarcation between pecuniary and non-pecuniary costs is tenuous as in the literature on discrimination. For instance, Becker (1971) recognizes that taste based discrimination may arise not from the prejudice of the employer (the firm), but from the tastes of the coworkers that should be compensated by higher wages for working with minorities.

While Loanware contains information on syndicated loans to local and central governments, we focus on corporate borrowers. We extract information on contracts from 1980 to 2005. Less than 15 percent of the contracts are signed in the first 10 years, reflecting the fact that the syndicated loan market was still underdeveloped during the 1980s.[6] It is also possible that Loanware coverage is less complete at the beginning of the period or for some countries.[7] Therefore, in the empirical analysis we make sure that our results do not hinge upon the inclusion of the 1980s or of countries with fewer than 100 loans.

C. Measuring cultural distance

The definition of culture usually includes some notion of shared values, beliefs, codes, and norms. The World Values Survey (WVS) is an attempt by social scientists to measure cultural values around the world. The WVS initially covered only 22 countries and was conducted at ten-year intervals; currently, the survey covers about 80 countries and is updated every five years. The survey consists of a detailed questionnaire on concrete aspects of life (about 250 questions) administered in face-to-face interviews; the average number of respondents is 1,400 per country.

Inglehart (1997) and Inglehart and Baker (2000) show that diverse orientations tend to cluster together in coherent patterns. Consequently, they use factor analysis to summarize the salient features of different cultures along two dimensions (values): (1) The extent to which a society emphasizes traditional as opposed to secular and rational

[6] The syndicated loan market of the 1980s consisted mostly of sovereign loans, especially to developing countries (Gadanecz, 2004). It became a significant venue for corporate finance only in the early 1990s.

[7] Carey and Nini (2007) conclude that, while Loanware's coverage varies across countries, the only systematic bias is under-reporting in the early years (1980s).

values; (2) The extent to which a society emphasizes values related to survival as opposed to self-expression.

In societies with traditional values, individuals emphasize religion, family ties, and, most importantly to us, deference to authority. Survival values are considered to be predominant in societies with low interpersonal trust, which tend to be intolerant of ethnic and cultural minorities, do not support gender equality or environmental protection, and often favor authoritarian governments. Besides affecting corporate policies on gender, diversity, environment etc., the cultural values are related to the degree of centralization of organizations, the identities of the individuals conducting the negotiations, and whether decisions are actually taken by the negotiators.

Cultural distance between any pair of countries can be measured as the Euclidean distance between the traditional vs. secular/rational and the survival vs. self-expression orientations.[8] The cross-country cultural differences that emerge are summarized in a cultural map of the world, which we reproduce in Figure 1. Figure 1 presents a snapshot based on the most recent edition of the survey. Although the time-series variation of cultural distance is limited, whenever possible, we measure culture in the country of the borrower and the bank in the years that immediately precede the signing date of the loan.[9]

We attribute to each borrower the culture of its own country and to the lead bank the culture of the country where its headquarters are located for two reasons. First, the individuals writing the contracts or the executives with high decision power are likely to be nationals of the bank's and the borrower's countries. Second, the culture of the

[8] Typically, measures of cultural distance do not reflect differences in culture between geographic areas or socio-economic groups within a country. These measurement errors bias the results against finding any effect of cultural distance.

[9] Interestingly, our results hold even if we exploit only this limited time-series variation by including borrower nationality times lender nationality fixed effects.

headquarters country affects organizational culture and the degree of centralization of the subsidiaries (Bloom, Sadun and Van Reenen, 2009).

We explore the robustness of our results to alternative measures of cultural distance. Surveying employees of IBM across different countries, Hofstede (2000) constructs a "power-distance" score that is related to the centralization of decision power. We use the Euclidean distance of power-distance scores between each pair of countries as an alternative a proxy for cultural distance.[10] Finally, since religion has an important role in shaping cultural values, we use a dummy variable that takes the value one if the countries of the borrower and the lead bank share the same religion as a proxy for cultural similarity.

II. Descriptive statistics

Our sample includes about 86,000 loans to over 40,000 borrowers in over 70 countries from 1980 to 2005. There are more than 6,500 lead banks from nearly 60 countries and over 8,000 participant banks. The list of the largest borrower and lead bank nationalities and the cultural distance between them is presented in Panel A of Table I.

Panel B of Table I describes *ex ante* loan characteristics. We focus in most of the analysis on the loan spread, which is measured as the basis point spread over the LIBOR,

[10] We also measure cultural distance using the country's personal values developed by Schwartz (2006). These different proxies for cultural distance confirm the results and, for brevity, are not tabulated. Furthermore, we explore whether the effect of cultural distance is asymmetric. First, we consider whether cultural distance matters more if the borrower is in a weaker creditor protection country than the lender. Second, we consider whether borrowers from countries that tend to stress more traditional and survival values (and perhaps have less "social capital" as a result) obtain worse loan terms. Finally, we also compare the effect of cultural distance when the lender's country is more "traditional" than the borrower's, in comparison with the reverse case (where the borrower's country is more traditional than the lender's). In all of these unreported tests we find that the effect of cultural distance is symmetric.

inclusive of all fees.[11] Non-price terms are as important as price terms for the lender to obtain a fair return on the loan. We observe the loan amount, its maturity, and whether the loan is secured or guaranteed by a third party. Finally, we also observe the borrower's credit rating (if any) at the time the loan is granted and any subsequent changes in rating before the maturity of the loan, including whether the loan is downgraded to default.

Loanware also provides information on the identity of the lead banks and their nationalities, as well as on the composition of the syndicate. For over 75 percent of the loans in our sample, there is only one lead bank. We thus consider the lead bank as *the* lending bank (as is customary in the literature) and use the lead bank's nationality to define cultural distance from the borrower (or from each of the participant banks when we focus on syndicate composition) and all the other lead bank nationality-based variables. In the few cases in which there are several lead banks, to be as conservative as possible, we define all the variables with respect to the lead bank which is culturally closest to the borrower (or to each of the participant banks).[12]

Panel C of Table I presents descriptive statistics for the various measures of distance between borrower and lender. Beside our basic measure of cultural distance from the WVS, the table presents also the alternative measure based on Hofstede's power-distance scores. Physical remoteness and differences in laws may also increase transaction costs, but in a way that is easily incorporated in neoclassical models. Hence, we control for physical distance, for whether countries share a common border as well as institutional distance by including a dummy variable that takes the value one if the two countries have a common legal tradition, the absolute value of the difference between the

[11] An alternative measure of price terms is the margin, which is measured as the spread over the base rate and does not include fixed fees. Our results are equivalent to the ones we report if we use this measure.
[12] Our results remain unchanged if we restrict the sample to syndicated loans with one lead bank only.

index of creditor rights in the borrower's and lead bank's countries, and a dummy variable that takes the value one if creditor protection is stronger in the lead bank's country.[13] Moreover, we also include dummy variables for countries with the same language or with common colonial ties, features that have been shown to favor international trade (Rose, 2004). Admittedly, language and common history capture aspects of culture. Nevertheless, we include these variables as controls in some specifications because, as highlighted in the management literature, the aspects we want to capture are largely unrelated to the spoken language or the colonial history.[14]

Panel D of Table I summarizes the salient features of the syndicate composition. Our main goal here is to explore the extent to which risk sharing within the syndicate depends on the cultural distance between the lead bank and each of the participants. In a hypothetical situation of perfect risk sharing in which banks were identical, all the banks in the syndicate would equally fund the loan.[15] However, if negotiations between culturally distant banks are less effective, the extent of risk sharing may be lower. We define actual risk sharing in the syndicate as the loan provided by a given participant bank standardized by the loan that each bank in the syndicate would provide under perfect risk sharing, minus the loan amount provided by the lead bank, also standardized by the loan that each bank would extend under perfect risk sharing. An advantage of this

[13] We also examine additional controls for institutional differences, such as the efficiency of debt enforcement (Djankov et al., 2008), the rule of law and corruption (from the World Bank's Worldwide Governance Indicators). We find that in countries where debt contracts are efficiently enforced and governance is strong, loan spreads are low, but the coefficient on cultural distance remains positive and significant. For brevity, these results are not tabulated.

[14] For instance, management scholars suggest that negotiators from France or Belgium should expect greater problems in cooperating with negotiators from Denmark, New Zealand or the United Kingdom than with negotiators from, say, Korea or El Salvador because the culture of the latter stresses authority to a similar large extent (Mead and Andrews, 2009, p. 301).

[15] In the empirical analysis, we control also for bank characteristics that may be related to the bank's propensity to share risk.

variable is that it does not depend on the size of the total loan and on the number of participants in the syndicate and allows us to measure a participant bank's willingness to share risk with a particular lead bank. All the distance variables used to explain within-syndicate risk sharing are defined using the countries where the headquarters of the participants and of the lead bank are located. As above, if there are multiple lead banks, we select the lead bank that is culturally closest to a given participant.

Panel E of Table I provides details on our main controls for borrower heterogeneity. These include four dummy variables capturing borrower rating at the time the contract is signed, 56 industry dummies, 21 dummies capturing the loan purpose (e.g., whether the loan is needed to finance an acquisition, to buy a specific asset, or as working capital), and 11 borrower type dummies capturing whether the borrower is publicly or privately owned and whether it is a bank, another type of financial institution, a utility company, or a company in another industry. All these borrower characteristics and, in particular, the credit rating, capture differences in the risk of firm assets and capital structure (Kisgen, 2006). We also include 46 dummies capturing the loan instrument type (e.g., whether the loan is a credit line, a term loan, a bridge facility etc.) and 69 currency dummies.[16]

In addition, we match by name Loanware firms with Worldscope to obtain financial statements for a subsample of large listed borrowers. For this subsample, whose size is comparable to the sample of Qian and Strahan (2007), we have information on sales, percentage of foreign sales, the market to book ratio, profitability (net income over assets), and the proportion of tangible assets (property, plants and equipment) over total

[16] We are aware that these dummies may, to some extent, reflect endogenously chosen contract features. Nevertheless, their inclusion may help capture the risk of the loan. The omission of subsets of the dummies does not affect our estimates.

assets. These firm characteristics, presented in Panel F of Table I, allow us to further control for firm creditworthiness. Finally, other time-varying country controls based on borrower and bank nationalities are presented in Panel G of Table I. These include a proxy for the supply of credit in the borrower's country as well as creditor rights and GDP per capita in the countries of both the borrower and the lead bank.[17]

A major question is whether domestic banks, culturally close and culturally distant (foreign) banks attract different types of borrowers. Table II shows how contract terms and borrower characteristics vary across lending banks. We define a bank as culturally close if its cultural distance is below the mean of the subsample of foreign banks. Loans extended by culturally distant banks have, on average, lower spreads than loans extended by domestic banks, but are more expensive than the ones extended by culturally close (foreign) banks. This does not imply that culturally distant banks are unlikely to offer worse terms to culturally distant borrowers, because a negative effect of cultural distance would imply that these banks provide more restrictive loan terms to culturally distant borrowers than to the average of their other clients. Culturally distant banks appear to be more likely to extend smaller loans and to require guarantees or collateral.

