

The Political Economy of Bank Cash Holdings

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Abstract

Our paper explores the political determinants of bank cash holdings. We show that banks in more corrupt countries hoard more cash. Notwithstanding, a higher level of the rule of law alleviates this effect. Furthermore, we also show that this effect only holds for Non-Common Law countries. Additionally, we highlight the effects of election years on the decision of banks to increase reserves. Our results are robust to several specifications, including a propensity score matching approach.

Keywords: cash holdings, banking, political economy, corruption

JEL codes: G15, G21, P52

1 Introduction

Corruption is a pervasive problem in society. It has several negative externalities, such as on health care (Gupta et al., 2001), GDP growth (Mauro, 1995), and on firm cash holdings (Thakur and Kannadhasan, 2019). Nevertheless, there is no evidence on if (and how) banks respond to corrupt environments by holding more or less cash. Hence, this paper fills this gap in the literature.

We show, using several specifications, that corruption induces banks to increase their reserves, which mimics the effects for firms found in previous literature (Thakur and Kannadhasan, 2019). However, differently from previous research, we go further in our analyses to assess the *political economy for bank cash holdings*.

First, we show that a higher rule of law mitigates the effect of corruption on banks' cash reserves, thus highlighting an important mechanism to reduce the negative impact of corruption in the financial sector. Moreover, we also show evidence that the law system in a country also has an important impact on the effect of corruption on cash holdings. We find that in Common Law countries, we do not have the effect of banks hoarding more cash in more corrupt environments.

Additionally, we also find an important effect of elections: in election years, banks tend to increase their reserves. This can be understood as a precautionary measure due to the fact that elections usually increase volatility and the risk exposure of banks. We go further, and we decompose the effect of election years on the effect of corruption on cash holdings, and we find such an effect just for G7 countries (not BRICS). Hence, we theorize that because G7 countries have lower levels of corruption and higher levels of the rule of law, elections are more important events in these countries than in countries with more corruption and the less rule of law.

Our paper offers several contributions to the literature and presents important practical implications. Firstly, we highlight the important role of the rule of law in creating an environment that reduces the cost of corruption. Secondly, we also show that

in non-common law countries, the effects of corruption on cash holdings by banks are more persistent. Finally, we also show that elections play a role in the cash management employed by banks. Additionally, our results also highlight how less corrupt and more transparent governments can lead to greater economic development via a reduction in the cost of banks.

This paper is divided into six sections. This first section is the introduction, and we present a literature review in the second section. In section 3, we discuss our methods and data and present our main results in section 4. In the fifth section, we do robustness estimations and conclude in the final section.

2 Literature Review

2.1 Cash holdings

There is substantial academic research regarding cash holdings, focused on understanding and evaluating its impact on corporate outcomes and firm valuation (Amess et al., 2015). According to Thakur and Kannadhasan (2019), the main reasons for firms to hold cash are the transaction, precautionary, agency, tax, and predation motives.

The first two derive from the classical proposition of Keynes (1937), who describes the two main benefits of holding liquid assets being the capability of avoiding transaction costs to raise money in the face of outstanding payments (transaction motive) and the power of being able to maintain or expand its operational activities when other funding options, such as bank financing, are not available or disproportionately expensive (precautionary motive). To this aspect, Lins et al. (2010) argues that the theory behind cash holdings for precautionary reasons refers only to non-operational cash. In other words, only the excess liquidity above operational cash should be considered. Considering their relatively high correlation, he concludes as “generally reasonable” to employ total cash as a proxy for non-operational liquidity. However, Amess et al. (2015) still indicates that

the inconsistency in the measurement of cash holdings is the main point of concern in cash holdings literature for precautionary purposes. Other studies under the umbrella of the precautionary motive investigate the effects on firm cash holdings of multiple determinants, such as environmental tax (Liu et al., 2022), bank relationship (Cui et al., 2020; Shikimi, 2019), and bank health (Sasaki and Suzuki, 2019).

The agency motive, in turn, relates to the fact that shareholders and firm managers have conflicting interests on what should be done with excess liquidity (Jensen, 1986). On one side, managers would want to maintain the most resources possible under their control, possibly leading firms to expand beyond optimal size, which is less than ideal from the shareholder’s perspective. According to Cheung (2016), corporate social responsibility (CSR) effectively reduces agency problems associated with the cash holdings decision. Another study, Yang et al. (2023) found that state ownership also diminishes over-investment of free cash flows, increasing firm cash holding. Some studies investigate cash holdings through the lenses of multiple motives. For instance, Xu et al. (2019) examines the impact of CFO gender on corporate cash holdings, considering both agency and precautionary reasons. The results supported the precautionary savings-based explanation based on the fact that female CFOs hold substantially more cash.

