Political connections and banking industry performance: A cross-country analysis

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Abstract

This study examines the association between political connectiveness in the banking sector and the aggregate profitability of the sector. Evidence from an international sample of 59 countries points towards a positive effect. This finding holds while controlling for a variety of country-level characteristics, such as macroeconomic conditions, economic freedom, quality ofinstitutions, government ownership of banks, banking sector characteristics and income level. Moreover, the positive relationship persists when using alternative sample specifications and proxies of political connectedness. Further analysis shows that this relationship is moderated by the control of corruption and the rule of law. In more detail, the results show that political connections are less valuable in countries with a better institutional environment along these dimensions.

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1. Introduction

The present study aims to answer two main questions: First, are there differences in banking sector profitability among countries with a different level of political connections of banking intuitions? Second, are these differences larger in countries with a strong institutional environment? Our results document a positive relationship between banking sector connectedness and performance. We also show that this relationship is moderated by the control of corruption and the rule of law.[1] In more detail, the results provide evidence that political connections are less valuable in countries with a better institutional environment along these two dimensions. In contrast, the supervisory power of banking regulators does not appear to play a moderating role. Given the international scope of our analysis, which allows the consideration of cross-country heterogeneity, our work complements several recent studies that explore the effects of political connections in the banking industry (e.g., Braun and Raddatz, 2010; Gropper et al., 2013,2015; Hung et al., 2017; Proença et al., 2020).

Exploring the impact of political connectedness on banking sector performance is a worthwhile and interesting research exercise for at least three reasons. First, the relationship between politics and finance is per se, a complicated one. As Calomiris and Haber (2015) emphasise, politics are 'baked' into the property rights systems, in which banks and financial institutions operate. Furthermore, they highlight that it is very difficult to compel independence between the government and banks. For instance, governments are responsible for allocating bank charters in some countries or supervising and regulating banks or enforcing bank accounting standards in some other countries. What is more, this creates room for opportunistic activity, such as regulatory forbearance or bailout of certain banks, occurring at the expense of taxpayers. Therefore, without doubt, this implicates the government around various aspects of the banking system, which should be explored and understood.

Second, the relationship between politics and banking does not have to be homogeneous across countries, especially when considering that banking system structures vary significantly across countries (Barth et al., 2013). Third, while there are many studies

[1]We adopt the concept of the moderating variable as defined in Hayes (2018): "*An association between two variables X and Y is said to be moderated when its size or sign depends on a third variable or a set of variables W […] Moderation is also known as interaction*" (p. 8).

for non-financial firms, evidence regarding the effects of political connections on banking institutions is scarce (Bian et al., 2021). Indicatively, existing evidence suggests that politically connected U.S. banks receive fewer formal regulatory enforcement actions (Lambert, 2019; Papadimitri et al., 2021; Papadimitri and Wohlschlegel, 2022) and are more likely to receive government support (Blau et al., 2013). This high level of regulatory oversight and policy complexities in the banking industry imply that political connections, lobbying, and influence, may be particularly valuable (Gropper et al., 2015, Igan and Lambert, 2019). On the one hand, banks may use their political connections to improve their position, perhaps by affecting banking regulation (Braun and Raddatz, 2010; Igan and Lambert, 2019). On the other hand, the literature suggests, that government-owned banks increase their lending in election years relative to private banks (Dinc, 2005). Thus, political factors may distort efficient lending which is no longer based on market criteria. To the extent that this applies to other types of connections, it may have an adverse effect on the overall banking sector profitability. Furthermore, political connections may squeeze interest margins. For instance, Infante and Pazza (2014) find that politically connected firms in Italy benefit from lower interest rates when the link is at a local level, an effect that is stronger when both firms and banks have politicians in their boards. Sapienza (2004) also concludes that the lending behavior of state-owned banks is affected by the electoral results of the party affiliated with the bank: the stronger the political party in the area where the firm is borrowing, the lower the interest rates charged.

To examine the impact of political connectiveness on banking sector performance we make use of a global sample of 59 countries over the years 2003-2007. We employ the measures of bank political connectiveness developed by Braun and Raddatz (2010), as our core proxy for political connections. We relate this proxy to the aggregate profitability of the banking sector and reach various interesting results. We first confirm a positive association between banking sector performance and political connectedness. This relationship holds when we use alternative measures of connectedness as well as when we restrict the sample to private banks only. Moreover, the results are robust to the use of various control variables intended to capture country-specific characteristics such as macroeconomic conditions,institutional development and political risk, banking sector regulation and characteristics, and economic freedom. Then, we undertake additional analysis to examine the conditional role of the following country-specific characteristics: control of corruption, rule of law and order, and bank supervisory power. The results

show that political connections are more valuable in countries with a more corrupted environment, as well as in countries with weaker rule of law and order. However, the supervisory power of the regulators does not appear to play a conditional role.