Differences in borrower characteristics across different subsamples are economically quite small. For instance, the average rating of loans issued by domestic banks is slightly lower than the average rating of loans issued by culturally distant and

[17] Controlling for GDP per capita is particularly important, because Inglehart (1997) finds that, while a society's historical heritage has an enduring influence, cultural values evolve during the process of development. In addition, since the survival vs. self-expression dimension of cultural values is considered to be influenced by economic development to a larger extent than the traditional vs. rational dimension, in some robustness checks, we measure cultural distance using only the latter factor. Since the results are qualitatively equivalent to the ones we report below, we omit them.

especially culturally close banks. To the extent that any unobserved heterogeneity is correlated with the initial rating of the loans, having domestic banks, for which cultural distance is zero, as the bulk of the sample would make it more difficult to find a negative effect of cultural distance on contract terms.

Some insights on the direction of the unobserved heterogeneity and the ex post performance of the loans of different groups of banks are gained from rating changes after the loan is signed. Focusing on rated borrowers and on loans where the rating changes, the proportion of upgraded loans is larger for loans issued by culturally distant banks than among the loans issued by domestic banks. Also, culturally distant banks do not appear to lend to firms with more volatile performance as the rating of a smaller fraction of their borrowers is changed after the granting of the loan; in addition, the proportion of firms that obtain a rating after the loan issuance is equally distributed across different groups of banks. Domestic banks appear to attract relatively more borrowers that default ex post, although the difference is not statistically significant.

Some interesting insights can also be derived from the type of loans granted by culturally distant banks and their purpose. For instance, loans granted for acquisitions and leveraged buyouts are considered to be the riskiest (Altman and Suggitt, 2000). Culturally distant banks extend fewer of these loans, again suggesting that they assume less risk. Not surprisingly, a higher number of loans from culturally distant banks are term loans. This is comforting because term loans are considered more likely to be non-relationship loans than other loans such as revolving credit lines, and the search frictions that lead borrowers to receive funding from culturally distant banks should be more pronounced for this type of loans.

Finally, firms borrowing from foreign banks have similar size and profitability; all firms have a large proportion of foreign sales although borrowing from culturally distant banks does not seem to be driven by a higher percentage of foreign sales. Most importantly, in comparison with firms borrowing from domestic lenders, firms borrowing from culturally distant banks have lower leverage ratios and more tangible assets suggesting that they are more creditworthy. Overall, Table II suggests that a negative effect of cultural distance on contract terms is unlikely to depend on the fact that some banks attract systematically worse borrowers.

III. The effects of borrower-lender cultural differences on loan contracts

A. Empirical approach

We estimate reduced form equations. Besides cultural distance and the controls described in Section II, in all equations, we include dummies for the borrower's and lead bank's nationalities, which may systematically affect contract terms. For instance, the expected repayment may be systematically lower for borrowers in countries with weak creditor protection (Qian and Strahan, 2007). Similarly, the cost of extending a loan may be systematically higher for banks from countries with higher funding costs. We also include year dummies to control for differences in credit market conditions over time.[18]

Our extensive set of controls should capture borrower heterogeneity. Thus, any effect of cultural distance on loan terms should be interpreted as arising from culturally distant banks' policies toward (similar) borrowers. However, it is important to stress that the ordinary least squares estimates of the effect of cultural distance on loan terms rest on

[18] In unreported specifications, we also include interaction terms of borrower nationality and year dummies thus controlling for any possible changes in the borrower's economic environment. The effect of cultural distance is similar to the one we report.

the assumption that bank and borrower characteristics unrelated to cultural distance drive the matching of borrowers and lenders. As discussed in Subsection I.A, this identifying assumption is consistent with the organization of the syndicated loan market, in which borrowers face search and bargaining frictions. To the extent that the non-random selection of borrowers could affect our estimates, the direction of the bias may be against finding any negative effect of cultural distance on contract terms as, for instance, in Table II we find that the clients of culturally distant banks are more likely to be upgraded after the loan is granted.

Nevertheless, we explicitly examine whether unobserved heterogeneity biases our estimates using two alternative methodologies. First, we include borrower-fixed effects and explore the effect of cultural distance using only within-borrower variation. In other words, we ask whether cultural distance affects the terms at which the same borrower obtains loans from different banks.

Second, we consider a two-stage selection model. This involves modeling the probability that a firm obtains the loan from a given lead bank and including the inverse Mills ratio obtained from the estimated probability in the second stage equation. In the first stage, we hypothesize that a given borrower could obtain a loan from any of the domestic and foreign lead banks that ever extended a syndicated loan to borrowers in the same country up to the year in which the contract is signed. We estimate the probability of observing a match between a particular lead bank and a particular borrower as a function of borrower, country, and lead bank characteristics.[19]

[19] In these tests, in order to keep the size of the dataset manageable, we rank lead banks according to the loans issued up to the contract year in each country and keep in the sample at most the top 500 active lead banks; any loans extended by lead banks that are not among the top 500 are excluded. Different cutoffs (50, 100, 200, and 300) yield similar results.

To capture the variation in the probability of a bank-firm match that is independent of borrower characteristics and directly test for the existence of a matching mechanism driven by search and bargaining frictions, we posit that the probability of a bank-firm match depends on the distribution and the numbers of banks active in a country. In particular, we include the bank's rank in the country (obtained by counting the number of deals the bank completed up to the year in which the contract is signed) and the number of physically and culturally close banks (banks with physical or cultural distance below the mean). Similarly to Sorensen (2007) and Bottazzi, Da Rin and Hellman (2008), our identifying assumption is that the characteristics of the other investors in the market should not be directly related to the cost of funding, after controlling for the aggregate supply of credit.

B. Loan spread

Table III shows that the effect of cultural distance on the loan spread is consistently positive and significant. It is important to note that, because we include lead bank nationality dummies, a positive effect of cultural distance on the cost of the loan does not necessarily imply that the borrower receives funding at a higher absolute cost from a culturally distant bank than from a domestic one. For example, French banks on average extend loans at a lower interest rate than domestic banks to culturally distant U.S. borrowers and, at the same time, offer worse contract terms to U.S. borrowers than to culturally closer Belgian borrowers. The effect of cultural distance is also economically significant. In column 5, the benchmark specification with a comprehensive set of controls, a one-standard-deviation increase in cultural distance, approximately the

difference between Canada and the U.S., increases the spread by approximately 6.5 basis points, or about 4 percent of the sample median spread of 150 basis points.

We explore whether borrower unobserved heterogeneity may lead us to overestimate the effect of cultural distance by including different sets of controls for borrower heterogeneity. To the extent that unobserved heterogeneity in borrower characteristics is correlated with the observed controls, the coefficient estimates should vary a lot across columns. In fact, the coefficient estimates are very similar, when we include no controls for borrower rating (column 1), when we control for rating by including four or 14 rating groups (columns 2, and 3, respectively). In column 4, we add controls for a number of loan characteristics. The latter are admittedly jointly determined with the interest rate; yet they help in further controlling for borrower heterogeneity, for loan size, and for the possible effects of risk sharing within the syndicate.[20] The coefficient of cultural distance remains unaffected.

In columns 5, we include other controls for distance. Consistently with our maintained hypothesis, the spread is slightly lower if we include the same religion dummy, an alternative proxy for cultural similarity. Sharing the same language or colonial history seems largely irrelevant. Other aspects of remoteness such as the physical distance between the capital cities of the borrower's and the lead bank's countries do not have a significant effect. This is probably due to the fact that many lead banks have subsidiaries in the country of the borrower or in nearby countries, which may mitigate the effect of geographical, but not of cultural distance; we revisit this issue in Subsection III.D. Interestingly, differences in creditor rights between the countries of the

[20] The nationalities of banks participating in the syndicate without leading are not expected to affect the loan terms because these are determined by the lead bank before other participants join the syndicate.

borrower and of the lender increase loan spreads. However, the effect has only weak statistical significance.

In column 6, we include only loans extended by foreign lead banks; our estimates are qualitatively unchanged, showing that the results are not driven by the difference between domestic and foreign banks. The results are also unchanged if we include lender fixed effects (column 7). In addition, the effect of cultural distance remains unchanged when lead banks from the U.S. or the U.K. are excluded (results not reported) suggesting that the effect is not driven by the behavior, or market power, of the largest and most reputable banks, which tend to be headquartered in the U.S. and the U.K. The robustness of the results to the exclusion of U.S. and U.K. lenders, as well as to the exclusion of U.S. borrowers (column 8) suggests that the effect of cultural distance is not restricted to the interaction between "Anglo-Saxon" economic agents and the rest of the world. The estimated effect of cultural distance on the spread remains unchanged even after controlling for firm size (sales), financial leverage, percentage of foreign sales, profitability and the proportion of tangible assets (property, plants and equipment) in column 9. Thus, any remaining unobserved heterogeneity biasing our results should be uncorrelated with any of these factors, which is unlikely.

We also run the regressions for groups of borrowers with the same ratings, for rated borrowers (for which information problems are presumably less severe) and for loans issued in different continents. The estimates (not reported with exception of the rated borrower sample in column 10) show that the effect of cultural distance is once again unchanged. Finally, we consider whether the effect of cultural distance changes over time. The results are qualitatively unchanged if we drop the loans issued during the

1980s; however, during the 1980s, the effect of cultural distance is larger than the one we report in Table III.

Some insights can be gained from the coefficients of the control variables. It is comforting that loan spreads are higher for borrowers with ratings below A; unrated borrowers obtain credit at lower interest rates than borrowers with C or lower ratings. Furthermore, stronger creditor rights in the borrower's country tend to decrease the loan cost, even though –unsurprisingly given that we include borrower nationality fixed effects– the coefficient is not statistically significant in most specifications.

We further address the issue of unobserved heterogeneity by using borrower fixed effects.[21] Column 1 of Table IV shows that, not only does the effect of cultural distance on the loan spread continue to be positive and significant, but the magnitude of the coefficient is similar to the one we obtain in Table III. We also estimate a two-stage Heckman selection model. The first stage estimates in column 2 of Table IV confirm that our instruments are statistically significant: The probability that a loan is obtained from a given bank is decreasing in the number of physically and culturally close banks. In addition, cultural distance does not affect the probability of a bank-borrower match, in line with empirical evidence showing that agents understate the effect of cultural differences on economic outcomes (Weber and Camerer, 2003). In the second stage, the coefficient of the inverse Mills ratio is not statistically significant, further indicating that selection problems are not driving our results. Most strikingly, the effect of cultural distance is now almost twice as large.

[21] The standard errors we report in Table IV are not corrected for clustering. This is because, with our large set of controls in the fixed effect and the Heckman models, Stata is unable to compute clustered standard errors. This inconvenience disappears if we exclude some controls, such as the instrument type dummies; the estimates of our variable of interest remain highly statistically significant with clustering at the borrower nationality times lead bank nationality level.