The final two primary motives of cash holdings are connected to large and multinational firms. The tax motive relates to the high taxation of money repatriation (Thakur and Kannadhasan, 2019). Finally, the predation motive explains why companies working in a concentrated industry tend to hoard liquidity to maintain their capacity to invest in similar projects to their competitors (Bolton and Scharfstein, 1990). This aspect is counterbalanced by the results of an empirical study by Zhuang et al. (2022) identifying that firms with lower cash holdings compared to peers (below median) tend to be valued higher.

2.1.1 Bank cash holdings

Research has shown a robust positive relationship between liquidity creation on economic growth (Berger and Udell, 2014). Therefore, the fact that bank cash hoarding restrains liquidity and economic development is important for both finance and development economics fields.

As with any other firm, the banking industry players are subjected to the same motives for holding liquidity as described above. However, most of the bank-specific literature converges to the precautionary motive to explain bank liquidity hoarding (Gale and Yorulmazer, 2013; Chang et al., 2014; Heider et al., 2015), especially after the subprime crisis (Acharya and Merrouche, 2012). Some authors (Diamond and Rajan, 2011; Gale and Yorulmazer, 2013) also relate to the speculative motive to address bank cash holding. This motivation is more specific to the banking sector. It refers to the high expected returns from saving liquidity in anticipation of emergency asset sales from peers in short to mid-term future.

Several papers evaluate country-specific determinants of bank liquidity (Munteanu, 2012). Zheng et al. (2022) evaluated the effects of social capital on bank liquidity hoarding and identified low liquidity hoarding from banks headquartered in regions with high social capital. In another study of evaluating the effect of cash holdings on bank profitability, Fernandes et al. (2021) identified an inverted U-shaped curve regarding the relationship between bank liquidity and profitability. In turn, results from Quang Trinh et al. (2021) indicate that board business is a mitigating factor on the negative valuation of bank liquidity hoarding.

2.2 Corruption

Corruption is a long-lasting object of academic study because of its compounded impacts throughout an economy, among other reasons (Jain, 2001). The literature on the subject is highly influenced by Shleifer and Vishny (1993), who proposed the structure of

governments and political process as the main determinants of corruption's level. They also state that the cost of corruption surpasses taxation, described as corruption's "sister activity." Another influential paper on the subject, from Jain (2001), discusses the main definitions, determinants, and models of corruption. According to Bhargava (2005), corruption is defined as "the abuse of public or corporate office for private gain." Similarly to Jain (2001), he further expands his theory on corruption by categorizing the types of corruption, causes, and consequences, as well as states some controversial aspects of corruption.

2.2.1 Corruption and banks

The literature on corruption in banks can be aggregated into six defined groups of study (although being pervasive among them), being: the determinants of bank lending corruption; the impact of corruption on the bank's lending and operational risk; the impact of bank corruption on firms; the impact of political connections on bank corruption; the impact of corporate governance and regulations on bank corruption; and the manipulation of the inter-bank offered rate (IBOR) (Bahoo, 2020). According to Barth et al. (2009), some determinants of bank lending corruption are ownership structure of firms and banks (also supported by Laeven (2001)), legal environment, and firm competition". Barth et al. (2009) also identify that banking competition, fostered by information sharing (i.e., via credit bureaus), reduces lending corruption. Cultural factors are also pointed out as determinants of banking corruption. A study by Zheng et al. (2013) suggests that collectivist countries are perceived as having higher levels of lending corruption than individualist ones.

Moving away from the determinants to analyze the impacts of corruption on banks, Chen et al. (2015) suggests that corruption promotes banks' risk-taking behavior. This could explain the increase of non-performing loans (NPL) in relation to corruption, as suggested by Park (2012). A mitigating factor to these circumstances is found in a paper regarding the effects of provision for these bad loans on bank corruption (Akins et al.,

2017). This study expands on the idea of Bushman (2014) that accounting provisions can alert bank decision-makers to non-compliant operations and found that a properly timed reserve for NPL constrains lending corruption. Accounting aspects are also explored by Ozili (2019). According to them, corrupt environments in African countries are positively related to income smoothing, which is "the process of minimizing the fluctuation of reported earnings over time". This behavior could also be linked to the idea of Bushman (2014) considering that income smoothing would prevent caution alerts to boards and stockholders. It is worth stating that these studies refer back to the agency theory proposed by Jensen (1986).

