



# Lender individualism and monitoring: Evidence from syndicated loans<sup>☆</sup>

Theodora Bermpei<sup>a</sup>, Marta Degl'Innocenti<sup>b</sup>, Antonios Nikolaos Kalyvas<sup>c,d</sup>, Si Zhou<sup>e,\*</sup>

<sup>a</sup> Essex Business School, University of Essex, Colchester CO4 3SQ, UK

<sup>b</sup> Department of Economics, Management and Quantitative Methods, University of Milan, Milan 20122, Italy

<sup>c</sup> Department of Accounting and Finance, Kent Business School, University of Kent, Sibson Building, Parkwood Road, Canterbury, Kent CT2 7FS, UK

<sup>d</sup> Southampton Business School, University of Southampton, Southampton SO17 1BJ, UK

<sup>e</sup> School of Economics, Shanghai University, No.99, Shangda Road, Shanghai 200444, China

## ARTICLE INFO

### JEL Classification:

G21  
G30  
M14

### Keywords:

CEOs  
Individualism  
Syndicate loans  
Monitoring, Covenants

## ABSTRACT

This paper addresses the question, “Does lenders’ culture affect their monitoring efforts and style?”, by exploring whether lender individualism affects the loan monitoring of U.S. borrowers for a sample of 27,164 syndicated loan facilities granted between 1998 and 2017. We proxy lender individualism based on the ancestral country of origin of the lead bank’s CEO. We show that lender individualism leads to a less stringent monitoring style. We find that individualist lenders resort less to covenant monitoring, impose less strict contract terms, such as performance pricing and rely more on soft information. We also provide evidence that individualist lenders retain a larger loan share and deal with a larger number of lenders. Finally, we find that some governance characteristics (board size and percentage of female directors) and other CEO features (cash compensation, tenure, and non-duality) moderate the negative association between lender individualism and loan monitoring.

## 1. Introduction

The pervasive impact that CEOs’ cultural heritage exerts on the firm decision process and outcomes is well documented by extant literature (e.g., Nguyen et al., 2018; Pan et al., 2017; Pan et al., 2020; Hagendorff et al., 2022). One of the most critical drivers of cultural differences across societies is arguably individualism (Markus and Kitayama, 1991; Zheng et al., 2013). Individualism reflects the degree to which people focus on their own abilities to differentiate themselves from others and, more generally, relates to independence and personal achievement (Hofstede et al., 2010; Zheng et al., 2013; Berger et al., 2021b).

According to prior research, in individualistic cultures, individuals are more inclined to see themselves as “an autonomous, independent person” (Markus and Kitayama, 1991, p.226). Conversely, people in collectivist cultures perceive themselves “not as separate from the social context but as more connected and less differentiated from others” (Markus and Kitayama, 1991, p.227). The notion that individualist cultures rely solely on independent constructs of the self, regardless of others’ perceptions and opinions (Markus and Kitayama, 1991), may lead to overestimating the precision of self-predictions regarding the

success rates of economic outcomes (Van Den Steen, 2004; Chui et al., 2010). In turn, this shapes how individuals process information and undertake investment decisions, which usually appear to be linked with more risk-taking. The finance literature in fact acknowledges that individualism increases trading volume, volatility (see Odean, 1998; Gervais and Odean, 2001; Scheinkman and Xiong, 2003), investment in risky long-term assets (Shao et al., 2013), corporate risk (Li et al., 2013) and bank failure (Berger et al., 2021b).

We address a gap in prior studies by asking whether individualism may also affect the monitoring efforts of banks in the lending market and, in turn, the bank-firm relationship. Our arguments are based on the notion that individualism relies on an imperative self-evaluation of information accuracy and systematic underestimation of risk (e.g., Daniel et al., 1998; Odean, 1998; Gervais and Odean, 2001; Moore and Healy, 2008; Ben-David et al., 2013). This may result in higher self-evaluation of arm’s length market forces in the lending context while not searching for further borrower information through connections with others. The idea is that banks with individualist CEOs may promote lending policies that give too much weight to the private content of borrowers’ self-collected information. Hence, banks led by individualist CEOs could

<sup>☆</sup> We thank Iftekhhar Hasan (the managing editor) and four anonymous referees for valuable comments and suggestions. We are solely responsible for all remaining errors and omissions.

\* Corresponding author.

E-mail addresses: [t.bermpei@essex.ac.uk](mailto:t.bermpei@essex.ac.uk) (T. Bermpei), [marta.deglinnocenti@unimi.it](mailto:marta.deglinnocenti@unimi.it) (M. Degl'Innocenti), [n.a.kalyvas@kent.ac.uk](mailto:n.a.kalyvas@kent.ac.uk) (A.N. Kalyvas), [szhou@shu.edu.cn](mailto:szhou@shu.edu.cn) (S. Zhou).

<https://doi.org/10.1016/j.jfs.2023.101123>

Received 7 August 2022; Received in revised form 15 March 2023; Accepted 24 March 2023

Available online 28 March 2023

1572-3089/© 2023 Elsevier B.V. All rights reserved.

be more inclined to exercise weaker lending monitoring and be more likely to impose less stringent covenants.

To address this research question, we adopt an approach based on “upper echelons” theory, which posits that organizational leaders’ characteristics can shape organizational policies and decisions (Hambrick and Mason, 1984). Consistent with this view, several studies link CEOs’ cultural heritage and corporates’ economic outcomes, such as research and development intensity (Pan et al., 2017; Graham et al., 2022), bank performance (Nguyen et al., 2018) and corporate acquisition decisions (Pan et al., 2020). Focusing on syndicated lending, Hagendorff et al. (2022) have recently shown that banks with trusting CEOs charge lower interest rates on U.S. syndicated loans. In contrast, we investigate whether CEOs’ individualism affects how banks monitor these syndicated loans. We also examine how the board of directors affects the way individualist CEOs perform their monitoring and advising duties in the syndicate lending market.<sup>1</sup> These issues have yet to be explored in the academic literature focusing on bank monitoring.

Regarding the importance of bank CEOs for syndicated loans, Hagendorff et al. (2022) have collected direct evidence of the CEOs’ influence on the syndicate lending process, by surveying loan office officers with experience in structuring syndicated loans. About 90% of the loan officers interviewed by the authors declared that they implement all lending instructions established by the CEOs. Using detailed interviews, Hagendorff et al. (2022) also show that communication between the CEO and the syndication team occurs regularly to ensure that loan offices adhere to the broad lending parameters that the CEO sets.

Drawing on the literature that acknowledges the importance of CEOs’ cultural heritage in shaping corporate decisions (e.g., Pan et al., 2017; Nguyen et al., 2018; Pan et al., 2020; Hagendorff et al., 2022), we measure the individualism of bank CEOs using Hofstede’s (2001) cultural values indices. As a novel research angle, our key variable of interest – individualism – is based on a hand-collected dataset that records the ancestry origin of U.S. bank CEOs from various sources. Our final dataset consists of 27,164 loan facilities over the period 1998–2017 for 70 U.S. banks, 118 bank CEOs and 1490 unique borrowers in the U.S. Data on syndicated loans was sourced from LPC-DealScan, which comprises the most comprehensive loan-deal information available on U.S. syndicate loans. This dataset allows loans to be matched with the bank- and firm-specific accounting information retrieved from Compustat. Bank CEOs’ compensation incentives and board characteristics come from Execucomp and BoardEx, respectively.

To test the individualist lenders’ monitoring style, we analyze the non-pricing conditions embedded in the loan contract. Following prior studies on syndicate loans (e.g., Sufi, 2007; Ivashina, 2009; Cai et al., 2018; Gustafson et al., 2021), covenant requirements and other written agreements are taken as proxies of the banks’ monitoring style. Higher covenant intensity and the number of financial covenants in loan contracts are usually associated with lenders exerting more screening and monitoring efforts. Indeed, financial covenants capture aspects of loan monitoring that can help prevent default or be used during subsequent renegotiations (Rajan and Winton, 1995; Gustafson et al., 2021). Furthermore, we seek to establish whether lenders with individualist CEOs rely more on soft information in the monitoring process of the loan.

The results show that lead banks with individualist CEOs resort to less stringent covenant-based monitoring requirements. Further analysis shows that individualist lenders are also less likely to impose performance pricing. They also tend to rely more on soft information during

<sup>1</sup> The literature has largely acknowledged that lenders’ characteristics may strongly affect the monitoring effort exerted in the syndicated market. For example, lead bank reputation, capital and liquidity, explain banks’ monitoring effort, the proportion of syndicate sold to other lenders as well as contractual conditions (Dennis and Mullineaux, 2000; Sufi, 2007). Lending decision-making is substantially influenced by CEOs’ personal characteristics as well as recently shown by Hagendorff et al. (2022).

the monitoring process rather than dealing with hard information. Overall, these results align with the theory, providing a link between individualist culture and the overestimation of prediction precision (Daniel et al., 1998) which, in our context, consists of underestimating the conditional uncertainty about borrowers. In turn, this can lead to less monitoring control on the lending activities from those banks with strongly individualist CEOs.

To further corroborate the main findings, we examine whether lender individualism shapes the syndicated loan structure. The analysis reveals that individualist lenders are more inclined to gather a smaller number of participant lenders and retain a larger loan share. This result may indicate that individualist led banks are less prone to connect with other lenders. The data also shows that CEO characteristics moderate the relationship between CEO individualism and loan monitoring efforts. Previous studies have found that factors lowering the risk attitude of bank CEOs include CEO tenure (Coles et al., 2006), cash compensation (Berger et al., 1997; Vallascas and Hagendorff, 2013) and non-duality (Daily and Johnson, 1997; Finkelstein et al., 2009). This paper also explores whether these variables moderate the relationship between CEO individualism and loan monitoring efforts. Next, we examine whether board size and composition may also affect the effectiveness of lenders with individualist CEOs’ in performing their monitoring duties in the lending market. Our findings show that board size and the proportion of female directors moderate the negative association between bank CEO individualism and loan monitoring in the syndicate lending market.

A battery of robustness checks is applied to address possible concerns that could affect baseline results. Firstly, using alternative instrumental variables and CEO turnover, we mitigate possible omitted variables and other endogeneity concerns. Given the nature of the sample, where multiple loans can be provided by the same bank and simultaneously, the same firm can obtain multiple loans, a comprehensive set of fixed effects are included in our models. In the estimations, year, firm×bank, and loan type are included as fixed effects, as well as several firm, bank, CEO and loan characteristics. Standard errors are double-clustered at the firm and bank levels. The use of firm×bank fixed effects is especially important in this study as it enables the effect of lender individualism within the same lender-borrower relationship to be inferred. This type of fixed effect addresses concerns that banks might select CEOs with specific cultural heritage traits to attract a specific type of borrower (e.g., less or more risky borrowers).

Although individualism is one of the most significant drivers of cultural differences (Triandis, 1994; Zheng et al., 2013; Berger et al., 2021b), our identification could still suffer from omitted cultural heritage variables, which could affect estimates. Thus, following the procedure used by Eun et al. (2015), the baseline model was rerun to control for the possible correlation between individualism and other cultural heritage dimensions (e.g., uncertainty avoidance, power distance and masculinity). This exercise allows us to exclude the possibility of individualism capturing different dimensions of cultural heritage.

In addition, based on data from House et al. (2004), we explore whether the positive association between lender individualism and loan monitoring is robust to alternative measures of individualism, such as the level of individualism in the bank CEOs’ ancestral country of origin. Our results are also robust when controlled for relationship lending and we show that the negative relationship between lender individualism and loan monitoring weakens in periods of recession.

Our study contributes to a growing literature on culture and finance. Cross country studies have shown that national culture plays an important role in bank risk-taking behavior (e.g., Ashraf et al., 2016; Mourouzdou-Damtsa et al., 2019; Berger et al., 2021b; Boubakri et al., 2023), stock performance (e.g., Chui et al., 2010; Eun et al., 2015; Pevzner et al., 2015), merger outcomes (e.g., Ahern et al., 2012), corruption (Zheng et al., 2013), cross-border investment activities (e.g., Siegel et al., 2011), dividend policy (e.g., Shao et al., 2010) and bank loan supply and lending terms to borrowers (e.g., Giannetti and Yafeh, 2012; Fisman et al., 2017). However, cultural dimensions can also be

associated with national banking regulations and legal institutions (Kwok and Tadesse, 2006). By focusing solely on the U.S. banking system and the cultural heritage of bank CEOs, we instead shed new light on the persistent differences in corporate policies across firms by disentangling the effect of culture from other confounding factors (e.g., differences in national bank regulation).