C. Non-price contract terms

An effect of cultural differences on contracting costs should be reflected also on more restrictive non-price loan terms. Estimates in Table V show that culturally distant banks provide smaller loans (column 1) and are more likely to request loan guarantees from a third party (column 4). These effects are also economically significant: A lender whose cultural distance from the borrower is about one (roughly the cultural distance between Germany and the U.K.) is likely to receive a loan which is nearly four million dollars (6.7 percent of the sample median) smaller than a similar domestic borrower; the probability that a third party guarantee for the loan would be required is higher by about 2 percentage points, a large number given that only about 7 percent of the loans in the sample are guaranteed. Cultural distance also has a positive impact on the probability that the loan is secured, although the effect is not statistically significant at conventional levels. We find no effect of cultural distance on loan maturity.

D. Ex post performance

If culturally distant banks had a rational concern about attracting clients with poor credit prospects, then loans to these borrowers should exhibit poor performance relative to the average loan. To evaluate the ex post performance of borrowers, we first consider the probability of default. As in previous literature (Altman and Suggit, 2000; Emery and Cantor, 2005), we identify defaulting borrowers as borrowers that are rated when the loan is extended and are then downgraded to a default rating. As mentioned above, we first verify that cultural distance increases the cost of the loans also in this subsample. Then, we test whether the probability of default after the loan is granted is higher for borrowers

receiving loans from culturally distant banks. Column 1 of Table VI shows that the cultural distance is unrelated to the default probability.

Since default rates in the syndicated loan market are quite low, they may not fully capture the exposure of the lender to credit risk. For this reason, we explore changes in the credit rating of borrowers after the loan is granted. A borrower's upgrade (downgrade) indicates that its credit quality has improved (deteriorated) after the extension of the loan and prior to its maturity.[22] In column 2, we present estimates of an ordered probit model in which we consider obtaining a rating as an upgrade and losing a rating as a downgrade. Strikingly, after controlling for loan and borrower country characteristics, culturally distant borrowers are more likely to be upgraded, not downgraded. This confirms that the loan terms offered by culturally distant banks are not justified by the borrowers' poor credit prospects.

Since including also unrated firms and considering obtaining a rating (losing a rating) as an upgrade (downgrade) may make our estimates noisier, in column 3 we restrict the sample to the actual rating changes. The estimates again suggest no systematic effect of cultural distance. This is so also when we further refine our estimates by considering a rating change not only migrations in letter grade between the four rating groups, but also changes in notches within the same letter grade.[23]

[22] An upgrade cannot be interpreted as incorporating positive information generated by the granting of the loan because this information is already incorporated in the borrower's rating when the loan is granted.

[23] We also estimate separate probit models for upgrades and downgrades. For upgrades (downgrades) we define the dependent variable to be equal to one if the borrower is upgraded (downgraded) by at least a notch and equal to zero if the borrower rating is unchanged or the borrower in downgraded (upgraded). Including the same controls as in the ordered probit models in Table VI, we find that a marginal increase in cultural distance increases the probability of an upgrade by 16% (the effect is statistically significant at 5%). By contrast, an increase in cultural distance has no statistically significant effect on the probability of a downgrade.

Finally, since ratings and their changes are noisy proxies for borrower performance, we turn to the subsample of loans matched with Worldscope, in which, as shown in Table III, we find a positive effect of cultural distance on the loan spread. Table VI shows that, for these borrowers, cultural distance is unrelated to changes in the market to book ratio, leverage, sales and profitability in the two years following the issuance of the loan (in unreported specifications, we show that this is the case also one year, three years, and four years after the issuance of the loan). Because changes in creditworthiness should be related to changes in firm value or accounting performance, this strongly suggests that clients of culturally distant banks are as creditworthy as the clients of other banks.

E. Local subsidiaries and repeated interaction

In this section, we explore how the effect of cultural distance varies if the lender has within-country experience or interacts repeatedly with a given borrower. Banks with a subsidiary in the borrower's country should have more within-country experience because they tend to have extended a larger number of loans in that country and have at least some local employees. The effect of culture may nevertheless persist if the managers of the subsidiary in charge of approving the loans are from the headquarters' country or if the culture of the country of origin affects the subsidiary's organization.

Table VII shows that having a local subsidiary in the country of the borrower mitigates, but does not eliminate the effect of cultural distance. The effects of cultural distance on the spread (column 1) and the probability of having a loan guarantor are almost halved (column 5). The negative effect of cultural distance on the size of the loan is, however, magnified. Furthermore, culturally distant banks with local subsidiaries grant

loans with shorter maturity and are more likely to secure the loan. Since short maturity and collateral are useful if the lender monitors the borrower, this finding suggests that the lender's experience makes monitoring less costly. The reduction in the marginal cost of monitoring appear to dominate any decrease in contracting costs, which should have led to less restrictive contract terms.[24]

In Table VIII, we find some evidence that repeated interaction with a given borrower mitigates the effect of cultural distance. In order to avoid biases deriving from the fact that previous interactions are, by construction, very few at the beginning of the sample period, we only include loans signed on or after 1990. For the effect of cultural distance on the spread to disappear, the borrower has to receive nearly four syndicated loans from a given lead bank. However, for 95 percent of the loans in the sample, the borrower received at most two previous loans from a given lead bank (the median number of loans from a given bank is one).[25] Thus, the effect of cultural differences is only partially mitigated by repeated interaction with the borrower. Repeated interaction with a culturally distant lead bank appears to enable the borrower to receive loans with longer maturity; however, it does not increase the size of the loan and has no significant impact on the probabilities that collateral or third party guarantees are required.

Given that its effect persists after repeated interaction, cultural distance is unlikely to exclusively capture information gathering costs, which should be most relevant for

[24] We also examine the effect of lead bank experience in the borrower's country and find little evidence that the effect of cultural distance disappears after the lead bank has concluded many deals there (results not tabulated). Only the propensity to ask for a third party guarantee appears to slowly decrease.

[25] Interestingly, in unreported regressions we find that the number of loans that a borrower receives from a given lead bank decreases with cultural distance. Our main results, however, are not driven by the fact that borrowers are less likely to engage culturally distant banks in repeated relations: The effect of cultural distance on the loan spread is larger if we consider only the first loan a borrower received from any given bank.

first time borrowers. Instead, cumbersome negotiations and contracting costs may remain persistently higher when borrower and lender do not share the same culture.

A possible concern is that the estimates in Table VIII are driven by a different unobserved risk profile of the repeated borrowers of culturally distant banks. To evaluate the merit of this alternative explanation, in unreported specifications, we test whether the effect of cultural distance on the probability of loan default differs between first time and repeated borrowers: Cultural distance continues to have an insignificant effect on the probability of default in both subsamples;[26] this confirms once again that the effect of cultural distance does not depend on borrower unobserved heterogeneity.

E. Further robustness

While our results so far indicate that the effect of cultural distance is not driven by borrower heterogeneity, concerns may remain that cultural distance is related to some characteristics of the country pair. For instance, low levels of international trade and portfolio capital flows may be correlated with cultural distance and lead to limited information about certain countries. Alternatively, information acquisition costs may be higher because culturally distant countries have different economic structures. In columns 1 to 3 of Table IX, we consider only loans from foreign banks and control for these factors in turn. The effect of cultural distance on the spread is unchanged.

Next, one may wonder whether our results depend on the specific measure of cultural distance we use. The finding that having the same religion generally affects contract terms favorably should alleviate any concerns. As a further robustness test, we

[26] If we include both cultural distance and the interaction between cultural distance and the number of previous interactions with that bank, we find that the coefficient of the first variable is still not statistically significant, while the default rate of repeated borrowers of culturally distant banks is lower.

use the difference in "power distance" scores developed by Hofstede (2000). Column 4 of Table IX shows that the effect of cultural distance on the spread is robust.

We also examine to what extent cultural distance captures "trust" between nations. While the interpretation of our results would not change if trust were relevant, given the wide use of trust in the literature, it is important to understand whether our measure of cultural distance captures something beyond trust. For this reason, we run a "horse race" between our measure of cultural distance and the proxy for trust proposed by Guiso, Sapienza, and Zingales (2009). For the subsample for which the measure of trust is available, we find that while our proxy for cultural distance is positive and statistically significant, trust is not significant.[27] Thus, it appears that cultural differences may affect interaction between economic agents beyond mutual trust. This result is important also for another reason. The trust measure is not available for most emerging markets. The robustness of our findings indicates that our results are not driven by rich country banks that charge a premium to emerging market borrowers.

Finally, we try to shed some further light on the mechanism through which cultural differences affect financial contracts. If culturally distant banks are less informed than other banks, under the hypothesis, strongly supported by the empirical evidence, that the clients of culturally distant banks are similar to the clients of other banks, the variance of the contract terms that culturally distant banks offer to borrowers in a given country should be lower than the variance of contract terms of culturally close banks. In unreported specifications, we investigate whether the variance of contract terms offered by a bank to borrowers in a given country decreases with cultural distance, after

[27] Higher trust decreases the cost of the loan if we do not include cultural distance.

controlling for the variance of borrower characteristics. We find no evidence of that, suggesting that culturally distant banks are as informed as other banks.

IV. Cultural distance between banks and risk sharing within the syndicate

If cultural differences affect interactions between economic agents, we should observe their effects also on the interaction between lead banks and participant banks. Keeping culture constant, negotiations may be faster for a smaller investment. If culture increases negotiation costs, participant banks may buy a smaller share of the loan to reduce the negotiation time. *Ceteris paribus*, a negative effect on the difference between the share of the loan bought by a participant bank and the share of the loan retained by the lead bank would suggest that cultural distance affects negatively negotiations and reduces risk sharing.

Since our unit of analysis is the extent of risk sharing between the lead bank and each participant bank, and given that each loan has, on average, several participant banks, we have multiple observations for each loan. For this reason, we cluster standard errors at the loan level.[28] The results show that, indeed, participant banks hold smaller portions of loans syndicated by culturally remote lead banks. In column 1 of Table X, a one-standard-deviation increase in cultural distance, approximately the difference between U.S. and Canada, decreases risk sharing between two banks by nearly 5 percent (relative to the sample mean). The effect is even more pronounced if we exclude observations for which the lead and participant banks share the same nationality (column 2). In this case, a one-standard-deviation increase in the cultural distance decreases risk sharing by over 10

[28] The statistical significance of the results is similar if we cluster errors at the lead bank nationality times participant bank nationality level.

percent. These results are consistent with the notion that cultural differences increase contracting costs, but harder to explain with an omitted factor: There is no reason to believe that an omitted factor should be similarly correlated with the cultural distance between borrowers and lenders and with the cultural distance between lead banks and participant banks.

Since we have multiple observations for each loan, we can perform a more stringent test for unobserved borrower heterogeneity. In column 3, we include loan fixed effects. The estimates show that, even for the same loan, culturally distant participants share less risk with the lead bank than culturally closer participants. The effect of cultural distance appears robust across different samples. For instance, in column 4, we exclude loans to U.S. borrowers and in column 5, loans for which the lead bank is from the U.S. Similarly, the coefficient of cultural distance is qualitatively unchanged in column 6, when we include additional controls for distance and investor protection.