Following the findings of evaluating the effects of corruption on banks' performance, Addai et al. (2022) concluded that, in an empirical study analyzing data from 715 banks in Africa, corruption undermines the positive impact of income diversification on the performance of banks. Similar results were also found in Eurozone countries, in which corruption was negatively correlated to bank profitability and bank stability (Asteriou et al., 2021).

2.2.2 Corruption and cash holdings

The literature on the links between corruption and cash holdings is divided into two opposite lines of thought (Thakur and Kannadhasan, 2019). One suggests that firms increase their cash position to take advantage of a corrupt environment (Chen et al., 2014; Tran, 2020; Thakur and Kannadhasan, 2019). On the other hand, some suggest that companies reduce liquidity in the face of corruption to avoid expropriation (Xu and Li, 2018; Kusnadi et al., 2015; Smith, 2016). However, a study by Park (2022) suggests an alternative reason for firms' lower liquidity in response to corruption. He proposes that the high cost of capital would be the main reason firms hold less cash in corrupt environments. Finally, some complementary studies also evaluate other impacts from government and political aspects on cash holdings (Xu et al., 2016; Claessens et al., 2008; Cai et al., 2022; Xie and Zhang, 2020; Kusnadi et al., 2015).

Looking at the perspective of firms protecting themselves from corrupt conditions, Xu et al. (2016) provides evidence that companies respond to political uncertainty by lowering their cash positions using city-level data in China. In this case, the political uncertainty is represented by the first year of a new politician in charge. The authors also suggest that one of the reasons for the cash lowering is the risk of political extraction. Analyzing the effects of political corruption in the United States, Smith (2016) indicates that firms not only hold less cash but also have higher leverage in corrupt environments. This later finding could be conjectured with the results from Claessens et al. (2008), studying the effects of political campaign contributions in Brazilian firms. Among the conclusions, they indicate an increased bank financing in politically connected firms (campaign contributors). Corroborating to this idea, politically connected firms were unlikely deemed to suffer from liquidity constraints (Boubakri et al., 2013).

On the opposite perspective, Chen et al. (2014) found that “firms hold less cash when local government quality is high”, supporting the argument of financial constraint mitigation. Similar results were found by Thakur and Kannadhasan (2019) examining firms in emerging markets. According to them, “firms can benefit in the corrupt environment by trading cash”; therefore, they increase cash position in relation to corruption. This idea is also supported by an empirical study sampling 199,333 observations across 46 countries in which corruption was positively associated with both cash holdings and cash flow sensitivity of cash (Tran, 2020).

Although there is a vast amount of literature evaluating the effects of corruption on cash holdings, we could not find relevant papers analyzing this effect specifically for the banking industry; therefore, our paper fills such a gap.

3 Methods and Data

3.1 Sample

We selected as our sample banks from G7 and BRICS countries. We collected data on banks' financial information from 2009 to 2019 from Capital IQ. We select this period since it is after the 2008 financial crisis but before the 2020 outbreak of the COVID pandemic. Moreover, we also collected data on the Systemic Risk of these institutions from the V-Lab project.

Additionally, we collected data on political indicators from the following datasets: the Corruption Perceptions Index from Transparency International (2019), the World Bank Database of Political Institutions (2017), and the World Bank Worldwide Governance Indicators (2018).

3.2 Empirical Strategy

In order to capture the effect of corruption the cash management by banks, we estimate the following GLS model:

$$CASH_{i,t} = \alpha Corruption_{i,t} + \beta RoL_{i,t} + \gamma SRISK + \delta CASH_{i,t-1} + \sum_{j=1}^J \beta_j X_{i,t}^j + \lambda_t + \eta_i + \varepsilon_{i,t}. \quad (1)$$

Thus, we model the cash of the bank in the current year as a function of the previous year ($\delta CASH_{i,t-1}$), and the political indicators: the corruption perception, $Corruption_{i,t}$ that goes from 1 (low corruption) to 9 (high corruption), and the rule of law, $RoL_{i,t}$ that goes from 2 (low level) to 9 (high level). This variable is the decile transformation from the Percentile Rank of the Control of Corruption data from the World Bank, as discussed in the previous sections. Hence, if a country had a percentile rank of the rule of law at

94%, we transformed that to a value of 9, taking the floor of the percentile rank divided by 10. We did that to rank in the same grade countries that have similar levels of corruption and rule of law, thus being a more robust metric of both variables.