We specifically add to the body of research focusing on how organizational leaders' characteristics can shape organizational policies and decisions (Hambrick and Mason, 1984; Bertrand and Schoar, 2003). In this regard, there is growing evidence that CEOs' cultural heritage affects various corporate economic outcomes, such as research and development intensity (Pan et al., 2017; Graham et al., 2022), bank performance (Nguyen et al., 2018), decision-making in the syndicated lending process (Hagendorff et al., 2022), corporate acquisition decisions (Pan et al., 2020) among others. All these studies acknowledge that CEO culture plays a crucial role in explaining the heterogeneity in managerial styles. Focusing on syndicated lending, Hagendorff et al. (2022) have shown that banks with trusting CEOs charge lower interest rates in U.S. syndicated loans. By contrast, we explore whether CEO individualism affects how banks monitor syndicated loans. The existing literature has acknowledged that lender characteristics may strongly influence the monitoring effort exerted in the syndicated market. For example, lead bank reputation, capital and liquidity affect banks' monitoring efforts, the proportion of the syndicated loan sold to other lenders and contractual conditions (Dennis and Mullineaux, 2000; Sufi, 2007). However, the role of CEOs' culture in loan monitoring duties and specifically, the influence of individualism, remains unexplored.

We also provide new evidence on the implications of individualism on banks' risk taking. Existing studies have mainly focused on cross country studies to examine how and to what extent the social and cultural environment may provide risk-taking incentives and/or affect investment choices for firms and banks (Li et al., 2013; Shao et al., 2013; Kanagaretnam et al., ; , 2011, 2014; Mourouzdou-Damtsa et al., 2019; Nguyen et al., 2019; Berger et al., 2021b). Our paper contributes to this research by showing that CEO individualism is an important source of lending policy differences across banks. Our paper provides nuanced evidence on the importance of the board of directors in encouraging individualist CEOs' monitoring effort in the syndicate lending market. Previous studies have in fact examined the role of governance mechanisms in influencing the managerial ability on investment efficiency and key strategic business decisions (e.g., de Andres and Vallelado, 2008; Adams et al., 2010; García-Sánchez and García-Meca, 2018). However, the extant literature has not yet explored the potential influence of these factors on how individualist CEOs perform loan monitoring. We also show that CEO tenure, cash compensation and non-duality moderate the relationship between CEO individualism and loan monitoring efforts. In this way, we provide new evidence showing that CEO tenure (Coles et al., 2006), cash compensation (Berger et al., 1997; Vallascas and Hagendorff, 2013) and non-duality (Daily and Johnson, 1997; Finkelstein et al., 2009) lower the risk attitude of bank CEOs.

Finally, the results of this study offer a novel understanding of the strands of literature examining the mechanisms underlying the structure of loan formation (Lee and Mullineaux, 2004; Sufi, 2007; Ivashina, 2009; Lin, 2012; Croci et al., 2021). In this respect, our findings highlight that individualist lead bank CEOs are more likely to form more dispersed loan syndicates.

The remainder of this paper is organized as follows. Section 2 develops the hypotheses. Section 3 describes the sample. Section 4 discusses the methodology, while Section 5 presents the main results. Section 6 describes our robustness checks and additional analysis. Finally, Section 7 concludes.

## 2. Background and hypotheses development

Existing studies acknowledge that culture plays a vital role in shaping individuals' attitudes in decision-making (Vitell et al., 1993;

Husted and Allen, 2008). An increasing number of studies highlight that CEOs' views reflect the corporate culture, which is an important element affecting firms' investment decisions and risk strategies (Graham et al., 2022). Among cultural traits, individualism (IDV) emerges as one of the most significant drivers of cultural differences across societies (Markus and Kitayama, 1991). Individualism reflects independence, personal achievement, overconfidence and over-optimism (Berger et al., 2021b, p. 951), and is often related to risk-taking incentives and/or poor investment choices (Li et al., 2013; Shao et al., 2013; Kanagaretnam et al., ; , 2011, 2014; Mourouzdou-Damtsa et al., 2019; Berger et al., 2021b). Individualism indeed appears to be associated with bank risk-taking (Kanagaretnam et al., 2014; Mourouzdou-Damtsa et al., 2019), more accounting discretion for earnings management (Kanagaretnam et al., 2011) and bank failure (Berger et al., 2021b). This is motivated by the fact that individualism breeds overconfidence and an excessive focus on personal achievement.<sup>2</sup> Consequently, executives who trace their origin to individualistic societies are more inclined to adopt riskier investment strategies and forgo risk mitigation control mechanisms to achieve their goals. We argue that this attitude can also have important implications in the lending market, where exerting adequate monitoring effort and control is crucial to reduce moral hazard behaviors. If lead banks do not monitor sufficiently, borrowers might be more prone to select suboptimal projects with higher risk-taking.

Conversely, monitoring services can increase borrowers' efforts and foster the project's success probability (Besanko and Kanatas, 1993). Therefore, if CEOs who trace their origin in more individualist cultures tend to lend too much weight to their abilities and be more confident about their information processing abilities, they could, in turn, underestimate the degree of information asymmetry embedded in the lending market. As a result, they could be overoptimistic about the likelihood that their borrowers will misbehave in the future and, thus, reduce their monitoring efforts and apply less strict contractual conditions in the loan contracts. For example, banks led by individualist CEOs could resort to less covenant monitoring (Dichev and Skinner, 2002; Chava and Roberts, 2008) which could allow banks to exercise control on lending and mitigate moral hazard issues (Rajan and Winton, 1995). Indeed, in syndicated lending, a higher covenant intensity and a number of covenants embedded in lending are essential to mitigate asymmetric problems between lenders and borrowers (e.g., Ivashina, 2009; Wang and Xia, 2014; Gustafson et al., 2021). This line of argument is grounded on the notion that individualism is associated with overconfidence and an assertive attitude towards risk (Mourouzdou-Damtsa et al., 2019; Berger et al., 2021b). Consequently, we formulate the following hypothesis:

*H1: Lender individualism reduces monitoring in the syndicated loan market, ceteris paribus.*

On the other hand, it could also be the case that individualism is positively related to monitoring activities. In less individualistic societies, people tend to be part of cohesive groups or extended families (Berger et al., 2021b). Strong collective ties among people in a community could also lead to poor lending decisions (e.g., Beckmann et al., 2008). Previous research shows that managers from collectivist cultures tend to favor specific groups. For example, some studies (Zheng et al., 2013; El Ghouli et al., 2016) show that managers from collectivist cultures engage more in corruption in bank lending and tend to stretch the rules in the loan screening process for the benefit of in-group members (Zheng et al., 2013). In addition, Hsee and Weber (1999) argue that individuals in collectivist societies could be more willing to take risks as they are more likely to be cushioned by their friends and immediate family if something goes wrong. Consistent with this argument, in a

<sup>2</sup> Individual-level analysis also shows the existence of a positive link between individualism and risk-taking. For example, by collecting survey data on 449 economics students in Germany and Singapore, Breuer et al. (2014) show that individualism has a significantly positive effect on a person's willingness to invest in risky assets.

**Table 1**  
Variables definitions.

Panel A: Variables used in the baseline analysis		
Variable	Definition	Source
Dependent variables - Monitoring		
Financial covenants	The natural log of 1 + the number of financial covenants in a loan. Financial covenants are calculated according to <a href="#">Deng et al. (2020)</a> .	DealScan
Covenant intensity	It is an index value ranging from 0 to 6, which is based on six different covenants as described in <a href="#">Bradley and Roberts (2015)</a> . We use the natural log of 1 + covenant intensity	DealScan
Other covenants	The natural log of 1 + the sum of performance and capital covenants. Performance and capital covenants are calculated according to <a href="#">Deng et al. (2020)</a> .	DealScan
Main explanatory variable		
Bank CEO Individualism (IDV)	The degree to which a society is considered individualistic versus collectivist in terms of “I” and “We” in the bank CEOs’ ancestral country of origin. The index has a 0 – 100 range.	Ancestry.com, <a href="#">Hofstede et al. (2010)</a>
Loan controls		
Loan amount	The natural log of the value of the loan in millions of dollars (\$).	DealScan
Loan maturity	The natural log of the months between the initiation of a loan and its maturity date.	DealScan
Loan spread	The “all-in-spread drawn” (AISD) of the loan interest payment in basis points over the LIBOR plus the annual fee for the loan facility that the borrower obtained.	DealScan
Firm controls		
Firm size	The natural logarithm of total assets.	Compustat
Firm performance	The ratio of net income to total assets.	Compustat
Firm tangibility	The ratio of property, plant and equipment to total assets.	Compustat
Firm efficiency	The ratio of firm sales to total assets.	Compustat
Firm sales	Sales over turnover (net).	Compustat
Firm cash	Cash over total assets.	Compustat
Bank Controls		
Bank size	The natural logarithm of bank total assets.	Compustat Bank Fundamentals
Tier 1 Capital	The ratio of tier-1 capital to total risk-weighted assets, a key measure of bank capitalization.	Compustat Bank Fundamentals
Loan Loss Provision	Provisions for losses on loans divided by total assets.	Compustat Bank Fundamentals
Bank CEO controls		
CEO vega	The change in the dollar value of the bank CEO’s equity-based compensation for a 1% change in stock price volatility. We use the natural log of the variable.	ExecuComp
CEO age	The natural log of the bank CEO’s age.	ExecuComp
Panel B: Variables used in further tests and analysis		
Other monitoring variables		
Performance pricing	Dummy equal to one if the loan has performance-pricing provisions, zero otherwise.	DealScan
Collateral	A dummy variable that equals one if the loan is secured by collateral and zero otherwise.	DealScan
Soft Information	Following <a href="#">Delis et al. (2017)</a> , we regress the loan amount (weighted by the share of the bank in the syndicate) on loan and firm variables that banks use as hard information (credit rating downgrading, default, financial covenants, collateral, maturity and, performance pricing) and a set of bank dummies. These explanatory variables encompass the hard information used by banks in the monitoring process of the loan. We then use the residuals to encompass the soft information.	Own estimations based on data from DealScan
Other CEO controls		
CEO cash compensation	The natural log the of bank CEO’s cash compensation, which is the sum of salary and bonus in a given year.	ExecuComp
CEO tenure	The natural log of the years between the date of appointment of a bank CEOs and the date before a loan was granted.	ExecuComp
CEO non-duality	A dummy variable that equals one if a bank CEO is not also the Chairman of the board, zero otherwise.	ExecuComp
Controls for bank corporate governance		
Board size	The natural log of the number of board directors.	BoardEx
Audit Committee	The size of the auditor committee scaled by the board size.	BoardEx
Board independence	It is the percentage of independent directors inside the board.	BoardEx
Female ratio	The number of female directors scaled by the board size.	BoardEx
Instruments		
Pathogen	A measure of the relative presence of pathogens in the local ecology regarding nine specific pathogens harmful to human health in the ancestral country of origin of each bank CEO. We use this variable as an instrument for bank CEO individualism in the 2SLS -IV models.	<a href="#">Fincher et al. (2008)</a>
Pronoun	A dummy that takes the value of one in case the predominant language in the ancestral country origin of bank CEOs allows the omission of first-person singular pronouns in an independent clause and zero if not. We use this variable as an instrument for bank CEO individualism in the 2SLS -IV models.	<a href="#">Nash and Patel (2019)</a>
Alternative measure of Bank CEO Individualism		
IDV Globe	The level of individualism in the bank CEO’s ancestral country of origin based on data from the GLOBE study. The original variable measures collectivism (the opposite of individualism) with a range of 0–7. To transform the variable in order for this to denote individualism, we subtract the score for collectivism from 7.	GLOBE study (globeproject.com)
Further loan characteristics		
Syndicate size	The number of banks in the syndicate loan.	DealScan
Bank allocation	The share of the lead bank in the syndicate loan in terms of the dollar (\$) value of the loan.	DealScan
Relationship lending	The ratio of the number of loans a firm has taken from a specific bank in the previous five years divided by the number of total loans the same firm has taken over the same period.	DealScan
Economic conditions		
Recession NBER	A dummy variable that takes the value of one for the periods that the National Bureau of Economic Research (NBER) defines as recession periods and zero otherwise. The NBER recession periods in the timeline of our study are March 2001 to November 2001 and December 2007 to June 2009. <a href="https://www.nber.org/research/data/us-business-cycle-expansions-and-contractions">https://www.nber.org/research/data/us-business-cycle-expansions-and-contractions</a>	NBER