Some of the control variables offer further interesting insights. Risk sharing is higher if the participant bank is from a country with the same religion as that of the lead bank's country, but is significantly lower if banks are from physically remote countries: A one-thousand kilometer increase in distance decreases risk sharing by 12 percentage points.[29]

In columns 7 and 8, we explore whether the effect of cultural distance on risk sharing declines as a bank participates in more deals with a given lead bank. We focus on interactions within a country to capture the possibility that employees responsible for a

[29] In unreported specifications, we also control for the size of the lead bank and the participant bank in terms of the syndicated loans they held during the previous year. As expected, large lead banks share risk less; however, the size of the participant bank does not seem to affect its portion of the loan. More importantly, the effect of cultural distance on risk sharing is unchanged.

given country may learn to interact with the representatives of the lead bank in that country. Also in this case, in order to avoid biases resulting from the fact that previous interactions are, by construction, very few at the beginning of the sample period, we only include loans signed on or after 1990. We find that, indeed, the effect of cultural distance becomes smaller as the number of previously concluded deals with a given lead bank increases. Nevertheless, the pace at which the negative effect of cultural differences dies out is very slow, and over 30 deals are needed to fully offset the effect of cultural distance on risk sharing. The mean (median) number of deals that a participant concludes with a given lead bank is, however, only eight (two).

V. Conclusion

This paper shows that professional decision-makers are inclined to offer better terms to culturally similar counterparties. In particular, cultural differences increase the loan spread, limit the loan size and reduce the investment of participant banks. Our results indicate new directions for theoretical research in the growing literature on behavioral economics, individual incentives, and economic interactions. Existing theories have explored the importance of social esteem and altruism (e.g., Bénabou and Tirole, 2006). Our empirical evidence suggests that cultural similarity also matters and calls for new theories clarifying the mechanisms.

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Figure 1: Cultural Map of the World

Source: World Values Survey, www.worldvaluessurvey.org

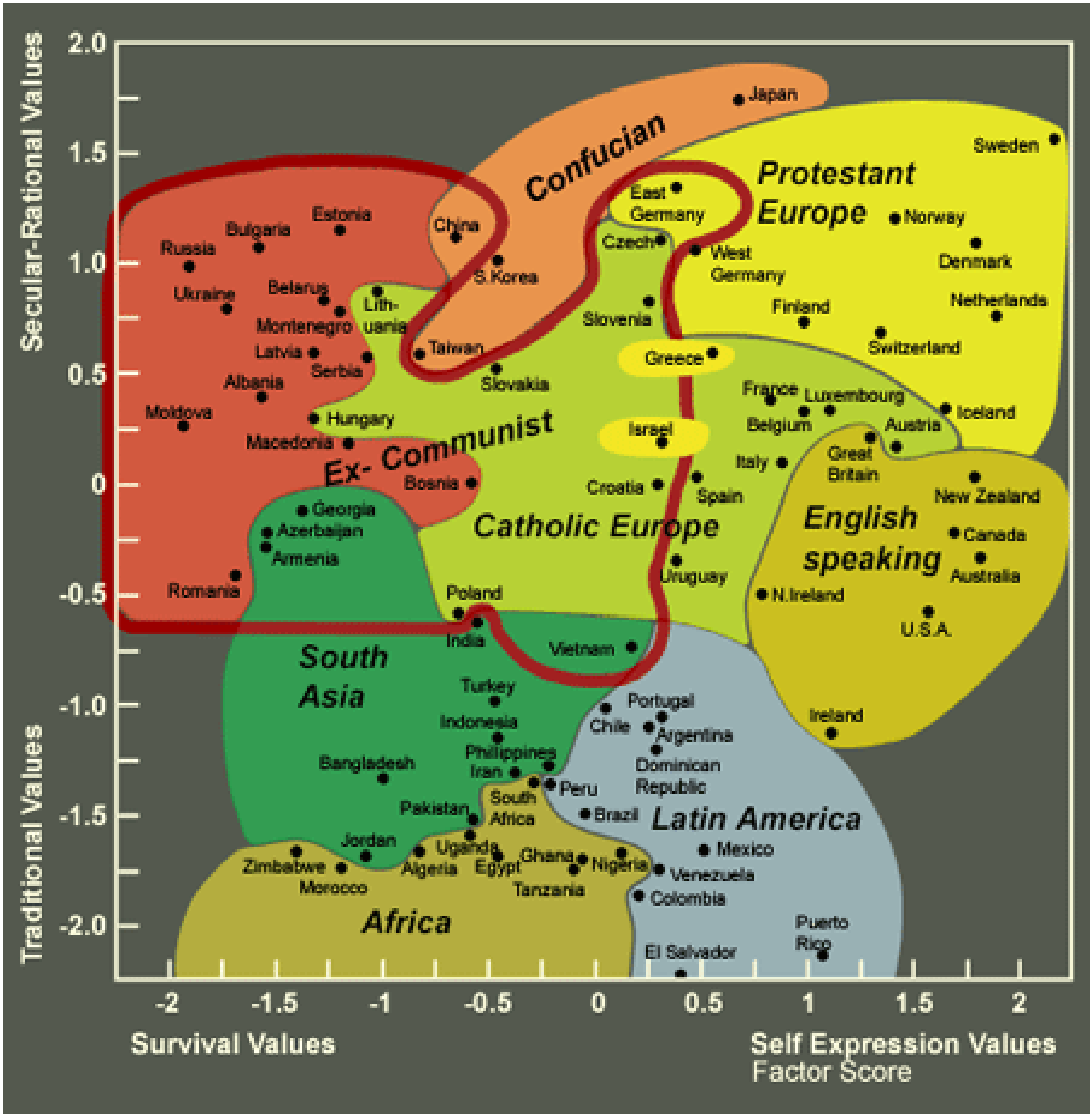

Table I – Variable Definitions and Sample Statistics

Panel A presents the top 20 borrowers and lenders nationalities in the sample. The nationality of the lead lender is listed on the rows and borrower nationality is listed on the columns. The total figures in the rows (columns) include all loans from lenders (to borrowers) in each country, not only the ones involving the top 20 borrowing nations. Cultural distance, from the World Values Survey, appears in parentheses. The figures are time varying and are calculated for the years in which contracts are signed; therefore, the average cultural distance between, for example, lenders from France and borrowers from Germany, need not be exactly equal to the cultural distance between lenders in Germany and borrowers in France. The other countries included in the sample, but not reported in Panel A either as lenders or as borrowers are: Algeria, Argentina, Austria, Bangladesh, Belarus, Belgium, Bulgaria, Chile, Colombia, Croatia, Czech Republic, Denmark, Egypt, El Salvador, Finland, Ghana, Greece, Hungary, Iran, Ireland, Israel, Jordan, Latvia, Lithuania, Morocco, New Zealand, Nigeria, Pakistan, Peru, Philippines, Poland, Portugal, Puerto Rico, Romania, Russia, Saudi Arabia, Slovakia, Slovenia, South Africa, Switzerland, Tanzania, Ukraine, Uruguay, Venezuela, Vietnam, Zimbabwe. The statistics in all panels of Table I are calculated using only observations included in subsequent tables. For variables used in the analysis of loan spreads, we use only observations included in Column 5 of Table III, which we use as a benchmark in most of the subsequent tests. For other variables, we use only observations included in the regression where the variable is used.

Panel A. Number of loans to major borrowing countries

		Borrowers																				
		AU	BRZ	CA	CHN	FR	GR	HK	INDIA	INDO	IT	JPN	MX	NL	NOR	SING	KOR	SP	SWE	TUR	UK	US	TOT LEND
Lenders	Australia (AU)	635		10 (0.2)						15 (2.6)											18 (0.7)	101 (0.6)	875
	Brazil (BRZ)		158	0																			176
	Canada (CA)	46 (0.2)	11 (2.0)	1574										15 (1.0)							97 (0.4)	1470 (0.4)	3306
	China (CHN)				189			293 ('0)								13 (1.5)	21 (0.21)						540
	France (FR)	13 (1.3)	20 (1.8)	27 (0.9)	39 (2.1)	610		41 (1.7)	29 (1.7)	76 (2.2)	39 (0.5)	30 (1.4)	17 (1.7)		16 (0.8)		76 (1.2)	48 (0.9)		54 (1.8)	98 (0.5)	671 (1.4)	2097
	Germany (GR)	31 (1.7)	16 (2.6)	24 (1.6)	70 (1.8)	19 (0.8)	777	72 (1.7)	24 (2.2)	50 (2.5)	37 (1.0)	45 (0.8)	13 (2.6)	14 (1.2)	108 (0.3)	22 (2.0)	112 (1.3)	37 (1.2)	21 (0.9)	36 (2.4)	143 (1.2)	1177 (2.1)	3388
	Hong Kong (HK)				44 ('0)			86															140
	India								213														242
	Indonesia (INDO)									208													220
	Italy (IT)		15 (1.7)		23 (1.9)				15 (1.6)	13 ('1.8)	1288						11 (1.2)	41 (0.4)		54 (1.5)	16 (0.5)	63 (1.0)	1744
	Japan (JPN)	107 (2.4)	25 (3.2)	20 (2.2)	167 (1.6)	29 (1.4)	38 (0.9)	268 (1.5)	53 (2.5)	155 (3.1)	97 (1.6)	256		14 (1.9)	16 (1.0)	41 (2.4)	413 (1.0)	55 (1.8)	28 (1.6)	23 (2.8)	116 (1.9)	1001 (2.8)	3150
	Mexico (MX)												80										85
	Netherlands (NL)	10 (1.0)	15 (2.9)	19 (1.0)	12 (2.7)			34 (2.7)		42 (3.1)			14 (2.7)	505	18 (0.6)	10 (2.6)	17 (2.5)		11 (0.8)		34 (0.9)	986 (1.4)	1884
	Norway (NOR)														267							49 (2.0)	342
	Singapore (SING)							53 (1.5)	38 (0.3)	127 (0.7)						222							552
	S. Korea (KOR)				61 (0.5)			73 (0.2)		69 (2.2)							789					45 (2.7)	1098
	Spain (SP)		34 (1.4)								18 (0.4)		66 (1.1)					1160		25 (1.0)	19 (0.8)	22 (1.3)	1617
	Sweden (SWE)																		402				538
	Turkey (TUR)																			129			142
	UK	50 (0.6)	21 (2.0)	55 (0.4)	33 (2.5)	28 (0.5)	28 (1.1)	185 (2.2)	29 (2.0)	62 (2.2)	25 (0.6)	13 (1.8)	20 (1.6)	30 (0.9)		39 (1.8)	81 (2.1)	63 (0.9)		13 (1.9)	4093	848 (0.9)	5913
	US	102 (0.6)	115 (1.7)	299 (0.4)	17 (3.1)	26 (1.3)	26 (1.9)	56 (2.8)	47 (2.2)	119 (2.1)	32 (1.2)	38 (2.6)	265 (1.3)	35 (1.4)		27 (1.9)	52 (2.6)	60 (1.3)		90 (1.7)	238 (0.9)	52650	54909
	TOTAL BORR	1029	503	2048	719	755	906	1198	516	974	1615	421	527	679	457	427	1626	1540	504	621	5085	59810	