Additionally, we use the systemic risk as a control, such as a bank size (log of total assets), their Credit Risk, the Leverage, the Gross Loan over Total Assets, and the banks' age in years. We also employ year and bank-specific fixed effects.

3.3 Summary Statistics

Table 1 shows the descriptive statistics and the distribution of our main variables described in the previous section. In addition to the corruption and the rule of law variables, we also added two dummies that will be used in further analyses: Election Year (which assumes the value of 1 if there is a nationwide election in that country in that particular year) and Common Law, which is also a dummy (=1 if that country has a Common Law legal systems).

<Insert Table 1 around here.>

Table 2 shows the pairwise correlation between the main variables. Additionally, Table 3 shows the distribution of banks among different countries. Moreover, we also disclose the corruption, the rule of law, and SRISK levels among countries. We also highlight which countries are coded as Common Law and which are coded as Non-Common Law. We highlight the fact that, on average, G7 countries tend to have lower levels of corruption and higher levels of the rule of law when compared to BRICS countries.

<Insert Tables 2 & 3 around here.>

4 Results

The main results are shown in Table 4. Model 1a shows that while a higher level of corruption is positively associated with higher banking cash levels, the rule of law has no direct effect. Nevertheless, model 1b provides evidence of an indirect effect: higher levels of the Rule of Law reduce the effect of corruption on the cash hoarded by banks. Hence, an increase in the rule of law seems to counteract the effect of corruption.

<Insert Table 4 around here.>

Additionally, we also estimated the difference between the indirect effect of the Rule of Law on the direct effect of corruption on the prudential cash maintained by banks. It is reported in model 1c. The coefficient is positive and significant, and since the interaction term was negative and significant, this shows that the interaction effect is bigger for non-G7 countries. Thus, higher levels of the Rule of Law can benefit emerging economies by reducing the cost of corruption in the financial system.

5 Robustness

5.1 Election Years

As a robustness test, we analyze if election years affect banks' prudential level of cash. The results are shown in Table 5. Results from model 2a show that banks tend to hoard more cash in election years. This can be due to the direct effects of corruption or precautionary measures since election years tend to be years with higher market volatilities in anticipation of the election's outcome.

<Insert Table 5 around here.>

We refine our argument in models 2b and 2c, where we analyze the indirect effect of an election year on the effect of corruption on the cash maintained by banks in BRICS

vs. G7 countries. Interestingly we only find a significant effect for G7 countries, not for BRICS ones. It is important to notice that G7 countries have lower levels of corruption and higher levels of the rule of law. Hence, we theorize that elections are more important events in G7 countries, which tend to be more democratic, than in BRICS countries, which explains such effect.

5.2 Common Law

We also refine our theory by analyzing the second-order effect of Common Law on the direct effect of corruption on banks' cash holdings. Table 6 shows the results: model 3a shows the results for Common Law countries, and model 3b shows the results for Non-Common Law countries.

<Insert Table 5 around here.>

Results provide evidence that the corruption effect is concentrated in Non-Common Law countries. While results from Non-Common Law countries reproduce our main results, we find no direct effect of corruption on cash levels in Common Law countries, neither the interaction of corruption and the rule of law.

5.3 Matching

We use the nearest neighbor matching to match banks from G7 countries to banks of BRICS countries on several covariates. In the end, we have a sample of 3,061 observations being 2,531 from G7 countries and 530 from BRICS. Figure 1 shows the balancing of the sample among the covariates: Bank Size, Leverage, Credit Risk, Gross Loans / Total Assets, and Age.

<Insert Figure 1 around here.>

Table 7 shows the results. The results from model 4a reproduce our main findings, thus lending credibility to our results. We find that higher corruption levels increase cash hoarding by banks and that the rule of law reduces this effect, but this effect is only present for BRICS countries, not for the G7 ones.