The findings of our study relate and contribute to the general literature examining the value of political connections in the banking sector. In a more specific way, our work is more closely related to earlier studies on the banking sector that consider the effect of political connections on regulatory enforcement actions (Lambert, 2019; Papadimitri et al., 2021), government support (Blau et al., 2013), credit smoothing behaviour (Bian et al., 2021), risk-taking (Braham et al., 2020), and leverage (Braham et al., 2019). Within this strand of the literature there are also a few studies, which focus on performance-related outcomes and are closely tied to ours. Focusing on the U.S. banking sector, Gropper et al. (2013, 2015) provide evidence that banks headquartered in states where a Senator or member of the House of Representatives serves as the chairman on their respective banking committee in Congress outperform banks headquartered in other states. However, the country-specific nature of these studies raises questions as for whether political connections in banking matter in countries with different institutional (e.g., control of corruption, quality of legal system) and regulatory settings. Lambert (2019) examines among others the impact of lobbying on bank performance as a support exercise to his core analysis. Using a sample of US Commercial and Savings banks, his findings indicate that lobbying firms to underperform their non-lobbying peers. These findings are consistent with the ones of Chen et al. (2018), who assess the impact of political connections on bank performance during the Global Financial Crisis. Outside the U.S. context, Hung et al. (2017) explore whether politically connected CEOs lead to improvements related to the performance and risk-taking appetite of Chinese commercial banks. They find that politically connected banks have higher profitability and lower default and credit risk. Focusing on EU banks, Proença et al. (2021) provide supporting evidence on the moderating role of gender diversity on the political connection and banking performance nexus. In contrast to the above studies, our data and research design allow us to take advantage of a cross-country setting to study the effect of political connections on banking institutions under different institutional frameworks, in terms of corruption, legal systems, and supervisory power.

To the best of our knowledge, the only cross-country study that refers to the relationship between political connections and bank performance is the one of Braun and Raddatz (2010). However, their study only marginally touches on this issue. Instead, they

focus on the impact of connectedness on country-level attributes like economic and financial development, as well as the institutional and regulatory quality. Additionally, while they conclude that certain country-characteristics like weak institutions play a conditional role in the relationship between bank connections and economic development, they do not extend this analysis to bank performance. Our work aims to close this gap.

The remainder of this paper is structured as follows: Section 2 presents a background discussion and hypothesis development. Section 3 discusses the research design of the paper. Finally, Section 4 provides the results of the study, whereas Section 5 concludes.

2. **Background discussion and Hypothesis development**

Financial development and access to finance have been at the centre of academic research for some time. The influence that political economy has on financial development received extensive attention from several scholars (e.g., La Porta et al, 1999; Acemoglu and Johnson, 2005), who pointed out the link between political influence and financial development (e.g., Rajan and Zingales, 2003). A recent and growing strand of literature argues that political connections of financial and non-financial firms appear to be linked to preferential treatment (e.g., Duchin and Sosyura, 2012; Blau et al. 2013). However, there exists evidence supporting that political connections are inversely related to GDP per capita, but positively related to corruption and government power (Braun and Raddatz, 2010). Hence, the role of country heterogeneity, within the context of political influence and banking sector profitability, is a crucial point that requires further investigation. Indicatively, for the purpose of this study we consider a range of countries with a diverse socio-economic and political background[2]. For instance, we include countries of the developed (e.g., Australia, Germany, United Kingdom) and the developing world (e.g., Belarus, Mongolia, Indonesia).

The literature suggests various channels as for the potential impact of political connections on performance outcomes. To begin with, banks in many cases may adopt rent-seeking behavior by choosing to follow corporate political strategies (such as lobbying or campaign contributions) aiming to influence the decisions of regulators or government officials. For instance, Igan et al. (2012) explore the difference in the behaviour of lobbying and non-lobbying lenders around the financial crisis period. Their findings confirm differences in the behaviour of the two groups, highlighting that the lenders that engage in "aggressive"

[2] For full description of our sample and the countries that constitute it please see Section 3.1.

lobbying are benefited more than others when loose regulatory policies are implemented.