Panel B. Contract characteristics

Variable	Definition/ Source	Units	Mean	Std	25%	Median	75%	Obs
Spread	Loan cost including all fees/Loanware	Basis points p/a above LIBOR	189	219	62.5	150	250	86354
Amount	Loanware	Million USD	190.5	517.2	20	60	175	116803
Maturity	Loanware	Years	4.3	3.2	2	4	5.5	101202
Secured	Dummy which takes the value 1 if the loan is secured/ Loanware	0/1	0.29	0.45	0	0	1	117194
Guaranteed	Dummy which takes the value 1 if the loan is guaranteed/ Loanware	0/1	0.07	0.26	0	0	0	117194
Secured or guaranteed	Dummy which takes the value 1 if the loan is either secured or guaranteed/ Loanware	0/1	0.34	0.47	0	0	1	117194
Tranched	Dummy which takes the value 1 if the loan is offered in several separate tranches/ Loanware	0/1	0.46	0.49	0	0	1	86354
Number of banks	Number of banks in the syndicate		7.6	9.1	2	4	10	86354
Foreign bank	Dummy which takes the value 1 if the firm borrows from a foreign bank/ Loanware	0/1	0.22	0.41	0	0	0	86354
Borrower Interaction	Total number of loans (including current) of the lead bank to the borrower/Loanware		1.5	1.1	1	1	2	86354
Rating	Borrower credit rating at the time the contract is signed on a scale from 1 (AAA) to 21 (C or lower). Refers to the lower of Moody's and S&P's ratings, if both are available.	1 to 21	10.9	4.4	7	11	15	25202
Default	Proportion of borrowers classified by Moody's or S&P's as in default	Percentage	0.5	0.7	0	0	0	86354

Panel C. Measures of distance between borrower and lead bank

Variable	Definition/ Source	Units	Mean	Std	25%	Median	75%	Obs
Continuous distance measures								
Cultural distance	Euclidean distance between the cultures of the borrower's and the lead bank's countries/ WVS	See text for details	0.30	0.68	0	0	0	86354
Power-Distance	The difference in "power-distance" scores between the borrower's and the lead bank's countries, squared /Hofstede (2000)	see text for details	85.9	350.8	0	0	0	86648
Distance	Physical distance between the capital of the country of the lead bank's headquarters and the capital of the borrower's country/ *infoplease.com*	1000km	1.21	3.27	0	0	0	86354
Discrete distance measures								
Creditor rights distance	Absolute value of the difference between creditor rights in the lead	0 to 4	0.27	0.70	0	0	0	86354

	bank's country and in the borrower's country/ Djankov et al. (2007)							
Creditor rights are better in lender country dummy	Dummy which takes the value 1 if the creditor rights index is higher in the lead bank's country than in the borrower's country/ Djankov et al. (2007)	0/1	0.10	0.30	0	0	0	86354
Same legal	Dummy which takes the value 1 if the borrower and the lead bank are from countries of the same legal origin/ Djankov et al. (2007)	0/1	0.87	0.34	1	1	1	86354
Same religion	Dummy which takes the value 1 if the borrower and the lead bank are from countries with same religion/ Djankov et al. (2007)	0/1	0.84	0.36	1	1	1	86354
Same language	Dummy which takes value 1 if the borrower and the lead bank are from countries that share the same language/ Rose (2004)	0/1	0.85	0.36	1	1	1	86354
Colonial ties	Dummy which takes value 1 if the borrower and the lead bank are from countries that had colonial ties in the past/ Rose (2004)	0/1	0.78	0.41	1	1	1	86354
Border	Dummy which takes value 1 if the borrower and the lead bank are from countries that share a common border/ Rose (2004)	0/1	0.81	0.39	1	1	1	86354

Panel D. Syndicate composition and characteristics

Variable	Definition/ Source	Units	Mean	Std	25%	Median	75%	Obs
Risk sharing	(Loan held by participant *i*)/(Loan amount/Number of Banks)- (Loan held by the lead bank) /(Loan amount/Number of banks) /Loanware		-2.3	17.92	-1.82	-0.98	-0.5	225704
Interaction-syndicate	No. of previous deals of a participant bank with a lead bank, including current/Loanware		7.99	11.34	1	2	9	225704
Banks' cultural distance	Cultural distance between the participant bank's and lead bank's countries / WVS	See text for details	0.68	0.88	0	0.22	1.17	225704
Banks' distance	Physical distance between the capital of the country of the lead bank's headquarters and the capital of the country of the participant bank's headquarters/ *infoplease.com*	1000km	2.79	4.18	0	0.3	5.86	225601
Same legal-syndicate	Dummy which takes the value 1 if the participant	0/1	0.67	0.47	0	1	1	225704

	bank and the lead bank are from countries of the same legal origin/ Djankov et al. (2007)							
Creditor rights distance-syndicate	Absolute value of the difference between creditor rights in the participant bank's country and in the lead bank's country/ Djankov et al. (2007)	0 to 4	0.64	0.93	0	0	1	225704
Creditor rights better in participant bank country – syndicate	Dummy which takes the value 1 if creditor rights are better protected in the country of the participant bank than in the country of the lead bank/ Djankov et al. (2007)	0/1	0.22	0.41	0	0	0	225704
Same religion-syndicate	Dummy which takes the value 1 if the participant bank and the lead bank are from countries with the same religion/ Djankov et al. (2007)	0/1	0.63	0.48	0	1	1	225704
Same language-syndicate	Dummy which takes the value 1 if the participant bank and the lead bank are from countries with the same language/ Rose (2004)	0/1	0.69	0.46	0	1	1	225704
Colonial ties-syndicate	Dummy which takes the value 1 if the participant bank and the lead bank are from countries that had colonial ties in the past/ Rose (2004)	0/1	0.58	0.49	0	1	1	225704
Border-syndicate	Dummy which takes the value 1 if the participant bank and the lead bank are from countries that share a common border/ Rose (2004)	0/1	0.63	0.48	0	1	1	225704

Panel E. Loan characteristics: Categorical variables

Variable	Definition	Source
Loan instrument type	Type of loan such as working capital, overdraft facility, construction loan, etc. (47 categories)	Loanware
Rating group (1 through 4)	The lower rating between Moody's and S&P, where group 1 corresponds to all A-letter ratings, group 2 corresponds to all B-letter ratings, group 3 corresponds to C and lower ratings, and group 4 is unrated. Ratings are at the time of the loan origination	Loanware
Year	Year in which loan was issued (1980-2005)	Loanware
Currency	Loan currency (70 categories)	Loanware
Borrower type	Private corporate, private bank etc. (15 categories). Government (central and local) are excluded.	Loanware

Loan purpose	Acquisition, debt repayment, general corporate purposes etc. (22 categories)	Loanware
Borrower industry	57 categories	Loanware

Panel F. Firm characteristics (available only for a sub sample of loans)

Variable	Units	Mean	Std	25%	Median	75%	obs
Sales	Th. USD	3,233,466	10,300,000	149,639	749,197	2,789,614	9043
Foreign sales	Percentage	20.4	40.3	0	0	0	13093
Market-to-Book		1.10	3.08	0.30	0.61	1.12	8315
Leverage	Percentage	0.34	0.36	0.15	0.30	0.44	8997
Net income over assets		0.08	0.40	0.06	0.11	0.16	8474
Property, Plant, and Equipment (PPE) over Assets		0.37	0.28	0.13	0.32	0.60	8846

Panel G. Country characteristics

Variable	Definition/Source	Units	Mean	Std	25%	Median	75%	obs
Per capita GDP-Lead bank	World Development Indicators	Th. USD	28.066	7.763	23.330	29.942	34.484	86354
Per capita GDP-Borrower	World Development Indicators	Th. USD	27.210	9.460	23.883	29.942	34.484	86354
Per capita GDP-Participant bank	World Development Indicators	Th. USD	26.32	8.31	20.88	27.83	33.28	225704
Creditor rights -Lead bank	Index of protection of creditor rights/Djankov et al. (2007)	0 to 4	1.44	0.94	1	1	1	86354
Creditor rights – Borrower	Index of protection of creditor rights/Djankov et al. (2007)	0 to 4	1.52	0.99	1	1	2	86354
Creditor rights-Participant bank	Index of protection of creditor rights/Djankov et al. (2007)	0 to 4	2.07	1.01	1	2	3	225704
Credit to GDP-Borrower	World Development Indicators	Percentage	182.66	66.58	138.46	195.99	241.51	86354
Industrial similarity	Correlation between the ranks of industry outputs for each pair of lead bank-borrower countries/UNIDO 1991	Correlation coefficient (-1 to 1)	0.66	0.19	0.52	0.70	0.81	14662
Export flows	Percent of the borrower country's exports which are sold in the lead bank's country /IMF bilateral trade data	Percentage	10.8	16.0	2.6	4.9	12.3	18604
Investment flows	Percent of all capital outflows from the lead bank's country to the borrower's country/ IMF/CPIS survey	Percentage	14.3	18.1	0.45	5.99	23.69	17829

Table II: Characteristics of Firms Borrowing from Domestic, Culturally Close, and Culturally Distant Banks

The table presents sample means, medians (in brackets) and standard deviations (in square brackets). Low cultural distance is defined as positive cultural distance below the sample mean which is about 1.4 for the subsample of foreign banks and high cultural distance is defined as cultural distance exceeding 1.4. We present statistics for contract terms, initial ratings and rating changes (upgrades or downgrades after the loan was granted), the most common loan purposes and loan instruments and firm characteristics. * denotes differences in means statistically significant at the 5% level relative to the means reported in column 3.