6 Conclusion

Our paper’s main results show that higher corruption levels correlate to banks holding more cash, i.e. being more prudential. However, the rule of law alleviates this effect. Nevertheless, this effect seems to be concentrated in Non-Common Law countries.

We also show the role of the election in this regard. We provide evidence that banks tend to increase their reserves in election years, but this effect is mainly concentrated in G7 countries. Our theory is that elections are more important events in G7 countries, which tend to be more democratic, than in BRICS countries, driving banks to hoard cash during these volatile events.

Additionally, our main results are robust in matching banks from BRICS countries to banks from G7 countries, hence diminishing endogeneity concerns and increasing the credibility of our findings.

Hence our paper contributes to a large literature showing the negative effects of corruption (Mauro (1995), Gupta et al. (2001), Thakur and Kannadhasan (2019)). Nevertheless, this paper is the first to relate corruption to the prudential reserves maintained by banks. In addition, we also show the effects of the rule of law, elections, and Common Law on this decision-making process by banks, thus showing the political determinants of bank cash holdings.

Further research can assess the impact of other political measures, such as democracy or polarization, on the bank’s cash holdings.

References

- Acharya, V. V. and Merrouche, O. (2012). Precautionary Hoarding of Liquidity and Interbank Markets: Evidence from the Subprime Crisis. *Review of Finance*, 17(1):107–160.
- Addai, B., Tang, W., Gyimah, A. G., and Twumasi, M. A. (2022). Income diversification and bank performance nexus: Does corruption matter? *Journal of Multinational Financial Management*, 65:100757.
- Akins, B., Dou, Y., and Ng, J. (2017). Corruption in bank lending: The role of timely loan loss recognition. *Journal of Accounting and Economics*, 63(2):454–478.
- Amess, K., Banerji, S., and Lampousis, A. (2015). Corporate cash holdings: Causes and consequences. *International Review of Financial Analysis*, 42:421–433.
- Asteriou, D., Pilbeam, K., and Tomuleasa, I. (2021). The impact of corruption, economic freedom, regulation and transparency on bank profitability and bank stability: Evidence from the eurozone area. *Journal of Economic Behavior & Organization*, 184:150–177.
- Bahoo, S. (2020). Corruption in banks: A bibliometric review and agenda. *Finance Research Letters*, 35:101499.
- Barth, J. R., Lin, C., Lin, P., and Song, F. M. (2009). Corruption in bank lending to firms: Cross-country micro evidence on the beneficial role of competition and information sharing. *Journal of Financial Economics*, 91(3):361–388.
- Berger, A. N. and Udunov, J. (2017). Bank liquidity creation and real economic output. *Journal of Banking & Finance*, 81:1–19.
- Bhargava, V. (2005). The cancer of corruption. In *World bank global issues seminar series*, volume 26. Washington, DC World Bank.
- Bolton, P. and Scharfstein, D. S. (1990). A theory of predation based on agency problems in financial contracting. *The American Economic Review*, 80(1):93–106.

- Boubakri, N., Ghouli, S. E., and Saffar, W. (2013). Cash holdings of politically connected firms. *Journal of Multinational Financial Management*, 23(4):338–355.
- Bushman, R. M. (2014). Thoughts on financial accounting and the banking industry. *Journal of Accounting and Economics*, 58(2):384–395. 2013 Conference Issue.
- Cai, W., Hu, F., Xu, F., and Zheng, L. (2022). Anti-corruption campaign and corporate cash holdings: Evidence from china. *Emerging Markets Review*, 51:100843.
- Chang, S.-H., Contessi, S., and Francis, J. L. (2014). Understanding the accumulation of bank and thrift reserves during the u.s. financial crisis. *Journal of Economic Dynamics and Control*, 43:78–106. The Role of Financial Intermediaries in Monetary Policy Transmission.
- Chen, D., Li, S., Xiao, J. Z., and Zou, H. (2014). The effect of government quality on corporate cash holdings. *Journal of Corporate Finance*, 27:384–400.
- Chen, M., Jeon, B. N., Wang, R., and Wu, J. (2015). Corruption and bank risk-taking: Evidence from emerging economies. *Emerging Markets Review*, 24:122–148.
- Cheung, A. W. K. (2016). Corporate social responsibility and corporate cash holdings. *Journal of Corporate Finance*, 37:412–430.
- Claessens, S., Feijen, E., and Laeven, L. (2008). Political connections and preferential access to finance: The role of campaign contributions. *Journal of Financial Economics*, 88(3):554–580. Darden - JFE Conference Volume: Capital Raising in Emerging Economies.
- Cui, W., Cuong, L. K., and Shimizu, K. (2020). Cash policy and the bank-firm relationship. *Economic Modelling*, 91:804–818.
- Diamond, D. W. and Rajan, R. G. (2011). Fear of Fire Sales, Illiquidity Seeking, and Credit Freezes. *The Quarterly Journal of Economics*, 126(2):557–591.