**Table 2**  
Summary statistics.

	N	Mean	Median	Std. Dev.	p25	p75
IDV	27164	72.664	80	19.322	67	89
Fin Cov	27164	1.091	1.099	.28	1.099	1.386
Cov Int	27164	1.175	1.099	.594	.693	1.609
Other Cov	27164	1.053	1.099	.266	.693	1.099
Maturity	27164	3.792	4.094	.585	3.584	4.094
Loan amount	27164	19.566	19.519	1.178	18.826	20.426
Loan spread	27164	162.543	150	100.498	87.5	225
Firm size	27164	7.728	7.68	1.504	6.658	8.768
Firm performance	27164	.009	.011	.033	.003	.021
Firm tangibility	27164	.32	.246	.244	.123	.479
Firm cash	26707	.082	.039	.144	.014	.105
Firm efficiency	27164	1.113	.948	.809	.559	1.412
Firm sales	27164	14.727	15.05	221.591	7.826	27.787
Idiosyn. risk	23183	.071	.057	.049	.039	.088
Bank size	27164	12.485	12.298	1.354	11.433	13.555
Tier 1 capital	27164	.088	.089	.015	.078	.099
Loan loss provisions	27164	.005	.003	.005	.002	.006
CEO age	27164	4.044	4.043	.071	4.007	4.094
CEO vega	27164	5.849	6.178	1.201	5.074	6.853

This table reports summary statistics for the loan, borrowing firm, bank, monitoring, and bank CEO characteristics that we employ in the baseline models. Definitions are available in Table 1.

study of 447 foreign investors in the Estonian stock market, Illiashenko (2019) shows that individualism is related to a lower-risk attitude. Furthermore, it is plausible to assume that managers from less individualistic societies could be less careful in terms of screening out risky loans and apply more intense discretionary contractual clauses in lending conditions. This latter view yields the following hypothesis:

*H2: Lender individualism increases monitoring in the syndicated loan market, ceteris paribus.*

### 3. Sample

We construct a unique dataset to explore the relationship between lender individualism, monitoring and borrower characteristics for U.S. banks. We build a sample linking information on syndicate loans, banks, CEOs' ancestry, and borrowing firms. Data on syndicated loans come from the DealScan database. We only consider the loans for which the borrowing firms' and banks' data can be matched to Compustat, and the financial variables employed in the study are available. The analysis is run at the facility level in line with previous studies (e.g., Campello and Gao, 2017; Cumming et al., 2020; Croci et al., 2021). Indeed, the loan tranches or facilities provide a more accurate picture of the syndicated loan market as the lead agent could offer different contractual terms at this level.<sup>3</sup>

First, we identify the lead bank in each syndicate loan by employing the ten-part ranking hierarchy developed by Chakraborty et al. (2018). The lead bank performs the information screening and monitoring activities and evaluates the borrowing firm's creditworthiness. Furthermore, the lead bank negotiates the key contractual terms before contacting a group of potential lenders to form the syndicate (Lin et al., 2012). Once the loan agreement is signed, all the participants fund the part(s) of the loan they are responsible for (Sufi, 2007).

A critical issue in our analysis is identifying the lender's CEO origins. For this, we follow Pan et al., (2017, 2020)'s approach which focuses on the origin of the surname to retrieve ancestral information on bank CEOs. First, we use the Execucomp database to collect the surnames of all lender CEOs. We manually check lender CEOs' surnames to detect spelling errors and changes of family surnames and maiden names, in cases of married female CEOs. For this part, we use various sources, including state digital archives of marriage certificates, curriculum vitae and online biographies. Once we identify a lead bank CEO's surname, we use three sources to identify ancestral cultural heritage. First, we use

Forebears website (forebears.io), which provides a preliminary indication of the country of origin based on CEOs' surnames. Next, we use the ancestry.com website, which collects information from the 1940 U.S. Federal Census, and the immigration records of the New York, Passenger and Crew Lists (Castle Garden and Ellis Island) during the 1820–1957 period. Then, as a robustness check, we compare these data with those provided by the commercial database Origins Info (Hegde and Tumlinson, 2014). This, in turn, enables us to verify the ethnic origin of individuals based on their surnames.

We are aware that there could be CEOs of mixed ancestry. However, this only concerns a small percentage of bank CEOs in the U.S. during the sample period (Nguyen et al., 2018). In addition, cross-cultural weddings among immigrants during the early twentieth century were rare (Pagnini and Morgan, 1990). Finally, we check whether ethnic groups coincide with current country borders. After collecting ancestry information, we link the CEOs' ancestral country of origin with the individualism index reported by Hofstede (2001) for several countries.<sup>4</sup> Data on the board of directors come from BoardEx and ExecuComp. Our final sample comprises 27,164 loans by 70 unique banks, led by 118 CEOs, to 1490 unique borrowers over the 1998–2017 period. Our sample is similar to other studies in this research field (e.g., Hagendorff et al., 2022).

### 4. Methodology

To test the effect of lender individualism on monitoring, our empirical model adopts the following specification:

$$Loan\_Monitoring_{f,b,i,t} = \beta_0 + \beta_1 IDV_{b,t} + \beta_2 F_{f,t} + \beta_3 L_{b,t-1} + \beta_4 B_{i,t-1} + u_{ij,t} \quad (1)$$

where *Loan Monitoring* represents loan monitoring proxies, and *f* is the syndicated facility initiated at time *t* and granted to borrower *i* with

<sup>4</sup> The countries of origin of the CEO surnames in our sample are as follows: Germany, France, the United Kingdom, Hungary, Ireland, Serbia, Russia, Denmark, Greece, the United States, the Netherlands, Lithuania, Israel, Poland, China, Italy, South Korea, and Slovakia. We assign the United States as a country of origin to the CEOs for which the information on their ancestry is missing from immigration records and the Origins Info Ltd database (commercial vendor). Although there are limited cases with missing information, we have rerun the baseline analysis by removing those observations in an unreported table. Our results are robust to this test.

<sup>3</sup> A syndicated loan deal may contain more than one loan tranche (or facility).

lender  $b$  as the lead bank. We employ alternative measures of debt covenants to proxy for banks' monitoring, such as financial covenants (*FinCov*), which are the primary covenant type applied in loan contracts, and *OtherCov*, which include performance and capital covenants.<sup>5</sup> We also introduce the measure of covenant intensity (*CovInt*) developed by Bradley and Roberts (2015), which ranges from 0 to 6.<sup>6</sup> All dependent variables are in logarithm form.

The primary variable of interest is *IDV* which is built based on the Individualism Index provided by Hofstede (2001) at the time of loan origination,  $t$ . This variable ranges from 0 to 100, with the highest values indicating higher levels of individualism. Consistent with our expectations, *IDV* should exert a negative (positive) effect on loan monitoring. Therefore,  $\beta_1$  should have a negative (positive) and significant association with the measures on loan monitoring.  $F$  is the vector of facility characteristics, including *Facility Amount*, *Maturity*, and the all-in-spread-drawn (*AISD*), which refers to the amount the borrower pays in basic points over LIBOR for each dollar drawn down.  $L$  is the vector of bank characteristics at time  $t-1$ , which includes *bank size*, *tier 1 capital*, *loan loss provision*.  $B$  is the vector of firm characteristics at time  $t-1$ , which encompasses *firm size*, *firm performance*, *firm efficiency*, *firm sales*, *firm cash* and *tangibility*. We also include the CEO's risk incentives as measured by the compensation *Vega*. All variable definitions are reported in Table 1.

In addition, we saturate our models with year, firm $\times$ bank, and loan type fixed effects to account for differences in time-invariant characteristics. Firm $\times$ bank fixed effects allow us to infer the effect of lender individualism within the same lender-borrower relationship while year and loan type F.E.s allow us to account for time-invariant year and loan type characteristics. All standard errors are double clustered at the firm and bank levels. Tables 2 and 3 offer the summary statistics of the variables we use in the baseline model.

## 5. Empirical analysis

### 5.1. Main findings

This section examines whether and, if so, to what extent, lender individualism may affect loan monitoring in the syndicated market. Table 4 presents the baseline results when estimating Eq. (1). In Column 1, we use *FinCov* (Financial covenants) at time  $t$  as a dependent variable. Columns 2 and 3 present the results for covenant intensity and other covenants at time  $t$  (respectively, *CovInt* and *OtherCov*).

We find that the coefficient estimates of *IDV* are negative and significant at the 1% level for *FinCov* and *OtherCov* in Columns (1) and (3). Regarding Covenant Intensity (*CovInt*), the coefficient estimate of *IDV* continues to be negative and statistically significant, although at the 10% level. These results indicate that individualist lenders decrease the covenant-based monitoring for their borrowing firms. These effects are also economically significant. According to the specification in Column 1 of Table 4 regarding financial covenants, one unit increase in lender individualism is associated with a 0.4% decrease in financial covenants ( $-0.004 \times 100$ ). Hence, a bank with a one-standard-deviation increase in *IDV* (19.3), which is analogous to the difference in individualism

<sup>5</sup> Following Deng et al. (2020), *Performance covenants* include maximum debt to EBITDA, minimum EBITDA, minimum current ratio, minimum fixed-charge coverage, minimum interest coverage, maximum senior debt to EBITDA, minimum cash-interest coverage, and minimum debt-service coverage; while *Capital covenants* include: number of capital covenants, which includes minimum quick ratio, minimum current ratio, maximum debt to equity, maximum debt to tangible net worth, maximum leverage, maximum senior leverage, minimum net worth, and minimum tangible net worth.

<sup>6</sup> The six categories of covenants are: secured debt, dividend restrictions, more than two restricted financial ratios, asset sweep, debt sweep, and equity sweep.

between a CEO with Polish heritage and a CEO with Hungarian heritage, will lead to a 7.72% decrease in the use of financial covenants in the loan contracts. The economic significance is similar for covenant intensity (Column 2) and other covenants (Column 3).

These findings offer new insights into the monitoring-effort explanation of CEO's national culture. Specifically, we maintain that banks led by highly individualist CEOs may adopt a soft monitoring style and exert less monitoring effort. This result is consistent with the H1 positing that lenders led by highly individualist CEOs could be more overconfident about the accuracy of the information on borrowers, thereby underestimating the risks associated with syndicated loans. Consequently, they require less strict contractual terms.<sup>7</sup>

In Table 5, we rerun the analysis by considering alternative measures of monitoring style of banks led by individualist CEOs. For this scope, we introduce a dummy variable, *Performance Pricing*, which is equal to one if the loan contract embeds a performance pricing option that allows the lender to control the borrower's business prospects (Ross, 2010; Delis et al., 2017) and zero otherwise. As Delis et al. (2017) point out, *Performance pricing* is used to proxy for the hard monitoring incentives of banks. We then add a dummy variable, *Collateral*, which is equal to one if the loan is secured with collateral, and zero otherwise. Column 1 of Table 5 shows that *IDV* is negatively and significantly related to *Performance Pricing*. On the other hand, *IDV* does not seem to be linked with the variable *Collateral*. Collateral helps banks reduce adverse selection in asymmetric information and when the borrowers' prospects are poor (Karapetyan and Stacescu, 2014; Rajan and Winton, 1995). Conversely, covenants are valuable monitoring tools because they allow banks to renegotiate more often (Gustafson et al., 2021). Furthermore, as pointed out by Sufi (2007), we also highlight that one drawback of DealScan is that many collateral data could be missing. Finally, we do not have information on the value of the collateral but rather on whether it is embedded in the loan contracts. These could be possible explanations for the lack of significance of collateral compared to covenants.