	Domestic banks	Low cultural distance bank	High cultural distance banks
Observations	68084	8841	9429
Outcomes			
Spread	193*	169*	180
	(150)	(108)	(131)
	[226]	[195]	[190]
Loan amount	217*	159*	125
	(73)	(60)	(50)
	[570]	[400]	[387]
Loan maturity	4.2*	4.8*	4.6
	(4.0)	(5.0)	(4.0)
	[2.9]	[3.5]	[3.5]
Secured	31%*	26%*	35%
Guaranteed	5%*	12%*	18%
Ratings and Rating Changes			
Average rating (on a scale from 1 (AAA) to 21 (C)).	11.1*	9.7*	10.4
	(11)	(9)	(10)
	[4.4]	[4.4]	[4.6]
Unrated	70.4%*	71.3%*	75.8%
Proportion of upgraded firms out of all firms for which the rating changed after the granting of the loan	48.2*	50.4%	51.5%
Proportion of firms whose rating changed after the granting of the loan relative to firms with unchanged rating	29.6%*	27.9%*	25.2%
Proportion of unrated firms which obtained a rating after the granting of the loan	10.7%	11.2%	10.6%
Default	0.4%	0.7%	0.5%
Loan Instruments			
Revolving Credit	57%*	34%*	31%
Term Loan	31%*	47%*	51%
Loan Purposes			
General corporate	50%*	39%*	42%
Acquisition-related loans	19%*	14%*	10%
Firm Attributes			
Observations	10371	1353	1171
Sales (million U.S. dollars)	3,175,593	3,871,536	3,029,002
	(645,878)	(1,186,925)	(1,511,165)
	[10,500,000]	[12,600,000]	[4,393,677]

Foreign sales	22.5%*	29.8%*	18.0%
	(6.7)	(14.8)	(0)
	[28.5]	[33.5]	[28.2]
Market-to-book	1.18*	0.84	0.86
	(0.64)	(0.43)	(0.44)
	[3.17]	[2.39]	[3.19]
Leverage	0.34*	0.34*	0.32
	(0.30)	(0.31)	(0.30)
	[0.38]	[0.26]	[0.21]
Net income over assets	0.08	0.09	0.08
	(0.11)	(0.10)	(0.11)
	[0.42]	[0.29]	[0.32]
Property, plant, and equipment over assets	0.37*	0.38*	0.42
	(0.31)	(0.36)	(0.44)
	[0.27]	[0.31]	[0.30]

Table III. The Determinants of Loan Spreads

The dependent variable is the spread. All regressions include 21 primary loan purpose dummies, 46 loan instrument dummies, 69 currency dummies, 11 borrower type dummies, 56 borrower business (industry) dummies, year dummies, borrower nationality dummies, lead bank nationality dummies and the constant term. Regression 4 includes 14 rating group dummies whose coefficients are not reported. All variables are defined in Table I. Parameters are estimated by ordinary least squares. Standard errors are presented in parentheses and are corrected for heteroskedasticity and clustered at the borrower nationality times lead bank nationality level. ***, **, and * denote statistical significance at the 1, 5, and 10 percent, respectively.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	No rating controls	4 rating groups controls	14 rating groups controls	Contract terms controls	Other distances	Foreign banks only	Lender fixed effects	No U.S. borrowers	Firm level controls	Rated borrowers
Cultural distance	12.86***	13.09***	13.11***	11.15***	8.692**	11.20***	11.57***	17.44***	12.99*	23.81***
	(3.172)	(3.190)	(3.187)	(2.533)	(4.130)	(4.169)	(4.196)	(4.473)	(7.612)	(4.679)
Distance					-0.0339	-0.974	0.263	-0.0193		
					(0.682)	(0.754)	(0.717)	(0.773)		
Border					-10.04	-23.04***	-3.184	-7.303		
					(6.949)	(7.893)	(8.371)	(7.414)		
Same legal					7.607	8.573*	5.716	6.440		
					(4.912)	(4.887)	(6.049)	(4.686)		
Same religion					-7.806*	-10.81**	-9.325*	-9.781*		
					(4.391)	(4.823)	(5.284)	(5.246)		
Same language					-5.431	-0.00283	-1.895	-7.230		
					(6.857)	(7.163)	(7.349)	(6.709)		
Colonial ties					3.699	-12.30	2.633	12.72		
					(6.173)	(17.12)	(7.425)	(8.000)		
Creditor rights – Borrower					-10.56	-10.87	-12.42	-5.233		
					(7.590)	(8.848)	(8.090)	(7.777)		
Creditor rights -Lead bank					16.77***	8.987	12.87*	8.041		
					(6.163)	(6.379)	(7.404)	(7.340)		
Creditor rights distance					2.293	3.182	4.905*	4.512		
					(2.792)	(2.851)	(2.723)	(3.325)		
Creditor rights are better in lender country dummy					-8.358	-8.594	-18.44**	-9.608		
					(9.867)	(9.278)	(9.012)	(10.86)		
Credit to GDP-Borrower	0.0498	0.0535	0.0407	0.0424	0.0610	0.320***	0.0283	0.106	0.0646	-0.132
	(0.0873)	(0.0886)	(0.0884)	(0.0685)	(0.0668)	(0.116)	(0.0741)	(0.0768)	(0.141)	(0.112)
Per capita GDP – Lead bank	-4.522***	-4.475***	-4.359***	-4.006***	-4.948***	-4.666***	-3.199**	-3.700***	-13.41**	-7.492***

	(1.742)	(1.710)	(1.643)	(1.360)	(1.414)	(1.790)	(1.396)	(1.347)	(5.237)	(2.367)
Per capita GDP-										
Borrower	1.747	1.070	1.165	0.449	1.203	-0.915	-0.808	-1.423	-1.787	6.404**
	(1.789)	(1.713)	(1.660)	(1.303)	(1.360)	(1.473)	(1.265)	(1.388)	(5.227)	(2.909)
Tranched	25.61***	25.06***	23.16***	22.50***	25.27***	16.50***	25.00***	12.08***	11.68***	25.17***
	(2.644)	(2.638)	(2.249)	(4.581)	(4.997)	(3.613)	(1.631)	(2.525)	(4.025)	(1.658)
Number of loan purposes	-4.051***	-3.552***	-3.129***	-2.830	-3.484	-4.071	-3.331	-2.259	-10.85**	-5.734***
	(1.104)	(1.103)	(1.097)	(2.522)	(2.159)	(4.154)	(2.072)	(2.793)	(5.465)	(1.452)
Rating group2		43.26***			44.02***	7.752	49.28***	1.410		56.68***
		(14.10)			(12.15)	(8.073)	(3.283)	(6.157)		(7.227)
Rating group3		137.0***			137.8***	56.21***	136.2***	91.47***		146.4***
		(18.50)			(26.90)	(18.94)	(6.129)	(21.52)		(9.068)
Rating group4		51.55***			52.30***	13.71*	59.12***	8.823*		
		(15.34)			(12.34)	(7.591)	(3.017)	(5.050)		
Number of banks				-0.656***						
				(0.166)						
Amount				-0.0135***						
				(0.00260)						
Maturity				2.303***						
				(0.631)						
Secured *or* guaranteed				-4.518						
				(3.895)						
Sales									-0.000008***	
									(0.0000001)	
Financial leverage									2.792***	
									(0.383)	
% foreign sales									-0.0208	
									(0.0303)	
Net income over assets									-0.526	
									(0.388)	
PP&E/Assets									-7.058	
Observations	86701	86701	86701	77771	86354	18607	86772	26544	6108	24530
R-squared	0.100	0.106	0.111	0.118	0.106	0.183	0.186	0.309	0.170	0.170

Table IV. Addressing Selection Problems

Column 1 presents estimates obtained by controlling for borrower fixed effects. Columns 2 and 3 report the estimates of a Heckman selection model. In column 2 (first stage), we consider how a borrower is matched to all top 500 potential lead banks in the country; the unit of analysis is the potential borrower-lead bank match and the dependent variable is a dummy which takes the value one if a borrower receives a loan from a given lead bank that has been operational in its country in the past, and equals zero if the borrower does not receive a loan from that lead bank. In column 3, we consider all loans issued by the top 500 lead banks in country. In addition to the variables defined in Table I, the selection equation in column 2 includes the rank of the lead bank in a country according to the number of deals concluded up to the year of the loan, the number of close foreign banks (foreign banks from countries with a capital city less than 2000 km from the capital city of the country of the borrower), and the number of culturally distant foreign banks (foreign banks with cultural distance above the median cultural distance from the country of the borrower). In addition to the coefficients we report, we include 21 primary loan purpose dummies, 46 loan instrument type dummies, 69 currency dummies, year dummies, dummies, lead bank nationality dummies, and the constant term. Standard errors are presented in parentheses. ***, **, and * denote statistical significance at the 1, 5, and 10 percent, respectively.

	(1)	(2)	(3)
	Borrower fixed effects	Heckman selection model	
	Spread	Bank-firm match	Spread
Cultural distance	11.07**	-0.0178	17.59**
	(5.129)	(0.012)	(7.03)
Distance	-0.247	0.000702	3.275**
	(0.855)	(0.0026)	(1.43)
Border	-10.35	-0.624***	6.207
	(10.55)	(0.043)	(13.6)
Same legal	0.679	0.0592***	-6.064
	(7.056)	(0.018)	(8.58)
Same religion	-6.475	0.0164	-35.91***
	(6.272)	(0.018)	(9.47)
Same language	5.199	-0.0768***	-19.64
	(8.877)	(0.025)	(13.6)
Colonial ties	18.65*	0.450***	20.01
	(9.769)	(0.028)	(17.7)
Creditor rights –Borrower	2.871	0.0712***	-1.807
	(11.46)	(0.012)	(10.7)
Creditor rights -Lead bank	7.677	-0.0146	4.295
	(8.234)	(0.012)	(10.7)
Creditor rights distance	0.656	0.0121	-9.217*
	(3.458)	(0.011)	(4.94)
Creditor rights are better in lender country dummy	2.423	-0.0224	-5.578
	(11.24)	(0.036)	(15.6)
Credit to GDP-Borrower	-0.0161	-0.0479	-0.00184***
	(0.115)	(0.10)	(0.00016)
Per capita GDP-Lead bank	-3.167**	-0.00184***	-0.0479
	(1.471)	(0.00016)	(0.10)
Per capita GDP –Borrower	-0.331	0.000438	-1.683
	(1.967)	(0.00090)	(2.04)
Tranched	13.27***	-0.00282***	-2.693
	(2.313)	(0.00100)	(1.89)
Number of loan purposes	-1.573	0.0552***	15.41***
	(2.488)	(0.0097)	(3.47)
Rating group2	23.57***	0.0851***	1.003
	(6.830)	(0.013)	(4.49)

Rating group3	105.4***	-0.0567***	19.57***
	(10.01)	(0.019)	(6.72)
Rating group4	15.28**	-0.297***	68.15***
	(7.132)	(0.056)	(20.7)
Bank rank		-0.102***	
		(0.015)	
Number close banks		-0.790***	
		(0.032)	
Border * Number close banks		-0.0791***	
		(0.0061)	
Number culturally distant banks		0.109***	
		(0.0073)	
Border* Number culturally distant banks		-0.0859***	
		(0.0067)	
Mills Ratio			-17.786
			(14.298)
Observations	86354	350411	15963
Wald Chi-squared			7726.77
R-squared	0.502		

Table V. The Determinants of Other Contractual Features

The dependent variables are loan amount, loan maturity and binary variables denoting secured or guaranteed loans. In this table, and in all subsequent tables where the loan amount appears as a dependent variable, the largest observations are winsorized at about 1 percent level. All regressions include 21 primary loan purpose dummies, 46 loan instrument dummies, 69 currency dummies, 11 borrower type dummies, 56 borrower business dummies, year dummies, borrower nationality dummies, lead bank nationality dummies, and the constant term. All variables are defined in Table I. Parameters are estimated by ordinary least squares. Standard errors are presented in parentheses and are corrected for heteroskedasticity and clustered at the borrower nationality times lead bank nationality level. ***, **, and * denote statistical significance at the 1, 5, and 10 percent, respectively.