- Fernandes, G., dos Santos Mendes, L., and de Oliveira Leite, R. (2021). Cash holdings and profitability of banks in developed and emerging markets. *International Review of Economics & Finance*, 71:880–895.
- Gale, D. and Yorulmazer, T. (2013). Liquidity hoarding. *Theoretical Economics*, 8(2):291–324.
- Gupta, S., Davoodi, H., and Tiongson, E. (2001). Corruption and the provision of health care and education services. In *The Political Economy of corruption*, pages 123–153. Routledge.
- Heider, F., Hoerova, M., and Holthausen, C. (2015). Liquidity hoarding and inter-bank market rates: The role of counterparty risk. *Journal of Financial Economics*, 118(2):336–354.
- Jain, A. K. (2001). Corruption: A review. *Journal of Economic Surveys*, 15(1):71–121.
- Jensen, M. C. (1986). Agency costs of free cash flow, corporate finance, and takeovers. *The American Economic Review*, 76(2):323–329.
- Keynes, J. M. (1937). The general theory of employment. *The Quarterly Journal of Economics*, 51(2):209–223.
- Kusnadi, Y., Yang, Z., and Zhou, Y. (2015). Institutional development, state ownership, and corporate cash holdings: Evidence from china. *Journal of Business Research*, 68(2):351–359.
- Laeven, L. (2001). Insider lending and bank ownership: The case of russia. *Journal of Comparative Economics*, 29(2):207–229.
- Lins, K. V., Servaes, H., and Tufano, P. (2010). What drives corporate liquidity? an international survey of cash holdings and lines of credit. *Journal of Financial Economics*, 98(1):160–176.
- Liu, G., Zhang, L., and Xie, Z. (2022). Environmental taxes and corporate cash holdings: Evidence from china. *Pacific-Basin Finance Journal*, 76:101888.

- Mauro, P. (1995). Corruption and growth. *The Quarterly Journal of Economics*, 110(3):681–712.
- Munteanu, I. (2012). Bank liquidity and its determinants in romania. *Procedia Economics and Finance*, 3:993–998.
- Ozili, P. K. (2019). Bank income smoothing, institutions and corruption. *Research in International Business and Finance*, 49:82–99.
- Park, J. (2012). Corruption, soundness of the banking sector, and economic growth: A cross-country study. *Journal of international money and Finance*, 31(5):907–929.
- Park, S. (2022). Liquid asset sheltering, or cost of capital? the effect of political corruption on corporate cash holdings. *International Review of Financial Analysis*, 82:102146.
- Quang Trinh, V., Elnahass, M., and Duong Cao, N. (2021). The value relevance of bank cash holdings: The moderating effect of board busyness. *Journal of International Financial Markets, Institutions and Money*, 73:101359.
- Sasaki, T. and Suzuki, K. (2019). Bank health and cash holdings: Evidence from a bank-centered financial market. *Pacific-Basin Finance Journal*, 57:101195.
- Shikimi, M. (2019). Bank relationships and corporate cash holdings. *Pacific-Basin Finance Journal*, 57:101185.
- Shleifer, A. and Vishny, R. W. (1993). Corruption. *The Quarterly Journal of Economics*, 108(3):599–617.
- Smith, J. D. (2016). Us political corruption and firm financial policies. *Journal of Financial Economics*, 121(2):350–367.
- Thakur, B. P. S. and Kannadhasan, M. (2019). Corruption and cash holdings: Evidence from emerging market economies. *Emerging Markets Review*, 38:1–17.
- Tran, Q. T. (2020). Corruption and corporate cash holdings: international evidence. *Journal of Multinational Financial Management*, 54:100611.