Next, we analyze individualist CEOs' monitoring style by considering the type of information (soft or hard) employed by the lead bank during the monitoring process. For this analysis, we follow Delis et al. (2017) by regressing the loan amount (weighted by the bank's shares in the syndicate) on the following variables: *Downgrading*, *Default*, *Financial covenants*, *Collateral*, *Maturity*, *Performance pricing*, and a set of bank dummies. The explanatory variables refer to hard information. Therefore, we use the residuals derived from the regression to proxy for soft information. Column 3 shows that *IDV* is positively and significantly related to *Soft Information*. The above findings suggest that banks led by highly individualist CEOs tend to rely less on hard information. At the same time, they use more intensively soft information in the process of loan monitoring.

Finally, we test whether banks led by highly individualist CEOs tend to retain a larger share of loans rather than preferring dispersed ownership and diversification of risk exposure across lenders. In general, the lead bank has incentives to syndicate bad or risky loans and thus retain a lower loan fraction (Ivashina, 2009). However, highly individualist bank CEOs could overweight their own information on borrowing firms in the syndicated market and thus, underestimate the due diligence and monitoring effort required by a loan. Consequently, banks led by highly individualist CEOs would retain a larger loan share while selling larger loan parts to syndicate participants. Another explanation could be that banks led by highly individualist CEOs prefer to retain more shares to fully place the loan instead of comprising other lenders on contractual terms. This phenomenon stems from the fact that individualist people have their own goals that tend to prevail over those of

<sup>7</sup> We have also explored whether there is a non-linear relationship between *IDV* and loan covenants' conditions. Untabulated results, available upon request, show that the quadratic term of *IDV* is not significantly related to the dependent variables.

the group (Zheng et al., 2013). For this reason, they could refrain from negotiating with other individuals to avoid modifying their own initial targets.

For this analysis, following previous studies (e.g., Sufi, 2007; Ivashina, 2009; Lin et al., 2012; Delis et al., 2020), we introduce the following two variables to analyze the syndicate structure: i) *Syndicate size*, which is the logarithm number of lenders (in addition to the lead bank); ii) *Bank allocation*, which is the share of the loan held by the lead bank. Columns 4 and 5 of Table 5 report the estimation results. Our findings show that *IDV* has a positive and significant effect on both *Syndicate size*, the number of lenders, and *Bank allocation*, the share held by the lead agent. All the coefficients are significant at the 1% level (5% level for *Syndicate size*). Overall, our main findings suggest that banks led by highly individualist CEOs prefer to retain a larger loan share and deal with a larger number of lenders. This finding suggests that lead banks with more individualist CEOs prefer dispersed ownership. However, they do not diversify their risk exposure across other lenders as they retain a larger loan share.

## 6. Robustness checks and additional analysis

This section presents a battery of additional tests that we carry out to rule out alternative stories and assess the robustness of our findings. As an additional test, we verify whether the lending style can be affected by CEOs' characteristics, such as CEO tenure, compensation, CEO duality and bank governance (Section 6.1). Then, we explore whether lending contractual conditions change during periods of economic downturn (Section 6.2). Next, we run additional tests to remove potential bias due to endogeneity concerns (Section 6.3) and omitted cultural variables (Section 6.4). We also verify whether our baseline results are robust to alternative measures of lenders' individualism (Section 6.5). Finally, we control for bank-borrower relationships (Section 6.6).

### 6.1. Bank governance and CEO characteristics

In this section, we first investigate the potential moderation effects of CEO cash compensation (measured as the sum of cash salary and cash bonus), CEO tenure and CEO duality, which is the practice of the CEO serving as the chairman of the board of directors. On the one hand, *CEO tenure* could be related to CEO power (Haynes and Hillman, 2010), thus amplifying the negative effect of CEO individualism on monitoring. On the other hand, *CEO tenure* could also proxy for the CEO's level of risk aversion (Coles et al., 2006). This is because CEOs with longer tenure tend to be more entrenched and thus more willing to avoid risk (Berger et al., 1997). Cash compensation can also affect the risk choices made by individualist bank CEOs. While compensation practices in the banking industry are usually associated with excessive risk-taking (e.g., Bebchuk and Spamann, 2010), Vallasca and Hagendorff (2013) show that CEO cash bonuses lower the risk preferences of the CEO. Similarly, Berger et al. (1997) maintain that CEOs who receive higher cash compensation are more likely to be entrenched and seek to avoid risk. Drawing on this literature, we thus explore the moderating role of *CEO tenure* and *cash compensation* on the relationship between a CEO's individualism and monitoring in the lending market. Table 6 shows the results of this exercise. Columns 1–3 of Table 6 examine whether *CEO cash compensation* may alter the monitoring effort of lenders led by individualist CEOs, while Columns 4–6 focus on *CEO tenure*. We find that the coefficients of the interaction term between *CEO cash compensation* and *IDV* are all significantly and positively related to loan covenants' variables, suggesting that compensation may help spur the monitoring quality of individualist CEOs. We find similar results for *CEO tenure*. This finding is consistent with studies positing that CEOs with longer tenure and higher cash compensation are more willing to avoid risk (Berger et al., 1997; Guay, 1999; Coles et al., 2006). Thus, *CEO tenure* and *cash compensation* moderate the negative effect of *IDV* on loan covenants.

The analysis of CEO duality is motivated by the fact that duality

confers CEOs with greater power (e.g., Daily and Johnson, 1997) and more discretion in exercising that power (Finkelstein et al., 2009). Thus, CEOs' individualism could affect loan monitoring more if a CEO can also exert greater power on the board of directors. To address this issue, we assign the value of 1 for the cases in which the CEO is not also the Chairman and 0 for *CEO non-duality*.<sup>8</sup> Columns 7–9 of Table 6 show that the interaction term coefficient between *IDV* and *CEO non-duality* is significantly and positively related to the loan monitoring variables. This result provides evidence of the moderating effect of limited CEO power on the negative relationship between individualism and loan monitoring, in terms of CEOs not having a dual role as board directors.

Next, we test whether our findings are affected by the quality of the banks' board governance. Previous studies acknowledge that board composition plays an essential role in bank risk profile and lending strategies (e.g., Sun and Liu, 2014; Vallasca et al., 2017; Nguyen et al., 2018). In line with these studies, we include the following variables as additional controls in the regression: i) *Board Size*, which is the logarithm of the number of board members; ii) *Board Independence*, which is the ratio of the number of independent directors divided by the number of directors of a board; iii) *Female ratio*, which is the ratio of female directors on the board; and iv) *Audit Committee*, which is the ratio of the number of directors serving in the audit committee, divided by the number of directors. Data on governance come from BoardEx. Table 7 shows that our results continue to hold when controlling for these additional governance measures, even if the number of observations drops due to data limitations.<sup>9</sup>

We also investigate the moderating role of board monitoring on individualist CEOs' effectiveness in performing their monitoring and advising duties in the syndicate lending market. For this purpose, we analyze the interaction between the board characteristics with *IDV*. Panel A of Table 8 shows that the coefficient of the interaction term between *Board Size* and *IDV* is positively and significantly related to *FinCon*, *CovInt*, and *OtherCov* at 1% or 5% significance level. This result suggests that *Board Size* is crucial in moderating individualist CEOs' effectiveness in providing lending guidance and advice. Panels B, C and D of Table 8 focus respectively on the moderating role of *Board Independence*, *Female Ratio* and *Audit Committee* on loan covenant requirements. *Board Composition* and *Audit Committee* appear to increase the monitoring intensity exerted by individualist CEOs. However, this moderating effect is not significant. Instead, the coefficient of the interaction term between the *Female Ratio* and *IDV* is positively and significantly related to all the loan covenants' measures. This finding suggests that a high number of female directors on the board may contribute to making individualist CEOs' risk assessment in the lending market more conservative. This result is in line with the literature suggesting that more gender-diverse boards may possess more information and, therefore, have the potential to make better and more conscious investment decisions (de Haan and Vlahu, 2016).

### 6.2. Recession periods

An increasing number of studies highlights the cyclicity in the supply of business credit (see for example, Ivashina and Scharfstein, 2010). This cyclicity can stem from shocks to borrowers' collateral, which affect firms' ability to raise capital and exacerbates the asymmetric information with lenders. It could also originate from shocks to bank capital, which may affect the supply of bank loans. In this context,

<sup>8</sup> We found that about 70% of the CEOs are also the Chairperson of the board. After matching bank board variables from BoardEx with the syndicate loan information, we found that almost 89% of the loans in our sample are associated with banks led by CEOs with a dual role. This is because some banks give more loans than others to different borrowing firms. Hence, clustering our standard errors by bank and firm is a rational choice.

<sup>9</sup> BoardEx holds data on a limited number of banks pre-2004.

**Table 3**  
Correlation matrix.

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	
	IDV	Fin Cov	Cov Int	Other Cov	Maturity	Loan amount	Loan spread	Firm size	Firm performance	Firm tangibility	Firm cash	Firm efficiency	Firm sales	Bank size	Tier 1 capital	Loan loss provisions	CEO age	CEO vega	
1	1																		
2	0.0287	1																	
3	0.0229	0.655	1																
4	0.0314	0.8908	0.5581	1															
5	-0.0162	0.1339	0.159	0.1328	1														
6	-0.0062	-0.422	-0.4215	-0.317	0.0368	1													
7	-0.023	0.3843	0.5032	0.2526	0.0796	0.7618	1												
8	-0.0155	-0.5154	-0.5511	-0.437	-0.1066	0.0765	-0.3038	1											
9	0.0059	-0.0443	-0.0833	-0.008	0.0765	0.0699	0.0765	0.0699	1										
10	-0.0091	-0.1384	-0.1312	-0.054	-0.0704	0.0849	-0.0329	0.132	-0.0882	1									
11	-0.0137	0.0661	0.0621	0.0329	0.0495	-0.0739	0.0346	-0.1261	0.1374	-0.249	1								
12	-0.0034	0.062	0.0765	0.0091	-0.0107	-0.1265	-0.0254	-0.1646	0.0753	-0.2695	0.0205	1							
13	-0.0026	-0.004	0.0251	-0.003	0.0307	-0.0081	0.0133	-0.0117	0.0452	0.0091	0.0768	0.0091	1						
14	-0.2903	-0.1348	-0.1059	-0.132	0.0941	0.1158	0.031	0.144	-0.0171	-0.0327	0.0468	0.0429	0.0144	1					
15	-0.0199	-0.0793	-0.0408	-0.068	0.2239	0.1279	-0.004	0.0998	0.0618	-0.0786	0.0617	-0.0059	0.0173	-0.0289	1				
16	-0.0714	0.0439	0.0236	0.0372	-0.0556	-0.0626	0.2584	-0.0267	-0.0581	0.0489	-0.014	-0.0156	0.0022	0.0825	-0.0711	1			
17	0.183	0	0.0054	0.0065	0.094	0.0352	-0.0469	0.009	0.0048	-0.0184	0.0177	0.0091	0.0133	-0.068	0.1521	-0.1797	1		
18	-0.2313	0.0025	-0.018	-0.020	-0.0427	-0.0036	-0.113	0.0381	-0.0007	0.0379	-0.036	0.0197	0.0101	-0.2596	-0.2658	-0.0429	0.0616	1	

This table reports the correlation coefficients for loan, borrowing firm, bank, monitoring and bank CEO characteristics that we employ in the baseline models. Definitions are available in Table 1.

**Table 4**

Lender individualism and borrower monitoring: baseline model.