	(1) Amount	(2) Maturity	(3) Secured	(4) Guaranteed
Cultural distance	-3.877**	0.0482	0.00517	0.0202**
	(1.551)	(0.0794)	(0.00728)	(0.00875)
Distance	0.453*	-0.0177	-0.00130	0.000205
	(0.245)	(0.0166)	(0.000953)	(0.00122)
Border	2.573	0.246*	-0.0239**	-0.0109
	(2.606)	(0.134)	(0.0119)	(0.0131)
Same legal	-4.907**	-0.0930	-0.00506	-0.0277***
	(1.918)	(0.0982)	(0.00978)	(0.0106)
Same religion	3.159*	-0.215**	-0.0113	-0.0122
	(1.755)	(0.108)	(0.00923)	(0.00809)
Same language	1.036	-0.0378	0.000904	0.0274**
	(2.461)	(0.135)	(0.0109)	(0.0137)
Colonial ties	8.993***	-0.0352	-0.00152	0.00152
	(2.502)	(0.123)	(0.00951)	(0.0106)
Creditor rights –Borrower	-1.636	0.0612	0.0406*	0.00168
	(3.484)	(0.141)	(0.0212)	(0.0118)
Creditor rights -Lead bank	-2.374	0.265*	0.0262	0.000259
	(2.575)	(0.140)	(0.0203)	(0.0103)
Creditor rights distance	-1.849**	0.0283	0.0106**	0.00493
	(0.922)	(0.0593)	(0.00504)	(0.00420)
Creditor rights are better in lender country dummy	6.397**	-0.256	-0.0243	-0.0196
	(3.141)	(0.176)	(0.0160)	(0.0155)
Credit to GDP- Borrower	-0.0258	-0.00461***	0.000436**	0.000321**
	(0.0442)	(0.00170)	(0.000193)	(0.000145)
Per capita GDP- Lead bank	-0.0267	-0.0823***	-0.00608*	0.00101
	(0.503)	(0.0283)	(0.00317)	(0.00322)
Per capita GDP -Borrower	1.960***	0.104***	-0.00844***	0.0104***
	(0.690)	(0.0240)	(0.00227)	(0.00373)
Tranched	-17.26***	0.625***	0.0889***	0.00489
	(1.195)	(0.0253)	(0.00598)	(0.00306)
Number of loan purposes	7.690***	0.0423	0.0371***	0.00216
	(1.198)	(0.0856)	(0.00786)	(0.00280)
Rating group2	-19.66***	0.401**	0.148***	-0.0212
	(6.927)	(0.173)	(0.0422)	(0.0154)
Rating group3	-52.06***	-0.208**	0.312***	-0.0101
	(8.752)	(0.0909)	(0.0465)	(0.0145)
Rating group4	-76.58***	0.105	0.175***	-0.00892
	(10.96)	(0.103)	(0.0392)	(0.0117)
Observations	116803	101202	117194	117194
Adjusted R-squared	0.312	0.380	0.250	0.200

Table VI: Ex post Borrower Performance

The dependent variables are measures of borrower performance after the loan is granted. In columns 1, the dependent variable is a dummy that takes value 1 if a borrower rating is changed to default before the maturity of the loan and equal to zero if the borrower continues to have a no default rating; parameter estimates are obtained using a probit model. In column 2, the dependent variable takes the value 1 (-1) if the borrower was upgraded (downgraded) by Moody's or S&P after the loan issuance and before its maturity and the value zero if the rating remained unchanged; obtaining (losing) a rating is treated as an upgrade (downgrade). In column 3, the dependent variable takes the value 1 (-1) if the borrower was upgraded (downgraded) by Moody's or S&P after the loan issuance and before its maturity and the value zero if the rating remained unchanged; we exclude unrated borrowers. While in column 2 and 3 we consider as a change in rating only changes in letter grades, in column 4, we consider changes in notches; we exclude unrated borrowers. In columns 2 to 4, estimates are obtained using an ordered probit model. In columns 5 through 8, the dependent variable is the change in the measure of borrower performance indicated on top of the column during the two years after the loan is granted. Parameters estimates in these columns are obtained by ordinary least squares. In all equations, we include the following control variables whose coefficients are not reported: year dummies, borrower type dummies, the borrower's initial rating group, GDP in the country of the borrower and the time since the loan was issued. Standard errors are presented in parentheses and are corrected for heteroskedasticity and clustered at the borrower nationality times lead bank nationality level. ***, **, and * denote statistical significance at the 1, 5, and 10 percent, respectively.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Default	Changes in rating			Changes in borrower characteristics			
	Rated companies only	Acquiring rating = Upgrade	Actual rating changes	Actual rating changes; finer ratings	Market to book	Leverage	ROA	Sales
Cultural distance	-0.000501	0.0284*	0.00362	-0.0241	0.235	0.0254	0.129	0.0192
	(0.00187)	(0.0154)	(0.0259)	(0.0243)	(0.394)	(0.0734)	(0.231)	(0.198)
Observations	9943	41336	9943	9943	1970	2093	1989	2090
R-squared	0.19	0.30	0.26	0.06	0.034	0.040	0.026	0.095

Table VII. Local Subsidiaries

The dependent variables are spread, amount, maturity, and binary variables denoting secured or guaranteed loans. All regressions include 21 primary loan purpose dummies, 46 loan instrument type dummies, 69 currency dummies, 11 borrower type dummies, 56 borrower business dummies, year dummies, borrower nationality dummies, lead bank nationality dummies, and the constant term. All variables are defined in Table I. In addition to the previously defined variables, Local subsidiary is a dummy variable that takes the value one if the lead bank has a local subsidiary in the country of the borrower and zero otherwise. Parameters are estimated by ordinary least squares. Standard errors are presented in parentheses and are corrected for heteroskedasticity and clustered at the borrower nationality times lead bank nationality level. ***, **, and * denote statistical significance at the 1, 5, and 10 percent, respectively.

	(1) Spread	(2) Amount	(3) Maturity	(4) Secured	(5) Guaranteed
Cultural distance	10.09**	-2.38	0.12	-0.0036	0.023***
	(5.01)	(1.637)	(0.08)	(0.0078)	(0.009)
Cultural distance* Local subsidiary	-4.13*	-4.64**	-0.21***	0.027***	-0.009*
	(2.13)	(1.96)	(0.06)	(0.009)	(0.005)
Distance	0.005	0.50**	-0.0155	-0.0016	0.0003
	(0.823)	(0.25)	(0.0162)	(0.00097)	(0.0012)
Border	-9.36	3.23	0.275**	-0.028**	-0.0096
	(7.93)	(2.68)	(0.134)	(0.012)	(0.013)
Same legal	7.48	-5.11***	-0.10	-0.004	-0.028***
	(5.26)	(1.96)	(0.098)	(0.009)	(0.010)
Same religion	-7.37	3.71**	-0.19*	-0.015	-0.011
	(4.69)	(1.88)	(0.11)	(0.010)	(0.008)
Same language	-5.54	0.98	-0.044	0.001	0.027**
	(7.10)	(2.48)	(0.135)	(0.011)	(0.014)
Colonial ties	3.87	9.07***	-0.027	-0.002	0.002
	(7.09)	(2.50)	(0.12)	(0.009)	(0.011)
Creditor rights –Borrower	-10.76	-1.88	0.053	0.0420**	0.0012
	(9.00)	(3.52)	(0.14)	(0.0209)	(0.019)
Creditor rights -Lead bank	16.86***	-2.22	0.27*	0.025	0.001
	(6.05)	(2.62)	(0.14)	(0.020)	(0.010)
Creditor rights distance	2.59	-1.57	0.04	0.0089*	0.0055
	(3.02)	(0.96)	(0.06)	(0.0052)	(0.0042)
Creditor rights are better in lender country dummy	-8.49	6.23**	-0.26	-0.023	-0.020
	(9.78)	(3.17)	(0.17)	(0.016)	(0.015)
Credit to GDP-Borrower	0.061	-0.026	-0.0046***	0.00043**	0.00032**
	(0.086)	(0.044)	(0.0017)	(0.00019)	(0.00014)
Per capita GDP –Lead bank	-4.81***	0.126	-0.075***	-0.007**	0.001
	(1.68)	(0.501)	(0.029)	(0.003)	(0.003)
Per capita GDP-Borrower	1.13	1.895***	0.10***	-0.00805***	0.0103***
	(1.70)	(0.684)	(0.024)	(0.00224)	(0.00373)
Tranched	25.31***	-17.22***	0.63***	0.089***	0.005
	(2.50)	(1.18)	(0.025)	(0.006)	(0.003)
Number of loan purposes	-3.47***	7.70***	0.043	0.037***	0.0022
	(1.09)	(1.20)	(0.085)	(0.0078)	(0.0028)
Rating group2	44.10***	-19.56***	0.406**	0.148***	-0.021
	(13.69)	(6.99)	(0.171)	(0.043)	(0.015)
Rating group3	137.94***	-51.84***	-0.199**	0.311***	-0.0097
	(17.99)	(8.90)	(0.0881)	(0.047)	(0.014)
Rating group4	52.44***	-76.41***	0.11	0.17***	-0.0086
	(14.92)	(11.06)	(0.10)	(0.04)	(0.012)
Observations	86354	116,803	101202	117194	117194
Adjusted R-squared	0.11	0.31	0.380	0.250	0.200

Table VIII. The Dynamics of Cultural Biases

The dependent variables are spread, amount, maturity, and binary variables denoting secured or guaranteed loans. We consider only syndicated loans made starting in 1990. All regressions include 21 primary loan purpose dummies, 46 loan instrument dummies, 69 currency dummies, 11 borrower type dummies, 56 borrower business dummies, year dummies, borrower nationality dummies, lead bank nationality dummies, and the constant term. Parameters are estimated by ordinary least squares. Standard errors are presented in parentheses and are corrected for heteroskedasticity and clustered at the borrower nationality times lead bank nationality level. ***, **, and * denote statistical significance at the 1, 5, and 10 percent, respectively.