- Xie, J. and Zhang, Y. (2020). Anti-corruption, government intervention, and corporate cash holdings: Evidence from china. *Economic Systems*, 44(1):100745.
- Xu, N., Chen, Q., Xu, Y., and Chan, K. C. (2016). Political uncertainty and cash holdings: Evidence from china. *Journal of Corporate Finance*, 40:276–295.
- Xu, X., Li, W., Li, Y., and Liu, X. (2019). Female cfo's and corporate cash holdings: Precautionary motive or agency motive? *International Review of Economics & Finance*, 63:434–454.
- Xu, X. and Li, Y. (2018). Local corruption and corporate cash holdings: Sheltering assets or agency conflict? *China Journal of Accounting Research*, 11(4):307–324.
- Yang, Y., Qian, Y., and Li, S. (2023). State capital and cash holdings in natural private enterprises: New evidence and a new explanation. *Finance Research Letters*, 51:103393.
- Zheng, C., Cheung, A. W. K., and Cronje, T. (2022). Social capital and bank liquidity hoarding. *Journal of International Financial Markets, Institutions and Money*, 80:101653.
- Zheng, X., Ghoul, S. E., Guedhami, O., and Kwok, C. C. (2013). Collectivism and corruption in bank lending. *Journal of International Business Studies*, 44(4):363–390.
- Zhuang, Y., Nie, J., and Wu, W. (2022). Peer influence and the value of cash holdings. *Journal of Empirical Finance*, 69:265–284.

A Figures and Tables

Table 1: Summary statistics

Variable	Obs	Mean	Std. Dev.	P25	P50	P75
Cash	60913	.09	.09	.03	.06	.11
Corruption	59390	2.33	1.38	2	2	2
Rule of Law	59390	8.3	1.55	8	9	9
SRISK	59250	26.47	.88	26.13	26.68	26.97
Election Year	59390	.2	.4	0	0	0
Common Law	65329	.83	.38	1	1	1
Bank Size	61171	6.42	2.08	5.02	5.95	7.34
Credit Risk	51918	.01	.29	0	0	.01
Leverage	60226	.86	.18	.88	.9	.91
Gross Loans / Total Assets	59493	.64	.16	.55	.67	.76
Age (in years)	62972	3.99	1	3.3	4.42	4.73

Table 2: Cross-correlation table

Variables	Cash	Corruption	Rule of Law	SRISK	Election Year	Common Law	Bank Size	Credit Risk	Leverage	Gross Loans / Total Assets	Age
Cash	1.000										
Corruption	-0.024	1.000									
Rule of Law	0.061	-0.933	1.000								
SRISK	0.063	-0.503	0.459	1.000							
Election Year	0.023	-0.089	0.124	-0.041	1.000						
Common Law	0.165	-0.547	0.679	0.369	0.006	1.000					
Bank Size	-0.275	0.190	-0.308	-0.116	0.013	-0.481	1.000				
Credit Risk	0.003	0.015	-0.016	-0.019	0.004	-0.021	-0.001	1.000			
Leverage	-0.185	0.016	-0.038	0.011	-0.000	-0.093	0.113	0.021	1.000		
Gross Loans / Total Assets	-0.282	-0.140	0.144	-0.043	-0.011	0.134	-0.051	-0.025	0.009	1.000	
Age (in years)	-0.103	-0.315	0.318	0.087	0.043	0.201	-0.016	-0.009	0.005	-0.031	1.000

Table 3: Summary statistics

Country	No. of Banks	Mean			Common Law
		Corruption	Rule of Law	SRISK	
Developed economies					
G7					
Canada	53	1	9	25.412	Yes
France	80	1.6	8.4	26.580	No
Germany	227	1	9	25.858	No
Italy	117	4.4	6	25.542	No
Japan	124	1.2	8.2	27.106	No
United Kingdom	126	1	9	26.498	Yes
United States	4,711	2	8.8	26.653	Yes
Emerging markets					
BRICS					
Brazil	93	5.4	4.7	23.865	No
China	302	6.3	3.5	26.321	No
India	22	6.5	5	24.604	Yes
Russia	70	8.9	2	21.586	No
South Africa	14	4.7	5.2	22.853	Yes
Total	5,939				