There are various explanations for such events. The political economy literature, for instance, points out that politicians are concerned about their re-election prospects and are therefore, more likely to adopt strategies which are in line with the "requests" of their supporters (McNollgast, 1999). Apart from rent-seeking behaviour, political influence and favorable outcomes could be driven by access to information (or else the "information transmission" channel) which reduces information asymmetries between banks and regulators/ politicians. As pointed out by Gropper et al. (2015), superior returns encountered by connected firms could be associated with easier access to information that otherwise could not have been made available to them. In the presence of either of the channels, a positive relationship would be observed between political connectedness and bank performance. Based on the above discussion the following hypothesis is formed:

H1: Political connections increase banking sector profitability.

As discussed in Brockman et al. (2013), the nature of political connections and the channel through which such connections impact firm behavior are likely to be influenced by the country-level institutional setting. Therefore, our second set of hypotheses is related to the institutional environment where banks operate. Earlier studies on non-financial firms focus on two aspects of a country's institutions: the weakness of its legal system and the level of corruption (Brockman et al., 2013). Given the central role of regulations in the banking sector, in the present study we also examine the power of bank supervisors.

Starting with corruption, Amore and Bennedsen (2013) refer to various studies that identify the value of political connections in corrupt countries (e.g., Fisman, 2001; Bunkanwanicha and Wiwattanakantang, 2009; Cingano and Pinotti, 2013). Relevant empirical evidence by Faccio and Parsley (2009) shows that connected firms in more corrupt countries experience a larger stock price decline around the death of the politician. Furthermore, Song et al. (2021) find that the impact of political connections on Chinese family firms is moderated by corruption intensity at the industry-level. Closer to our context, Cingano and Pinotti (2013) identify a revenue premium for Italian manufacturing firms that is granted by political connections, which becomes larger (up to 22%) in areas characterized by high public expenditure and high levels of corruption. Similarly, Jin et al. (2019) document a

decrease in the sales of politically connected firms in industries associated with the 2012 anti-corruption policy of Eight-Point Austerity Rules in China. In general, these studies imply that corruption could enhance the value of political connections on bank profitability. However, one might also argue that weak institutional environments provide corrupt politicians with a "free hand" to exploit firms for their private benefits, thereby imposing additional costs on shareholders (Brockman et al., 2013). Therefore, we formulate our next hypothesis as follows:

H2a: The impact of political connections on banking sector profitability will be moderated by the level of country corruption

Brockman et al. (2013) also discuss that a country with a well-functioning legal system will be characterized by fair application of law, higher transparency of government activity, and rigorous enforcement of rules and policies. Consequently, politicians will be more strictly monitored and controlled, preventing them from abusing their power in pursuit of private interests at the expense of the public interest. The results of Brockman et al. (2013) show that politically connected firms are more profitable from mergers in countries with weak legal systems. Li et al. (2008) also conclude that party membership is more important to Chinese firm performance in regions with weaker market institutions and weaker legal protection. Therefore, we formulate hypothesis H2b as follows:

H2b: The impact of political connections on banking sector profitability will be moderated by the quality of the legal institutions

Finally, the literature suggests that supervisors may use their powers to attract campaign donations, benefit certain constituents, and obtain bribes.[3] Within this context, it is possible that supervisors want to retain or establish relationships with politicians, they may then use their power to take actions or pass regulations that will benefit banks. This is consistent, to some extent, with the Iron Triangles literature. As discussed in Correia (2014), this literature emphasizes the exchange of favors between agencies, special interest groups,

[3] See Barth et al. (2004) and references therein.

and congressional committees. The underlying idea is that agencies obtain higher levels of funding and increase their power by catering to certain interest groups, which in turn influence Congress and play a role in the re-election of politicians who favor specific legislation and pressure regulators to develop favorable policies. Therefore, supervisory power may also moderate the effect of political connections on bank profitability. Hence, our last hypothesis is as follows:

H2c: The impact of political connections on banking sector profitability will be moderated by the level of bank supervisors' power.