	(1)	(2)	(3)
Dep. Var.:	Fin Cov	Cov Int	Other Cov
<i>IDV</i>	-0.004 * ** (0.001)	-0.003 * (0.001)	-0.005 * ** (0.001)
<i>Maturity</i>	-0.017 * (0.010)	0.004 (0.024)	-0.014 (0.010)
<i>Loan amount</i>	-0.006 * (0.004)	0.024 * ** (0.008)	-0.002 (0.004)
<i>Loan spread</i>	0.000 * ** (0.000)	0.001 * ** (0.000)	0.000 (0.000)
<i>Firm size</i>	-0.013 (0.012)	-0.084 * ** (0.024)	-0.006 (0.012)
<i>Firm performance</i>	-0.097 (0.120)	-0.343 (0.361)	-0.019 (0.099)
<i>Firm tangibility</i>	-0.205 * ** (0.064)	-0.232 * (0.134)	-0.154 * * (0.067)
<i>Firm efficiency</i>	-0.011 (0.019)	0.033 (0.039)	-0.013 (0.022)
<i>Firm sales</i>	-0.000 * ** (0.000)	0.000 (0.000)	-0.000 * ** (0.000)
<i>Firm cash</i>	0.089 * (0.050)	0.135 (0.090)	0.018 (0.049)
<i>Bank size</i>	-0.000 (0.011)	-0.022 (0.025)	-0.007 (0.008)
<i>Tier 1 capital</i>	0.012 (0.116)	0.382 (0.229)	-0.151 * (0.088)
<i>Loan loss provision</i>	-0.490 (0.457)	-1.947 * (1.104)	-0.873 (0.576)
<i>CEO vega</i>	0.004 * ** (0.001)	0.012 * ** (0.003)	0.003 * ** (0.001)
<i>CEO age</i>	0.033 (0.022)	0.011 (0.058)	0.034 * * (0.016)
Observations	24,106	24,106	24,106
R-squared	0.842	0.799	0.823
Bank*Firm FE	Yes	Yes	Yes
Year F.E.	Yes	Yes	Yes
Loan type F.E.	Yes	Yes	Yes

This table examines the relation between bank CEO individualism and borrower monitoring measures. Standard errors are double-clustered at the bank and borrowing firm levels. Definitions of all variables are in Table 1. Standard errors are in parentheses. \* \*\*, \* \*, and \* indicate significance at the 1%, 5% and 10% levels, respectively.

lenders may exert more monitoring efforts and tighten lending conditions. More borrowers could consider loan syndications an alternative to capital market instruments and are more likely to ask for syndicated loans during recessionary periods.<sup>10</sup> Consequently, even lenders with individualist CEOs could focus more attention on their contractual lending conditions. To address this issue, we explore whether lenders with individualist CEOs behave differently during bad and good times. For this purpose, we build a variable called *Recession NBER*, which is defined according to NBER recession periods.<sup>11</sup> From an empirical viewpoint, we analyze the interactions between *Recession NBER* and *IDV* to establish whether CEOs' individualism exerts a different impact on loan covenants according to whether the lender provides a loan during a period of recession or economic expansion. Table 9 shows that the interaction term *IDV\*Recession NBER* is positively and significantly related to loan covenants.<sup>12</sup> This finding indicates that lenders with

<sup>10</sup> We thank an anonymous reviewer for pointing out this issue.

<sup>11</sup> Data retrieved from US Business Cycle Expansions and Contractions | NBER. The NBER recession periods in the timeline of our study are March 2001 to November 2001 and December 2007 to June 2009.

<sup>12</sup> In untabulated results, we also considered the *GDP growth rate* at the national level, allowing us to explore individualism's effect on loan covenants during good times. We find that the interaction term *IDV\*GDP growth rate* has a negative and significant association with loan covenants' requirements. This result suggests that lenders with individualist CEOs exert less monitoring in expansionary periods.

**Table 5**

Lender individualism and borrower monitoring: other monitoring measures and syndicate loan structure.

Dep. Var.:	(1)	(2)	(3)	(4)	(5)
	Perf Pricing	Collateral	Soft Information	Syndicate size	Bank Allocation
<i>IDV</i>	-0.003 *** (0.001)	0.001 (0.001)	0.012 *** (0.005)	0.003 ** (0.001)	0.002 *** (0.000)
<i>Bank allocation</i>				-0.030 *** (0.002)	
<i>Syndicate size</i>					-0.095 *** (0.008)
Observations	24,106	24,106	8511	11,503	11,503
R-squared	0.542	0.831	0.854	0.929	0.890
Control Vars	Yes	Yes	Yes	Yes	Yes
Bank*Firm FE	Yes	Yes	Yes	Yes	Yes
Year F.E.	Yes	Yes	Yes	Yes	Yes
Loan type F.E.	Yes	Yes	Yes	Yes	Yes

This table examines the relation between bank CEO individualism with other borrower monitoring measures (performance pricing, collateral, and soft information) and syndicate loan structure measures (syndicate size and lead bank allocation). Standard errors are double-clustered at the bank and borrowing firm levels. Definitions of all variables are in Table 1. Standard errors are in parentheses. \*\*\*, \*\*, and \* indicate significance at the 1%, 5% and 10% levels, respectively.

**Table 6**

Lender individualism and borrower monitoring: the moderating effect of other CEO attributes.

Dep. Var.:	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	Fin Cov	Cov Int	Other Cov	Fin Cov	Cov Int	Other Cov	Fin Cov	Cov Int	Other Cov
<i>IDV</i>	-0.011 * (0.006)	-0.016 ** (0.007)	-0.021 *** (0.006)	-0.012 *** (0.002)	-0.007 ** (0.003)	-0.012 *** (0.002)	-0.006 *** (0.001)	-0.004 ** (0.002)	-0.007 *** (0.001)
<i>CEO cash compensation</i>	-0.002 (0.004)	-0.005 (0.006)	-0.007 (0.005)	0.002 (0.002)	0.001 (0.004)	0.002 (0.003)	0.004 * (0.002)	0.002 (0.004)	0.003 (0.003)
<i>IDV*CEO cash compensation</i>	0.002 ** (0.001)	0.001 ** (0.001)	0.003 *** (0.001)						
<i>CEO tenure</i>	0.001 (0.001)	0.003 (0.002)	0.000 (0.001)	-0.007 ** (0.003)	-0.000 (0.006)	-0.006 ** (0.002)	0.000 (0.001)	0.002 (0.002)	0.000 (0.001)
<i>IDV*CEO tenure</i>				0.001 *** (0.000)	0.000 (0.001)	0.001 *** (0.000)			
<i>CEO non-duality</i>	-0.016 * (0.009)	-0.029 (0.020)	-0.007 (0.011)	-0.023 (0.024)	-0.041 (0.028)	-0.021 (0.025)	-0.114 ** (0.055)	0.007 (0.036)	-0.102 ** (0.047)
<i>IDV*CEO non-duality</i>							0.013 * (0.007)	0.007 ** (0.003)	0.011 *** (0.003)
Observations	21,558	21,558	21,558	21,558	21,558	21,558	21,558	21,558	21,558
R-squared	0.845	0.853	0.825	0.849	0.855	0.830	0.849	0.855	0.829
Control Vars	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Bank*Firm FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year F.E.	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Loan type F.E.	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

This table examines the moderating effect of CEO cash compensation, tenure, and non-duality on the relationship between bank CEO individualism and borrower monitoring. Standard errors are double-clustered at the bank and borrowing firm levels. Definitions of all variables are in Table 1. Standard errors are in parentheses. \*\*\*, \*\*, and \* indicate significance at the 1%, 5% and 10% levels, respectively.

individualist CEOs exert more monitoring efforts in recessionary periods. This finding is consistent with the view that banks can tighten loan contract conditions during a period of turmoil (e.g., Berger et al., 2021a).

### 6.3. Endogeneity concerns and turnover

One concern could be that the degree of individualism of the bank CEOs could be correlated with other cultural characteristics in their ancestral country of origin. For example, an individual with orientation towards the self (more individualist rather than collectivist) versus the group could exhibit less trust in others (Huff and Kelley, 2003; Kiffin-Petersen and Cordery, 2003). To mitigate this concern, we rerun our analysis using the instrumental variables/two-stage least squares (IV/2SLS) estimation method. Following previous studies (e.g., Fincher et al., 2008; Gorodnichenko and Roland, 2011; Boubakri and Saffar, 2016; Berger et al., 2021b), we use the historical prevalence of pathogens in the ancestral country of origin, *Pathogen*, to construct the individualism instrument. According to Fincher et al. (2008), individualism is more likely to occur in societies that have historically experienced a

lower prevalence of pathogens. At the same time, this instrument is plausibly exogenous to borrowers' risk. In line with this conjecture, the first-stage analysis of 2SLS in Columns 1–3 of Table 10 shows a significant and negative association between the variable measuring the pathogen prevalence in the ancestral country of origin and *IDV*. Moreover, the second-stage models where the dependent variables are *FinCov*, *CovInt*, and *OtherCov* mirror the baseline findings in Table 4. This test mitigates endogeneity concerns.

We also consider an alternative instrument, *Pronoun*, which takes the value 1 if the predominant language in a CEO's ancestral country of origin allows the omission of first-person singular pronouns in an independent clause (such as "I" in English) and 0 if not. Nash and Patel (2019) show that many studies use linguistic-based instruments to mark individualism (e.g., Cai et al., 2022). Kashima and Kashima (1998) argue that specific pronouns signal the prominence of individualism in a culture. The potential omission of subject-indexing pronouns (i.e., "pronoun drop") indicates the relation between the individual and the group. They posit that a language's rules regarding "pronoun drop" capture whether a culture focuses more on the individual or the group. Hence, we expect a negative association between the *Pronoun*

**Table 7**

Lender individualism and borrower monitoring: controlling for lender's corporate governance.

	(1)	(2)	(3)
Dep. Var.:	Fin Cov	Cov Int	Other Cov
<i>IDV</i>	-0.005 *** (0.001)	-0.003 * (0.001)	-0.005 *** (0.001)
<i>Board Size</i>	-0.077 ** (0.036)	-0.019 (0.077)	-0.063 ** (0.029)
<i>Board Independence</i>	-0.060 (0.068)	0.009 (0.112)	-0.050 (0.066)
<i>Female ratio</i>	-0.014 (0.081)	-0.006 (0.186)	-0.063 (0.084)
<i>Audit Committee</i>	0.111 *** (0.036)	0.094 (0.071)	0.114 *** (0.028)
Observations	16,637	16,637	16,637
R-squared	0.840	0.855	0.824
Control Vars	Yes	Yes	Yes
Bank*Firm FE	Yes	Yes	Yes
Year F.E.	Yes	Yes	Yes
Loan type F.E.	Yes	Yes	Yes

This table examines the relation between bank CEO individualism and borrower monitoring while controlling for banks' corporate governance characteristics. Standard errors are double-clustered at the bank and borrowing firm levels. Definitions of all variables are in Table 1. Standard errors are in parentheses. \*\*\*, \*\*, and \* indicate significance at the 1%, 5% and 10% levels, respectively.

instrument and *IDV*. Columns 3–6 of Table 10 show that the association between the instrument *Pronoun* and *IDV* is negative and highly significant in the first stage. In the second stage, the results of *IDV* with respect to *FinCov*, *CovInt*, and *OtherCov* are consistent with the results of the baseline models. Finally, in Columns 7–9 of Table 10, we use both instruments in the same specification and continue to find a negative and significant coefficient for *IDV*. We run the diagnostic tests for over- and under-identification and weak identification in the instrumental variable estimations. Specifically, in the models that use two instruments, we cannot reject the null hypothesis that the instruments are uncorrelated with the error term, as demonstrated by the insignificant Hansen J-statistic. We also cannot reject the null hypothesis that the excluded instruments are not correlated with the endogenous regressors, using the Kleibergen–Paap rk L.M. statistic and that the instruments are not weak as shown by the Kleibergen–Paap rk Wald F-statistic and its comparison with critical values.