	(1) Spread	(2) Amount	(3) Maturity	(4) Secured	(5) Guaranteed
Cultural distance	11.45***	-2.723	-0.0127	0.00978	0.0175*
	(4.233)	(1.772)	(0.0919)	(0.00814)	(0.0104)
Borrower interaction	0.919	-1.503***	-0.0735***	0.00432***	-0.00232*
	(0.855)	(0.154)	(0.00728)	(0.000816)	(0.00121)
Cultural distance * Borrower interaction	-2.999***	-0.802*	0.0425*	-0.000239	0.00125
	(0.945)	(0.473)	(0.0244)	(0.00224)	(0.00393)
Distance	-0.182	0.545**	-0.0232	-0.00198*	0.000290
	(0.601)	(0.272)	(0.0205)	(0.00112)	(0.00141)
Border	-1.527	0.394	0.154	-0.0225	-0.0126
	(7.621)	(3.060)	(0.160)	(0.0147)	(0.0147)
Same legal	2.062	-4.347**	-0.0266	-0.00826	-0.0252**
	(4.403)	(2.146)	(0.106)	(0.0111)	(0.0119)
Same religion	0.182	2.046	-0.295**	-0.0109	-0.00809
	(4.693)	(2.004)	(0.127)	(0.0107)	(0.00877)
Same language	5.854	0.763	-0.0710	0.00599	0.0348**
	(6.819)	(2.884)	(0.149)	(0.0131)	(0.0151)
Colonial ties	-8.368	8.741***	0.00786	-1.30e-05	-0.00576
	(6.174)	(2.816)	(0.138)	(0.0112)	(0.0110)
Creditor rights –Borrower	-23.36**	-2.690	0.00400	0.0474**	0.00209
	(9.973)	(3.690)	(0.135)	(0.0234)	(0.0149)
Creditor rights -Lead bank	13.91**	-3.663	0.200	0.0325	0.00772
	(6.982)	(3.035)	(0.132)	(0.0235)	(0.0121)
Creditor rights distance	4.625*	-2.729***	0.0228	0.0141**	0.00456
	(2.474)	(1.016)	(0.0668)	(0.00569)	(0.00454)
Creditor rights are better in lender country dummy	-11.71	7.385**	-0.204	-0.0250	-0.00330
	(7.758)	(3.534)	(0.193)	(0.0180)	(0.0164)
Credit to GDP-Borrower	0.0370	0.0115	-0.00204	0.000495**	0.000366**
	(0.0848)	(0.0585)	(0.00206)	(0.000222)	(0.000174)
Per capita GDP –Lead bank	-4.243	0.524	-0.0550	-0.0117*	-0.00372
	(3.206)	(0.773)	(0.0396)	(0.00652)	(0.00402)
Per capita GDP-Borrower	2.529	2.827***	0.0484	-0.0175***	0.00783
	(2.797)	(0.784)	(0.0326)	(0.00467)	(0.00500)
Tranched	26.86***	-16.67***	0.673***	0.0917***	0.00543
	(1.950)	(1.304)	(0.0263)	(0.00493)	(0.00364)
Number of loan purposes	-3.494***	7.218***	0.0344	0.0377***	0.00273
	(1.079)	(1.107)	(0.0821)	(0.00763)	(0.00296)
Rating group2	58.64***	-24.97***	0.591***	0.182***	-0.0132
	(9.500)	(5.092)	(0.125)	(0.0360)	(0.0122)
Rating group3	156.2***	-59.22***	-0.0192	0.360***	-0.00129
	(13.57)	(7.210)	(0.0557)	(0.0397)	(0.0112)
Rating group4	67.34***	-82.94***	0.295***	0.209***	-0.00155

	(11.02)	(8.688)	(0.0553)	(0.0324)	(0.00937)
Observations	79022	105433	91892	105753	105753
Adjusted R-squared	0.102	0.321	0.375	0.227	0.183

Table IX. Further Robustness Checks

The dependent variable is the spread and estimates are obtained by ordinary least squares. In addition to previously defined variables, trust is defined as the percentage of individuals from the lead bank's country who claim to trust individuals from the borrower's country. The samples in columns 2 through 4 include only observations where the lead bank is foreign. In column 5, cultural distance is replaced by the squared difference of the Hofstede's Power-Distance score. In column 6, the sample includes only countries for which trust data are available. All regressions include 21 primary loan purpose dummies, 46 loan instrument type dummies, 69 currency dummies, 11 borrower type dummies, 56 borrower business dummies, year dummies, borrower nationality dummies, lead bank nationality dummies, and the constant term. Standard errors are presented in parentheses and are corrected for heteroskedasticity and clustered at the borrower nationality times lead bank nationality level. ***, **, and * denote statistical significance at the 1, 5, and 10 percent, respectively.

	(1) Spread	(2) Spread	(3) Spread	(4) Spread	(5) Spread
Cultural distance	15.43***	11.30***	13.34***		17.86*
	(4.61)	(4.14)	(4.45)		(10.13)
Industrial similarity	17.06				
	(22.78)				
Export flows		-0.065			
		(0.30)			
Investment flows			49.09		
			(34.77)		
Hofstede's Power-Distance				0.007*	
				(0.004)	
Trust					-1.65
					(14.48)
Distance	-1.22	-1.00	-0.96	0.87	1.75
	(0.83)	(0.83)	(0.73)	(0.69)	(7.03)
Border	-13.43	-21.40**	-28.34***	-8.09	-13.08
	(9.82)	(9.98)	(9.25)	(7.82)	(8.91)
Same legal	9.21	8.90*	10.08**	5.60	8.80
	(6.09)	(5.04)	(4.92)	(5.45)	(8.15)
Same religion	-12.24*	-10.99**	-9.25*	-0.51	-12.62
	(6.45)	(5.08)	(5.11)	(4.80)	(8.61)
Same language	6.26	-0.22	-3.16	-9.66	3.95
	(9.83)	(7.21)	(7.32)	(6.74)	(10.22)
Colonial ties	-28.13*	-12.36	-24.99*	-8.18	32.06**
	(16.50)	(14.53)	(14.57)	(6.73)	(15.33)
Creditor rights –	-10.39	-10.91	-9.65	-4.53	7.11
Borrower	(12.09)	(11.07)	(11.23)	(8.52)	(11.31)
Creditor rights -	7.26	9.14	14.24**	15.46**	9.45
Lead bank	(6.65)	(6.03)	(6.01)	(5.53)	(15.58)
Creditor rights distance	8.33***	2.97	3.30	0.34	8.34**
	(3.06)	(2.93)	(2.910)	(2.72)	(4.13)
	-15.02	-7.96	-9.11	-8.87	0.22
	(10.24)	(9.14)	(9.08)	(9.33)	(13.90)
Credit to GDP-Borrower	0.23*	0.32**	0.29**	-0.02	-0.23**
	(0.13)	(0.14)	(0.13)	(0.08)	(0.11)
Per capita GDP-Lead bank	-4.75*	-4.61**	-6.25***	-3.62**	-7.15**
	(2.60)	(2.22)	(2.34)	(1.72)	(3.34)
Per capita GDP -Borrower	-1.05	-0.926	-0.48	0.34	5.03*
	(2.17)	(1.23)	(1.93)	(1.71)	(3.03)
Tranched	17.04***	16.52***	17.21***	25.88***	25.56***
	(4.07)	(3.56)	(3.67)	(2.23)	(2.76)
Number of loan purposes	-2.74	-4.04	-3.78	-3.31***	-0.55
	(4.92)	(3.98)	(4.20)	(1.12)	(2.97)

Rating group2	9.60	7.821	8.99	43.22***	32.92***
	(11.68)	(10.68)	(10.78)	(14.08)	(10.67)
Rating group3	52.93***	53.53***	58.19***	137.11***	74.35***
	(17.63)	(18.74)	(18.62)	(18.33)	(13.92)
Rating group4	14.75	13.77**	14.96	52.07***	29.20***
	(9.64)	(9.65)	(5.76)	(15.06)	(6.86)
Observations	14662	18604	17829	86648	16232
Adjusted R-squared	0.14	0.17	0.18	0.11	0.34

Table X. Risk Sharing within the Syndicate

The dependent variable is risk sharing. For each loan we have a number of observations equal to the number of participant banks. In columns 2 and 6 to 8, we include only observations for which the nationality of the lead bank is different from the nationality of the participant bank (foreign participants). Additionally, in the regressions in which we include the number of bank interactions (columns 7 and 8), we consider only syndicated loans made starting in 1990. All regressions include 21 primary loan purpose dummies, 46 loan instrument type dummies, 69 currency dummies, 11 borrower type dummies, 56 borrower business dummies, year dummies, borrower nationality dummies, lead bank nationality dummies, participant bank nationality dummies and the constant term. Parameters are estimated by ordinary least squares. Standard errors are presented in parentheses and are corrected for heteroskedasticity and clustered at the loan level. ***, **, and * denote statistical significance at the 1, 5, and 10 percent, respectively.

	(1) Whole sample	(2) Foreign participants	(3) Loan FE; Whole sample	(4) Excluding U.S. borrowers	(5) Excluding U.S. lead banks	(6) Foreign participants	(7) Foreign participants	(8) Foreign participants
Banks' cultural distance	-0.162***	-0.334***	-0.0367**	-0.408***	-0.377***	-0.300*	-0.493***	-0.387*
	(0.056)	(0.12)	(0.015)	(0.082)	(0.079)	(0.17)	(0.14)	(0.20)
Banks' cultural distance*Interaction-Syndicate							0.0138**	0.0129*
							(0.0068)	(0.0069)
Interaction-Syndicate							-0.0222*	-0.0237*
							(0.012)	(0.013)
Banks' distance						-0.122***		-0.132***
						(0.026)		(0.029)
Border-Syndicate						-0.683*		-0.752*
						(0.36)		(0.40)
Same legal-Syndicate						-0.122		-0.0648
						(0.21)		(0.23)
Same religion-Syndicate						0.456***		0.450**
						(0.17)		(0.19)
Same language-Syndicate						-1.207***		-1.336***
						(0.29)		(0.32)
Colonial ties-Syndicate						1.545***		1.688***
						(0.36)		(0.40)
Creditor rights-Lead bank						0.348		0.341
						(0.35)		(0.42)
Creditor rights-Participant bank						0.188		0.0722
						(0.24)		(0.27)
Creditor rights distance-Syndicate						0.225**		0.124

						(0.11)		(0.12)
Creditor rights better in participant bank country-Syndicate						-0.315		-0.0252
						(0.35)		(0.40)
Per capita GDP-Participant bank	0.112**	0.110*	-0.00652	0.136*	0.110	0.104	0.134	0.132
	(0.050)	(0.066)	(0.016)	(0.075)	(0.069)	(0.069)	(0.085)	(0.089)
Per capita GDP-Lead bank	-0.0364	-0.0218	0.0116	0.00839	-0.0707	-0.0595	-0.209**	-0.241**
	(0.060)	(0.085)	(0.013)	(0.086)	(0.081)	(0.089)	(0.11)	(0.11)
Tranched	-2.008***	-1.859***		-2.259***	-2.169***	-1.848***	-1.850***	-1.830***
	(0.086)	(0.13)		(0.14)	(0.13)	(0.13)	(0.15)	(0.15)
Number of loan purposes	0.0383	-0.000338		-0.346**	-0.348**	-0.0237	-0.0274	-0.0503
	(0.10)	(0.15)		(0.17)	(0.15)	(0.15)	(0.16)	(0.16)
Rating group2	0.101	0.355*		0.124	0.00106	0.368*	0.324	0.349
	(0.13)	(0.20)		(0.26)	(0.22)	(0.20)	(0.23)	(0.23)
Rating group3	-5.616***	-2.896***		-0.717	-0.412	-2.812***	-3.550***	-3.459***
	(0.38)	(0.63)		(1.65)	(0.78)	(0.63)	(0.72)	(0.72)
Rating group4	-0.174	-0.230		-0.416**	-0.419**	-0.198	-0.300	-0.268
	(0.12)	(0.19)		(0.21)	(0.19)	(0.19)	(0.22)	(0.22)
Observations	225704	114159	227752	115522	124073	114049	101656	101562
Adjusted R-squared	0.03	0.03	0.89	0.07	0.07	0.03	0.03	0.03

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