3. **Research design**

3.1. Sample description and data sources

We collect information from various sources. First, banking sector related political connection measures at the country level are obtained from the work of Braun and Raddatz (2010). Second, financial variables are retrieved from S&P Market Intelligence Database (former SNL Financial). Finally, data for macroeconomic conditions and other country-level variables are collected from sources such as the World Bank, the International Country Risk Guide (ICRG), Fraser Institute, and the work of Barth et al. (2013). The sample consists of aggregated banking sector information for 59 countries over the 2003-2007 period, which results in an unbalanced dataset of 182 country-year observations. [4] The countries of the sample are from geographical regions and groups of economic development, hence allowing for adequate country level heterogeneity in terms of the main variables of interest (i.e., political connections, corruption, legal system, supervisory power).[5]

[4] The measures of bank political connections in Braun and Raddatz (2010) are available at the country-level only. Therefore, we also construct an aggregate measure of bank profitability at the country-level and conduct the entire analysis at the country-level. In more detail, we obtain information for individual public and private banks for S&P Market Intelligence which we then aggregate by country. In robustness analysis we obtain similar information from the Global Financial Development Database of the World Bank. The difference is that these data are aggregated automatically by the World Bank, using information for individual banks from the Bankscope and Orbis databases.

[5] The countries included in the sample are the following: Australia, Austria, Bangladesh, Belarus, Belgium, Brazil, Bulgaria, Cambodia, Canada, China, Croatia, Czech Republic, Cyprus, Denmark, Estonia, Finland, France, Georgia, Germany, Greece, Hong Kong, Hungary, India, Indonesia, Italy, Ireland, Japan, Korea Republic, Latvia, Liechtenstein, Lithuania, Luxembourg, Malaysia, Malta, Moldova Republic, Monaco, Mongolia, Netherlands, New Zealand, Norway, Pakistan, Philippines, Portugal, Poland, Russian Federation, Singapore, Slovakia, Slovenia, Spain, Sri Lanka, Sweden, Switzerland, Thailand, Turkey, Ukraine, United Arab Emirates, United Kingdom, United States, Vietnam.

It is important to clarify two points regarding our sample. First, given that the scope of our analysis is on the aggregate level, our observations correspond to the country-year level. That is, the key variable of interest, the political connectivity measure and all the financial characteristics are aggregated measures at the country level.[6] Second, it should be mentioned that Braun and Raddatz (2010) constructed their political measures using information about board composition in 2005. Assuming that country-level changes in political connections should be negligible in the short-term we expand the time coverage of our study to +/- 2 years around 2005, thus creating a panel dataset. Nonetheless, to mitigate potential concerns regarding the validity of our results, we also estimate the baseline model of the analysis while restricting the sample to the year 2005.

3.2. Empirical model

We follow the relevant empirical literature (e.g., Gropper et al. 2015) to examine the impact of political connections on bank profitability, while accounting for various banking sector-specific and country-specific characteristics. We tailor the model along the needs of our research question and estimate a function of the following form:

$$ROA_{i,t} = \alpha + \beta_1 Connection_{i,t} + \beta_2 Controls_{i,t} + \gamma year_t + \varepsilon_{i,t.} \quad (1)$$

Then, to examine our second set of hypotheses we extend equation (1) to include the interaction term of the institutional environment and political connections. Hence equation (2) takes the following form:

$$ROA_{i,t} = \alpha + \beta_1 Connection_{i,t} + \beta_2 Institutions_{i,t} + \beta_3 Connections_{i,t} * Institutions + \beta_4 Controls_{i,t} + \gamma year_t + \varepsilon_{i,t.} \quad (2)$$

where ROAi,t is the aggregate profitability measure for the banking sector of country i in year t and is measured by the Return on Assets (ROA) ratio. Connectioni,t is the core variable of interest from Braun and Raddadtz (2010) and represents a proxy for bank political connections in country i in year t. In our baseline analysis we employ two core alternative

[6] The construction of the variables is discussed in further detail in Section 3.3.

proxies for this measure: (i) FRACBANKSi,t, which denotes the fraction of banks that had a former politician on board and (ii) FRACBANKSPRi,t, which denotes the fraction of private banks that had a former politician on board. Institutionsi,t corresponds to variables that capture different aspects of the institutional environment in country i in year t. These include: (i) control of corruption (STRONG_CORRt), (ii) rule of law and order (STRONG_LEGALt) and (iii) bank supervisory power (HIGH_SPVPOWERt). Controlsi,t is a set of variables characterising the banking sector and the overall environment of country i in year t. These measures are all aggregated means at the country level and capture the following characteristics of the banking sector: (i) capitalization (EQUIi,t), (ii) size (SIZEi,t), (iii) liquidity (LIQUIi,t), (iv) non-performing loans (NPLi,t). We also estimate this baseline model with country-level measures to capture and address country-level heterogeneity in terms of macroeconomic conditions.[7] In particular, we employ a proxy for GDP growth (GDPGRt), inflation (INFL,t) and unemployment (UNEMPLt). All the specifications include year dummies to account for variation across time. Finally, εi,t is the error term of the model. The next section (3.3.) provides a detailed discussion on the definition and development of the variables used in our analysis.