As a further analysis, we use a subsample of banks with CEO turnover events to mitigate reverse causality concerns. The turnover setup allows us to infer the impact of variation in lender individualism by considering the bank CEOs' replacement. For this analysis, we follow Francis et al. (2013) to create a variable called *Post* that takes the value equal to 1 for the three-year window after the bank CEO turnover event and 0 otherwise. We consider the banks that experience a change in the level of CEOs' individualism from below the sample median to above the sample median, as treated banks. Instead, our control sample comprises banks with a CEO turnover but that do not experience a change from below the sample median to above the sample median in individualism or vice-versa. In other words, we use as a control sample banks whose CEO turnover does not lead to a cultural change in terms of a jump above or below the sample median of CEO individualism.<sup>13</sup>

A negative coefficient for the interaction term *Post\*Treated* would indicate a decrease in monitoring effort due to the variation in lender individualism because of CEO replacement. Table 11 shows that loan covenants decrease after their lenders are subject to a transition from

<sup>13</sup> We detect 39 turnover cases over the period of analysis. Specifically, 15 cases refer to low individualist CEOs replaced by high individualist CEOs (treated sample), while 12 cases are related to CEO turnovers that do not involve a change in individualism (control sample). There are also 11 cases regarding high individualist CEOs being replaced by low individualist CEOs.

**Table 8**

Lender individualism and borrower monitoring: the moderating effect of lender's corporate governance.

	(1)	(2)	(3)
Dep. Var.:	Fin Cov	Cov Int	Other Cov
Panel A: Board size			
<i>IDV</i>	-0.027 *** (0.009)	-0.024 *** (0.004)	-0.012 *** (0.002)
<i>Board Size</i>	-0.148 *** (0.038)	-0.042 (0.079)	-0.086 *** (0.027)
<i>IDV*Board Size</i>	0.010 ** (0.004)	0.010 *** (0.002)	0.003 *** (0.001)
<i>Board Independence</i>	-0.060 (0.068)	0.047 (0.113)	-0.050 (0.066)
<i>Female Ratio</i>	-0.015 (0.081)	0.028 (0.205)	-0.063 (0.087)
<i>Audit Committee</i>	0.111 *** (0.036)	0.128 (0.077)	0.114 *** (0.028)
Observations	16,637	16,637	16,637
R-squared	0.840	0.806	0.824
Panel B: Board Independence			
Dep. Var.:	Fin Cov	Cov Int	Other Cov
<i>IDV</i>	-0.007 ** (0.003)	-0.002 * (0.001)	-0.006 *** (0.002)
<i>Board Independence</i>	-0.080 (0.057)	-0.029 (0.114)	-0.054 (0.064)
<i>IDV*Board Independence</i>	0.003 (0.003)	0.001 (0.001)	0.005 (0.009)
<i>Board Size</i>	-0.077 ** (0.036)	-0.012 (0.084)	-0.063 ** (0.029)
<i>Female Ratio</i>	-0.014 (0.081)	0.043 (0.204)	-0.062 (0.084)
<i>Audit Committee</i>	0.111 *** (0.036)	0.125 (0.084)	0.079 (0.074)
Observations	16,637	16,637	16,637
R-squared	0.840	0.861	0.824
Control Vars and F.E. in all panels			
Control Vars	YES	YES	YES
Bank*Firm FE	YES	YES	YES
Year FE	YES	YES	YES
Loan type FE	YES	YES	YES
Panel C: Female ratio			
Dep. Var.:	Fin Cov	Cov Int	Other Cov
<i>IDV</i>	-0.008 *** (0.002)	-0.006 *** (0.002)	-0.008 *** (0.001)
<i>Female Ratio</i>	-0.173 ** (0.084)	-0.224 (0.184)	-0.200 ** (0.096)
<i>IDV*Female Ratio</i>	0.022 *** (0.008)	0.036 *** (0.011)	0.019 ** (0.009)
<i>Board Size</i>	-0.076 ** (0.036)	0.030 (0.076)	-0.063 ** (0.029)
<i>Board Independence</i>	-0.061 (0.068)	0.046 (0.112)	-0.050 (0.065)
<i>Audit Committee</i>	0.111 *** (0.036)	0.128 * (0.074)	0.114 *** (0.028)
Observations	16,637	16,637	16,637
R-squared	0.840	0.806	0.824
Panel D: Audit Committee			
Dep. Var.:	Fin Cov	Cov Int	Other Cov
<i>IDV</i>	-0.011 * (0.006)	-0.018 (0.012)	-0.014 ** (0.005)
<i>Audit Committee</i>	0.111 ** (0.042)	0.099 (0.088)	0.120 *** (0.034)
<i>IDV*Audit Committee</i>	0.005 (0.085)	0.016 (0.220)	0.008 (0.087)
<i>Board Size</i>	-0.074 * (0.038)	0.028 (0.081)	-0.069 ** (0.031)
<i>Board Independence</i>	-0.131 ** (0.064)	-0.011 (0.119)	-0.133 ** (0.059)
<i>Female Ratio</i>	-0.033 (0.085)	0.124 (0.220)	-0.088 (0.087)
Observations	16,637	16,637	16,637
R-squared	0.850	0.814	0.835
Control Vars and F.E. in all panels			
Bank*Firm FE	YES	YES	YES
Year FE	YES	YES	YES
Loan type FE	YES	YES	YES

This table examines the moderating effect of lender's corporate governance on the relationship between bank CEO individualism and borrower monitoring while controlling for banks' corporate governance characteristics. Panel A focuses on *Board Size*, Panel B focuses on *Board Independence*, Panel C focuses on *Female Ratio*, and Panel D focuses on the *Audit Committee*. Standard errors are double-clustered at the bank and borrowing firm levels. Definitions of all variables are in Table 1. Standard errors are in parentheses. \* \*\*, \* \*, and \* indicate significance at the 1%, 5% and 10% levels, respectively.

**Table 9**

Lender individualism and borrower monitoring: Differential impact between recessions and growth periods.

	(1)	(2)	(3)
Dep. Var.:	Fin Cov	Cov Int	Other Cov
<i>IDV</i>	-0.004 * ** (0.001)	-0.003 * (0.002)	-0.005 * ** (0.001)
<i>IDV</i> * <i>Recession NBER</i>	0.002 * * (0.001)	0.004 (0.003)	0.002 * * (0.001)
Observations	24,106	24,106	24,106
R-squared	0.842	0.799	0.825
Control Vars	Yes	Yes	Yes
Bank*Firm FE	Yes	Yes	Yes
Year F.E.	Yes	Yes	Yes
Loan type F.E.	Yes	Yes	Yes

This table examines the differential relationship between bank CEO individualism and borrower monitoring during periods of recession. Standard errors are double-clustered at the bank and borrowing firm levels. Definitions of all variables are in Table 1. Standard errors are in parentheses. \* \*\*, \* \*, and \* indicate significance at the 1%, 5% and 10% levels, respectively.

less to more CEO individualism.<sup>14</sup>

#### 6.4. Other national cultural dimensions

We further test whether individualism captures different dimensions of cultural heritage and, if so, whether its effect entails that of other cultural heritage variables. There is extensive literature investigating the effect of individualism as a cultural driver of corporate risk-taking and investment. However, several studies also focus on other cultural dimensions, such as uncertainty avoidance, tolerance for hierarchical relationships and masculinity (e.g., Kanagaretnam et al., 2011; Li et al., 2013; Berger et al., 2021b). Following the procedure suggested by Eun et al. (2015), we rerun the baseline model by including the residuals derived from regressing individualism against the other three main Hofstede (2001) cultural heritage characteristics, as explanatory variables. In this way, we overcome possible multicollinearity issues between individualism and other cultural dimensions, such as uncertainty avoidance (U.A.), masculinity (M.A.S.), and power distance (P.D.).<sup>15</sup> Table 12 suggests that our main findings are robust to possible multicollinearity issues between individualism and other cultural heritage dimensions, which could affect the bank CEOs' decision-making.

Interestingly, uncertainty avoidance appears to be significantly and positively related to loan covenants. This finding may suggest that CEOs with ancestry in high uncertainty avoidance countries may eschew risks (Berger et al., 2021b). We also find a significant and positive effect of P. D. on loan covenants. Bank CEOs whose origins can be traced to high

<sup>14</sup> In an untabulated result, we consider the banks that experience a change in the level of CEOs' individualism from high the sample median to below the sample median as treated banks. In this case, we find an increase of monitoring effort due to the variation in lender individualism because of CEO replacement.

<sup>15</sup> Uncertainty Avoidance (UA) refers to the degree to which the members of a society feel uncomfortable with uncertainty and ambiguity; Masculinity (MAS) is the degree to which a society is considered masculine versus feminine; Power Distance (PD) is the degree to which the less powerful members of a society accept and expect that power is distributed unequally.

power distance countries may be more inclined to value their high-ranking position and, in turn, be more skeptical about undertaking risky activities that could compromise their status. Indeed, countries with high power distance exhibit a predominance of authoritarian norms, conformity and loyalty, which usually lead to a low tolerance for deviations in behavior (Hofstede, 1984; Doney et al., 1998).

#### 6.5. Alternative measure for *IDV*

This additional analysis investigates whether our main evidence is robust to an alternative lender's individualism measure. Following Berger et al. (2021b), we replace individualism with a transformed version of the cultural dimension *CLT GLOBE*, retrieved from the Global Leadership and Organizational Behavior Effectiveness (GLOBE) project (see House et al., 2004 for more details), which captures collectivism practice values, the opposite of individualism at the country level. To make *CLT GLOBE* comparable with *IDV*, we subtract the respective value assigned to each country from the maximum value taken up by *CLT GLOBE*. Table 13 presents the regression results based on this alternative measure of *CLT GLOBE*, called *IDV GLOBE*. Consistent with our earlier findings, the coefficient of *IDV GLOBE* is negatively and significantly related to *FinCov*, *CovInt*, and *OtherCov*, in line with the baseline findings in Table 4.

#### 6.6. Controlling for relationship lending

Loan covenants could also be affected by the existing bank-borrower relationship. Previous studies find that in longer banking relationships, interest charges and collateral required by banks are reduced (Berger and Udell, 1995; Degryse and Cayseele, 2000; Sufi, 2007; Bharath et al., 2011). It could also be that lenders with individualist CEOs require less stringent loan covenants for certain borrowers because of the bank-borrower relationship. To mitigate such a concern, we follow Bharath et al. (2011) and build a variable called *relationship lending* by considering the number of loans a lead bank provides to the same borrower in the last five years, divided by the total loans of the borrower in the last five years.<sup>16</sup> Table 14 shows that after controlling for relationship lending, *IDV* still impacts loan covenant variables negatively and significantly, mitigating the possibility that existing bank-borrower relationships drive our findings.

## 7. Conclusions

This paper investigates the role of lender individualism in shaping bank monitoring in the syndicated loan market using a novel dataset of 27,164 syndicated loan facilities, granted between 1998 and 2017. Our results show that individualist lenders exert lower monitoring effort as they require less stringent covenant-based monitoring requirements, which substitute for monitoring in lending contracts (Gustafson et al., 2021); they also set less strict contractual conditions. Our results are robust to the use of alternative measures of loan monitoring, such as performance pricing. Furthermore, our findings indicate that these lenders rely more on soft information during the monitoring process than on mechanisms related to hard information. This could contribute to enhanced asymmetric problems between lenders and borrowing firms. We also provide evidence that individualist lenders retain a larger loan share and deal with a larger number of lenders.

Our analysis shows that CEO tenure, cash compensation and CEO non-duality lower the risk attitude of banks led by individualist CEOs in the lending market. We also find that board size and female directors improve banks led by individualist CEOs' effectiveness in performing their monitoring duties. Finally, we find that the negative relationship

<sup>16</sup> Average relationship lending intensity (i.e., the proportion of previous loans from the same lead bank as a proportion of total loans) is 0.39.