Table 4: Main Results

	1a	1b	1c
Corruption	0.608*** (0.162)	1.952*** (0.360)	4.609*** (1.052)
Rule of Law	0.149 (0.0856)	0.986*** (0.170)	5.589*** (1.444)
SRISK	-0.00314 (0.0940)	0.104 (0.0952)	0.361*** (0.0898)
$Cash_{t,i-1}$	0.290*** (0.0133)	0.290*** (0.0133)	0.774*** (0.0103)
Bank Size	-0.179 (0.193)	-0.145 (0.193)	-0.225*** (0.0212)
Credit Risk	-0.171 (0.308)	-0.147 (0.307)	0.0902 (0.101)
Leverage	1.478 (2.258)	1.322 (2.259)	-0.794*** (0.196)
Gross Loans / Total Assets	-22.31*** (0.898)	-22.36*** (0.900)	-4.984*** (0.270)
Age	-0.182 (0.385)	-0.102 (0.385)	-0.190*** (0.0309)
Corruption $\times$ Rule of Law		-0.258*** (0.0507)	-0.990*** (0.238)
G7			22.66*** (6.729)
G7 $\times$ Corruption			-4.497*** (1.244)
G7 $\times$ Rule of Law			-5.196*** (1.459)
G7 $\times$ Corruption $\times$ Rule of Law			1.025*** (0.257)
Observations	39,758	39,758	39,758
R^2	0.280	0.281	0.190
Bank FE	Yes	Yes	No
Year FE	Yes	Yes	Yes
Country FE	No	No	Yes

Standard errors in parentheses

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table 5: Robustness Estimations: Election Years

	2a	2b	2c
Corruption	0.621*** (0.162)	0.770** (0.248)	0.0186 (0.178)
Election Year	0.379*** (0.0753)	-0.562 (1.491)	-0.263 (0.170)
Rule of Law	0.0932 (0.0865)	-0.304 (0.273)	0.775*** (0.110)
SRISK	-0.0111 (0.0934)	0.175 (0.157)	1.788*** (0.198)
$Cash_{t,i-1}$	0.290*** (0.0133)	0.281*** (0.0394)	0.281*** (0.0138)
Bank Size	-0.180 (0.193)	-0.930* (0.435)	0.0204 (0.214)
Credit Risk	-0.167 (0.309)	-0.0438 (0.139)	0.792 (0.655)
Leverage	1.355 (2.259)	0.394 (1.585)	3.686 (2.893)
Gross Loans / Total Assets	-22.33*** (0.898)	-10.93*** (2.606)	-24.94*** (0.959)
Age	-0.166 (0.385)	0.847 (0.732)	0.310 (0.428)
Corruption $\times$ Election Year		0.0196 (0.220)	0.311*** (0.0692)
Observations	39,758	2,559	37,199
R^2	0.280	0.197	0.302
Sample	Full	BRICS	G7
Bank FE	Yes	Yes	Yes
Year FE	Yes	Yes	Yes

Standard errors in parentheses

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table 6: Robustness Estimations: Common Law

	3a	3b
Corruption	-1.515 (1.893)	1.019** (0.313)
Rule of Law	-0.211 (0.997)	0.438* (0.199)
Corruption $\times$ Rule of Law	0.237 (0.296)	-0.118** (0.0440)
SRISK	0.928 (0.550)	0.0534 (0.125)
$Cash_{t,i-1}$	0.264*** (0.0139)	0.435*** (0.0338)
Bank Size	0.159 (0.235)	-1.020*** (0.299)
Credit Risk	33.18*** (6.310)	-0.0973 (0.146)
Leverage	1.761 (3.086)	2.262 (1.813)
Gross Loans / Total Assets	-26.86*** (1.003)	-7.403*** (1.817)
Age	0.396 (0.444)	-1.290* (0.600)
Observations	34,259	5,499
R^2	0.305	0.273
Sample	Common Law	Non-Common Law
Bank FE	Yes	Yes
Year FE	Yes	Yes

Standard errors in parentheses

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table 7: Robustness Estimations: Propensity Score Matching

	4a
Corruption	3.607** (1.305)
Rule of Law	3.911* (1.809)
G7	21.88* (10.76)
Corruption $\times$ Rule of Law	-0.699* (0.301)
G7 $\times$ Corruption	-7.413 (4.759)
G7 $\times$ Rule of Law	-4.125* (1.931)
G7 $\times$ Corruption $\times$ Rule of Law	1.236* (0.619)
SRISK	0.214 (0.153)
$Cash_{t,i-1}$	0.736*** (0.0341)
Observations	3,061
R^2	0.138
Year FE	Yes
Country FE	Yes

Standard errors in parentheses

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Figure 1: Bias reduction due to Propensity Score Matching