**Table 10**  
Lender individualism and borrower monitoring: instrumental variable estimations.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Dep. Var.:	Fin Cov	Cov Int	Other Cov	Fin Cov	Cov Int	Other Cov	Fin Cov	Cov Int	Other Cov
<i>Instrumented IDV</i>	-0.003 ** (0.001)	-0.003 *** (0.001)	-0.003 ** (0.001)	-0.005 *** (0.000)	-0.006 ** (0.002)	-0.006 *** (0.002)	-0.003 *** (0.001)	-0.004 *** (0.001)	-0.004 *** (0.001)
1st Stage									
Pathogen	-0.491 *** (0.058)	-0.491 *** (0.058)	-0.491 *** (0.058)				-0.373 *** (0.057)	-0.373 *** (0.057)	-0.373 *** (0.057)
Pronoun				-0.417 *** (0.093)	-0.417 *** (0.093)	-0.417 *** (0.093)	-0.158 *** (0.036)	-0.158 *** (0.036)	-0.158 *** (0.036)
Observations	22,124	22,124	22,124	22,124	22,124	22,124	22,124	22,124	22,124
R-squared	0.041	0.045	0.009	0.041	0.045	0.008	0.041	0.045	0.009
UIT p-value	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
WIT	71.59	71.59	71.59	20.133	20.133	20.133	78.238	78.238	78.238
With critical value	16.38	16.38	16.38	16.38	16.38	16.38	19.93	19.93	19.93
OIT p-value							0.159	0.407	0.122
Control Vars	Yes								
Bank*Firm FE	Yes								
Year F.E.	Yes								
Loan type F.E.	Yes								

This table examines the relation between the instrumented bank CEO individualism and borrower monitoring with two-stage least-squares instrumental variable specifications (2SL-IV). The instruments used are the level of pathogens in the ancestral country origin of bank CEOs (*Pathogen*) and a dummy that takes the value of one in case the predominant language in the ancestral country origin of bank CEOs allows the omission of first-person singular pronouns in an independent clause and zero if not (*Pronoun*). The first stage includes all control variables and uses *IDV* as the dependent variable. UIT is the under-identification L.M. test by Kleibergen and Paap, which requires a value lower than 0.05 to reject the null hypothesis at the 5% level. WIT is the Wald F-statistic of the weak identification test by Kleibergen and Paap, which must be higher than its critical value to reject the null hypothesis. OIT is the over-identification test of Hansen, which requires a value higher than 0.05 to reject the null hypothesis at the 5% level. Standard errors are double-clustered at the bank and borrowing firm levels. Definitions of all variables are in Table 1. Standard errors are in parentheses. \*\*\*, \*\*, and \* indicate significance at the 1%, 5% and 10% levels, respectively.

**Table 11**  
Lender individualism and borrower monitoring: evidence from bank CEO turnovers.

	(1)	(2)	(3)
Dep. Var.:	Fin Cov	Cov Int	Other Cov
<i>Post*Treated</i>	-0.014 ** (0.005)	-0.017 *** (0.006)	-0.012 *** (0.004)
Observations	10,325	10,325	10,325
R-squared	0.803	0.816	0.774
Control Vars	Yes	Yes	Yes
Bank*Firm FE	Yes	Yes	Yes
Year F.E.	Yes	Yes	Yes
Loan type F.E.	Yes	Yes	Yes

This table examines the relation between bank CEO individualism and borrower monitoring using bank CEO turnovers. *Treated* is a variable representing a turnover from a low to a high individualism bank CEO based on the sample median. The control sample comprises banks with CEO turnovers that do not experience a change in individualism based on the sample median. *Post* is a variable that represents a three-year window after the bank CEO turnover. Standard errors are double-clustered at the bank and borrowing firm levels. Definitions of all variables are in Table 1. Standard errors are in parentheses. \*\*\*, \*\*, and \* indicate significance at the 1%, 5% and 10% levels, respectively.

between lender individualism and loan monitoring weakens in recession periods.

To mitigate the possibility that our findings are driven by endogeneity issues, such as reverse causality or omitted variables, we ran tests employing two instrumental variables (IV), CEO turnover, controlling for bank governance, correlation with other cultural heritage variables, and alternative individualism measures and relationship lending. Overall, our results indicate that the cultural heritage of banks' CEOs plays an important role in the syndicated loan market. It can affect both lenders' monitoring style and monitoring efforts.

A further extension to this research would be to analyze the initiation phase of the bank-firm relationship, including loan application and syndicate formation, for which we have limited data available. This would help better underpin possible market imperfections, mitigating lending inefficiencies.

**Table 12**  
Lender individualism and borrower monitoring: controlling for other cultural heritage characteristics.

	(1)	(2)	(3)
Dep. Var.:	Fin Cov	Cov Int	Other Cov
<i>IDV residuals</i>	-0.121 *** (0.024)	-0.084 * (0.047)	-0.149 *** (0.021)
<i>P.D. residuals</i>	0.162 *** (0.026)	0.123 *** (0.039)	0.159 *** (0.022)
<i>MAS residuals</i>	-0.010 (0.021)	0.177 *** (0.030)	0.008 (0.024)
<i>U.A. residuals</i>	0.117 *** (0.028)	0.134 *** (0.034)	0.142 *** (0.020)
Observations	24,106	24,106	24,106
R-squared	0.842	0.799	0.823
Control Vars	Yes	Yes	Yes
Bank*Firm FE	Yes	Yes	Yes
Year F.E.	Yes	Yes	Yes
Loan type F.E.	Yes	Yes	Yes

This table examines the relation between bank CEO individualism and borrower monitoring while controlling for the rest of main cultural heritage characteristics of bank CEOs (uncertainty avoidance, power distance, masculinity). To avoid the high correlation between the cultural characteristics, we follow Eun et al. (2015) and regress each cultural heritage characteristic on the other three characteristics. The residuals we obtain represent the portion of each cultural heritage characteristic that is not correlated with the rest. Standard errors are double-clustered at the bank and borrowing firm levels. Definitions of all variables are in Table 1. Standard errors are in parentheses. \*\*\*, \*\*, and \* indicate significance at the 1%, 5% and 10% levels, respectively.

**CRedit authorship contribution statement**

**Theodora Bermpel:** Data curation, Methodology, Writing – review & editing. **Marta Degl'Innocenti:** Conceptualization, Methodology, Formal analysis, Writing – original draft. **Antonios Nikolaos Kalyvas:** Methodology, Data curation, Formal analysis, Writing – original draft. **Si Zhou:** Conceptualization, Methodology, Writing – review & editing.

**Table 13**

Lender individualism and borrower monitoring: alternative measure of individualism.

	(1)	(2)	(3)
Dep. Var.:	Fin Cov	Cov Int	Other Cov
<i>IDV Globe</i>	-0.011 ** (0.004)	-0.031 *** (0.010)	-0.015 *** (0.003)
Observations	22,984	22,984	22,984
R-squared	0.848	0.853	0.833
Control Vars	Yes	Yes	Yes
Bank*Firm FE	Yes	Yes	Yes
Year F.E.	Yes	Yes	Yes
Loan type F.E.	Yes	Yes	Yes

This table examines the relation between an alternative measure of bank CEO individualism and borrower monitoring. The alternative measure is *IDV GLOBE*. This variable represents the level of individualism in the bank CEOs' ancestral country of origin based on data from the *GLOBE* study. Standard errors are double-clustered at the bank and borrowing firm level. Definitions of all variables are in [Table 1](#). Standard errors are in parentheses. \*\*\*, \*\*, and \* indicate significance at the 1%, 5% and 10% levels, respectively.

**Table 14**

Lender individualism and borrower monitoring: controlling for relationship lending.

	(1)	(2)	(3)
Dep. Var.:	Fin Cov	Cov Int	Other Cov
<i>IDV</i>	-0.004 *** (0.001)	-0.003 * (0.002)	-0.004 *** (0.001)
<i>Relationship lending</i>	-0.009 (0.020)	-0.046 (0.046)	-0.012 (0.024)
Observations	18,155	18,155	18,155
R-squared	0.850	0.810	0.834
Control Vars	Yes	Yes	Yes
Bank*Firm FE	Yes	Yes	Yes
Year F.E.	Yes	Yes	Yes
Loan type F.E.	Yes	Yes	Yes

This table examines the relation between bank CEO individualism and borrower monitoring while controlling for relationship lending. Standard errors are double-clustered at the bank and borrowing firm levels. Definitions of all variables are in [Table 1](#). Standard errors are in parentheses. \*\*\*, \*\*, and \* indicate significance at the 1%, 5% and 10% levels, respectively.

## Data Availability

Data will be made available on request.

## References

Adams, R., Hermalin, B.E., Weisbach, M.S., 2010. The role Boards Dir. Corp. Gov.: a Concept. *Framew. Surv. J. Econ. Lit.* 48, 58–107.

de Andres, P., Vallelado, E., 2008. Corporate governance in banking: the role of the board of directors. *J. Bank Financ* 32 (12), 2570–2580.

Ashraf, B.N., Zheng, C., Arshad, S., 2016. Effects of national culture on bank risk-taking behavior. *Res. Int. Bus. Financ.* 37, 309–326.

Bebchuk, L., Spamann, H., 2010. Regulating banker's pay. *Georget. Law Rev.* 98, 247–287.

Beckmann, D., Menkhoff, L., Suto, M., 2008. Does culture influence asset managers' views and behavior? *J. Econ. Behav. Organ* 67, 624–643.

Ben-David, I., Graham, J.R., Campbell, R.H., 2013. Managerial miscalibration. *Quart. J. Econ.* 128 (4), 1547–1584.

Berger, A.N., Udell, G.F., 1995. Relationship lending and lines of credit in small firm finance. *J. Bus.* 68 (3), 351–381.

Berger, A.N., Bouwman, C.H., Norden, L., Roman, R.A., Udell, G.F., Wang, T., 2021a. Is a friend in need a friend indeed? How relationship borrowers fare during the covid-19 crisis. *Kelley School of Business Research Paper No.* 2021–01.

Berger, A.N., Li, X., Morris, C., Roman, R.A., 2021b. The effects of cultural values on bank failures around the world. *J. Financ. Quant. Anal.* 56 (3), 945–993.

Berger, P., Ofek, E., Yermack, D., 1997. Managerial entrenchment and capital structure decisions. *J. Financ.* 52, 1411–1438.

Bertrand, M., Schoar, A., 2003. Managing with style: The effect of managers on firm policies. *Q. J. Econ.* 118 (4), 1169–1208.

Besanko, D.A., Kanatas, G., 1993. Credit market equilibrium with bank monitoring and moral hazard. *Rev. Financ. Stud.* 6, 213–232.

Bharath, S.T., Dahiya, S., Saunders, A., Srinivasan, A., 2011. Lending relationships and loan contract terms. *Rev. Financ. Stud.* 24 (4), 1141–1203.

Boubakri, N., Saffar, W., 2016. Culture and externally financed firm growth. *J. Corp. Financ.* 41, 502–520.

Boubakri, N., Cao, Z., Ghoul, S.E., Guedhami, O., Li, X., 2023. National culture and bank liquidity creation. *J. Financ. Stab.* 64, 101086.

Bradley, M., Roberts, M.R., 2015. The structure and pricing of corporate debt covenants. *Quart. J. Financ.* 5 (2), 1–37.

Breuer, W., Riesener, M., Salzmänn, A.J., 2014. Risk aversion vs. individualism: What drives risk taking in household finance? *Eur. J. Financ.* 20 (5), 446–462.

Cai, J., Saunders, A., Steffen, S., 2018. Syndication, interconnectedness, and systemic risk. *J. Financ. Stab.* 34, 105–120.

Cai, M., Caskey, G.W., Cowen, N., Murtazashvili, I., Murtazashvili, J.B., Salahodjaev, R., 2022. Individualism, economic freedom, and charitable giving. *J. Econ. Behav. Organ* 200, 868–884.

Campello, M., Gao, J., 2017. Customer concentration and loan contract terms. *J. Financ. Econ.* 123, 108–136.

Chakraborty, I., Goldstein, I., MacKinlay, A., 2018. Housing price booms and crowding out effects in bank lending. *Rev. Financ. Stud.* 31 (7), 2806–2853.

Chava, S., Roberts, M.R., 2008. How does financing impact investment? the role of debt covenants. *J. Financ.* 63, 2085–2121.

Chui, A.C., Titman, S., Wei, K.J., 2010. Individualism and momentum around the world. *J. Financ.* 65 (1), 361–392.

Coles, J.L., Daniel, N.D., Naveen, L., 2006. Managerial incentives and risk-taking. *J. Financ. Econ.* 79 (2), 431–468.

Croci, E., Degl'Innocenti, M., Zhou, S., 2021. Large customer-supplier links and syndicate loan structure. In: *J. Corp. Financ.* 66. Forthcoming.

Cumming, D., Lopez-de-Silanes, F., McCahery, J.A., Schwienbacher, A., 2020. Tranching in the syndicated loan market around the world. *J. Int. Bus. Stud.* 51, 95–120.

Daily, C.M., Johnson, J.L., 1997. Sources of CEO power and firm financial performance: a longitudinal assessment. *J. Manag.* 23 (2), 97–117.

Daniel, K., Hirshleifer, D., Subrahmanyam, A., 1998. Investor psychology and security market under- and overreactions. *J. Financ.* 53, 1839–1886.

Degryse, H., Van Cayseele, P., 2000. Relationship lending within a bank-based system: evidence from European small business data. *J. Financ. Inter.* 9 (1), 90–109.

Delis, M.D., Sotiriou, K., Ongena, S., 2017. Bank Market Power and Firm Performance. *Rev. Financ. Stud.* 21 (1), 299–326.

Deng, S., Mao, C.X., Xia, C., 2020. Bank geographic diversification and corporate innovation: evidence from the lending channel. *J. Financial Quant. Anal.* forthcoming.

Dennis, S., Mullineaux, D., 2000. Syndicated Loans. *J. Financ. Inter.* 9, 404–426.

Dichev, I.D., Skinner, D.J., 2002. Large-sample evidence on the debt covenant hypothesis. *J. Account. Res.* 40, 1091–1123.

Doney, P.M., Cannon, J.P., Mullen, M.R., 1998. Understanding the influence of national culture on the development of trust. *Acad. Manag. Rev.* 23 (3), 601–620.

El Ghoul, S., Guedhami, O., Kwok, C.C., Zheng, X., 2016. Collectivism and corruption in commercial loan production: how to break the curse? *J. Bus. Ethics* 139 (2), 225–250.

Eun, C.S., Wang, L., Xiao, S.C., 2015. Culture and R2. *J. Financ. Econ.* 115, 283–303.

Fincher, C.L., Thornhill, R., Murray, D.R., Schaller, M., 2008. Pathogen prevalence predicts human cross-cultural variability in individualism/collectivism. *Proc. R. Soc. B: Biol. Sci.* 275 (1640), 1279–1285.

Finkelstein, S., Hambrick, D.C., Cannella, A.A., 2009. *Strategic leadership: Theory and Research on Executives, Top Management Teams, and Boards.* Oxford University Press, New York.

Fisman, R., Paravisini, D., Vig, V., 2017. Cultural proximity and loan outcomes. *Am. Econ. Rev.* 107, 457–492.

Francis, B., Hasan, I., Wu, Q., 2013. The impact of CFO gender on bank loan contracting. *J. Account. Audit. Financ.* 28 (1), 53–78.

García-Sánchez, I.-M., García-Meca, E., 2018. Do talented managers invest more efficiently? the moderating role of corporate governance mechanisms. *Corp. Gov. Int. Rev.* 26, 238–254.

Gervais, S., Odean, T., 2001. Learning to be overconfident. *Rev. Financ. Stud.* 14, 1–27.

Giannetti, M., Yafeh, Y., 2012. Do cultural differences between contracting parties matter? evidence from syndicated bank loans. *Manag. Sci.* 58, 365–383.

Gorodnichenko, Y., Roland, G., 2011. Which dimensions of culture matter for long-run growth? *Am. Econ. Rev.* 101, 492–498.

Graham, J., Harvey, C., Popadak, J., Rajgopal, S., 2022. Corporate culture: evidence from the field. *J. Financ. Econ.* 146 (2), 552–593.

Guay, W., 1999. The sensitivity of CEO wealth to equity risk: an analysis of the magnitude and determinants. *J. Financ. Econ.* 53, 43–71.

Gustafson, M.T., Ivanov, I.T., Meisenzahl, R.R., 2021. Bank Monitoring: Evidence from Syndicated Loans. *J. Financ. Econ.* 139 (2), 452–477.

de Haan, J., Vlahu, R., 2016. Corporate governance of banks: a survey. *J. Econ. Surv.* 30, 228–277.

Hagedorff, J., Lim, S.S., Nguyen, D.D., 2022. Trust and bank loan contracts. *Man. Sci.* forthcoming.

Hambrick, D.C., Mason, P.A., 1984. Upper echelons: the organization as a reflection of its top managers. *Acad. Manag. Rev.* 9 (2), 193–206.

Haynes, K.T., Hillman, A., 2010. The effect of board capital and CEO power on strategic change. *Strateg. Manag. J.* 31 (11), 1145–1163.

Hegde, D., Tumlinson, J., 2014. Does social proximity enhance business partnerships? Theory and evidence from ethnicity's role in U.S. venture capital. *Man. Sci.* 60 (9), 2355–2380.

- Hofstede, G., 1984. *Culture's Consequences: International Differences in Work-related Values*, Vol. 5. Sage Publications, Inc.
- Hofstede, G., 2001. *Culture's Consequences: Comparing Values, Behaviors, Institutions and Organizations across Nations*. Sage Publications.
- Hofstede, G., Hofstede, G.J., Minkov, M., 2010. *Cultures and Organizations: Software of the Mind*, third ed. McGraw-Hill, New York.
- House, R.J., Hanges, P.J., Javidan, M., Dorfman, P.W., Gupta, V. (Eds.), 2004. *Culture, Leadership, and Organizations: The GLOBE Study of 62 Societies*. Sage Publications.
- Hsee, C.K., Weber, E.U., 1999. Cross-national differences in risk preference and lay predictions. *J. Behav. Decis. Mak.* 12 (2), 165–179.
- Huff, L., Kelley, L., 2003. Levels of organizational trust in individualist versus collectivist societies: a seven-nation study. *Organ. Sci.* 14, 81–90.
- Husted, B.W., Allen, D.B., 2008. Toward a model of cross-cultural business ethics: the impact of individualism and collectivism on the ethical decision-making process. *J. Bus. Ethics* 82, 293–305.
- Illiashenko, P., 2019. Tough Guy" vs. "Cushion" hypothesis: how does individualism affect risk-taking? *JBEF* 24, 100212.
- Ivashina, V., 2009. Asymmetric information effects on loan spreads. *J. Financ. Econ.* 92, 300–319.
- Ivashina, V., Scharfstein, D., 2010. Bank lending during the financial crisis of 2008. *J. Financ. Econ.* 97, 319–338.
- Kanagaretnam, K., Lim, C.Y., Lobo, G.J., 2011. Effects of national culture on earnings quality of banks. *J. Int. Bus. Stud.* 42, 853–874.
- Kanagaretnam, K., Lim, C.Y., Lobo, G.J., 2014. Influence of national culture on accounting conservatism and risk-taking in the banking industry. *Account. Rev.* 89, 1115–1149.
- Karapetyan, A., Stacescu, B., 2014. Does information sharing reduce the role of collateral as a screening device? *J. Bank. Financ.* 43, 48–57.
- Kashima, E.S., Kashima, Y., 1998. Culture and language: the case of cultural dimensions and personal pronoun use. *J. Cross Cult. Psychol.* 29, 461–486.
- Kiffin-Petersen, S., Cordery, J., 2003. Trust, individualism and job characteristics as predictors of employee preference for teamwork. *Int. J. Hum. Resour.* 14 (1), 93–116.
- Kwok, C., Tadesse, S., 2006. National culture and financial systems. *J. Int. Bus. Stud.* 37, 227–247.
- Lee, S.W., Mullineaux, D.J., 2004. Monitoring, financial distress, and the structure of commercial lending syndicates. *Financ. Manag.* 33, 107–130.
- Li, K., Griffin, D., Yue, H., Zhao, L., 2013. How does culture influence corporate risk-taking? *J. Corp. Financ.* 23, 1–22.
- Lin, C., Ma, Y., Malatesta, P., Xuan, Y., 2012. Corporate ownership structure and bank loan syndicate structure. *J. Financ. Econ.* 104, 1–22.
- Markus, H.R., Kitayama, S., 1991. Culture and the self: Implications for cognition, emotion, and motivation. *Psych. Rev.* 98, 224–253.
- Moore, D.A., Healy, P.J., 2008. The trouble with overconfidence. *Psych. Rev.* 115, 502–517.
- Mourouzdidou-Damtsa, S., Milidonis, A., Stathopoulos, K., 2019. National culture and bank risk taking. *J. Financ. Stab.* 40, 132–143.
- Nash, R., Patel, A., 2019. Instrumental variables analysis and the role of national culture in corporate finance. *Financ. Manag.* 48, 385–416.
- Nguyen, D.D., Hagedorff, J., Eshraghi, A., 2018. Does a CEO's cultural heritage affect performance under competitive pressure? *Rev. Financ. Stud.* 31 (1), 97–141.
- Nguyen, D.D., Nguyen, L., Sila, V., 2019. Does corporate culture affect bank risk-taking? evidence from loan-level data. *Brit. J. Man.* 30 (1), 106–133.
- Odean, T., 1998. Volume, volatility, price, and profit when all traders are above average. *J. Financ.* 53, 1887–1934.
- Pagnini, D.L., Morgan, S.P., 1990. Inter-marriage and social distance among U.S. immigrants at the turn of the century. *Am. J. Socio* 96 (2), 405–432.
- Pan, Y., Siegel, S., Wang, T.Y., 2017. Corporate risk culture. *J. Financ. Quan. Anal.* 52 (6), 327–3367.
- Pan, Y., Siegel, S., Wang, T.Y., 2020. The cultural origin of CEOs' attitudes towards uncertainty: evidence from corporate acquisitions. *Rev. Financ. Stud.* 33 (7), 2977–3030.
- Pevzner, M., Xie, F., Xin, X., 2015. When firms talk, do investors listen? The role of trust in stock market reactions to corporate earnings announcements. *J. Financ. Econ.* 117, 190–223.
- Rajan, R., Winton, A., 1995. Covenants and collateral as incentives to monitor. *J. Fin.* 50 (4), 1113–1146.
- Ross, D.G., 2010. The "dominant bank effect": How high lender reputation affects the information content and terms of bank loans. *Rev. Financ. Stud.* 23, 2730–2756.
- Scheinman, J., Xiong, W., 2003. Overconfidence and speculative bubbles. *J. Political Econ.* 111, 1183–1219.
- Shao, L., Kwok, C.C.Y., Guedhami, O., 2010. National culture and dividend policy. *J. Int. Bus. Stud.* 41, 1391–1414.
- Shao, L., Kwok, C.C.Y., Zhang, R., 2013. National culture and corporate investment. *J. Int. Bus. Stud.* 44, 745–763.
- Siegel, J.L., Licht, A.N., Schwartz, S.H., 2011. Egalitarianism and international investment. *J. Financ. Econ.* 102, 621–642.
- Sufi, A., 2007. Information asymmetry and financing arrangements: evidence from syndicated loans. *J. Financ.* 62 (2), 629–636.
- Sun, J., Liu, 2014. Audit committees' oversight of bank risk-taking. *J. Bank. Financ.* 40, 376–387.
- Triandis, H.C., 1994. *Culture and Social Behavior*. McGraw-Hill Series in Social Psychology. McGraw-Hill, New York.
- Vallascas, F., Hagedorff, J., 2013. CEO bonus compensation and bank default risk: evidence from the U.S. and Europe. *Finan. Mark. Inst. Instrum.* 22, 47–89.
- Vallascas, F., Mollah, S., Keasey, K., 2017. Does the impact of board independence on large bank risks change after the global financial crisis? *J. Corp. Financ.* 44, 149–166.
- Van Den Steen, E., 2004. Rational overoptimism (and other biases). *Am. Econ. Rev.* 94, 1141–1151.
- Vitell, S.J., Nwachukwu, S.L., Barnes, H. J., 1993. The effects of culture on ethical decision-making: an application of Hofstede's typology. *J. Bus. Ethics* 12, 753–760.
- Wang, Y., Xia, H., 2014. Do lenders still monitor when they can securitize loans? *Rev. Financ. Stud.* 27 (8), 2354–2391.
- Zheng, X., Ghoul, El, Guedhami, S., Kwok, O., C.C.Y., 2013. Collectivism and corruption in bank lending. *J. Int. Bus. Stud.* 44, 363–390.