3.3. Variable selection

3.3.1. Banking industry performance

Following empirical precedent (Braun and Raddatz, 2010; Gropper et al., 2013, 2015; Lambert, 2019), bank performance is captured by the Return on Assets ratio (ROA) calculated as the ratio of income (loss) before applicable income taxes and discontinued operations over total assets. We construct this variable in two-steps. First, we obtain bank-level data from the S&P Market Intelligence Database. Then, we aggregate these data at the country-level. Therefore, the mean values per country and per year serve as an overall measure of banking sector year-specific performance for each country. As a sensitivity test, we also employ readily available aggregated data by the World Bank's Global Financial Development database. The calculation of the aggregate World Bank measures is based on a similar concept; however, there are two differences between the two approaches. First, their country-level calculations are based on the median rather than the average of the bank-level data.

[7] Please note that in further regressions we incorporate several additional measures to control for alternative socio-economic aspects and to saturate further our baseline model.

Second, their data are drawn from Bankscope and Orbis rather than the S&P Market Intelligence Database.[8] Thus, it is possible that bank coverage in the two databases differs.

3.3.2. Political connections measures

As mentioned earlier, our proxy for the extent of banking sector political connectedness at the country- level, is retrieved from Braun and Raddatz (2010). The key measure of connectedness that we use is FRACBANKS, which captures the fraction of connected banks at the country level. It represents the number of banks in a country with at least one former politician on the board of directors as a fraction of the number of banks for which there are available data on board members.[9] There are two variations provided for this variable. The first version considers all the banks regardless of their ownership. The second version refers to matches between politicians and banks for fully private banks only.

In further analysis we also use the variable FRACBANKERS, which captures the fraction of connected bankers at the country level. Like the first key measure, we also consider a variation of this variable for private banks only (FRANKBANKERSPR).

Braun and Raddatz (2010) point out that FRACBANKS represents a measure of institutional connection between a country's banking sectors and political scene, rather than a personal connection. In contrast, the second variable (FRACBANKERS) is useful in identifying the extent to which politicians "populate" the boards of banks. In all cases, higher values declare a higher level of connectedness between banks and politicians in a particular country.

[8] According to the World Bank Database, the indicator is calculated from underlying bank-by-bank raw unconsolidated data from Bankscope and Orbis. They first aggregate the numerator and the denominator on the country level, and they then calculate the ratio. As they mention, the result is not reported if a country-year has less than 3 bank-level observations.

[9] Braun and Raddatz (2010) make use of a dataset that provides information on a large number of politicians, whose positions vary among cabinet members, financial sector regulators and central bank governors. They use this information to match politicians and bank board members, with the ultimate purpose of providing measures of political connectedness in the banking industries of the countries for which information is available. Once politician-banker matches are identified, they then consider the frequency of these matches to derive several measures of connectedness between bankers and politicians. For a more detailed description on the sources and methodology followed in the study please see Section I in Braun and Raddatz (2010).

3.3.3 Accounting for the role of a country's institutional environment

We use three variables to examine the role of institutional environment. To account for the control of corruption and the strength of the legal system we use information from the ICRG. Information for the bank supervisory power is from Barth et al. (2013).

The first indicator that we use is the ICRG dimension of corruption that provides an assessment of the control of corruption within the political system by consigning: (i) financial corruption in the form of demands for special payments and bribes connected with import and export licenses, exchange controls, tax assessments, police protection, or loans, and (ii) actual or potential corruption in the form of excessive patronage, nepotism, job reservations, 'favor-for- favors', secret party funding, and suspiciously close ties between politics and business. We construct a dummy variable that takes the value of 1 in case of countries whose ICRG score for the control of corruption is above the median (i.e., lower corruption), and the value of 0 otherwise (i.e., higher corruption). The second indicator that we consider is the ICRG dimension of law and order that provides an assessment of: (i) the strength and impartiality of the legal system (i.e., the law sub-dimension), and (ii) the popular observance of the law (i.e., the order sub-dimension). We construct a dummy variable that takes the value of 1 in case of countries whose ICRG score for the rule of law and order is above the median (i.e., stronger rule of law and order), and the value of 0 otherwise (i.e., weaker rule of law and order). The third indicator that we consider is the supervisory power index from Barth et al. (2013). This index is based on various questions that reveal whether the supervisory authorities have the authority to take specific actions to prevent and correct problems.[10] We construct a dummy variable that takes the value of 1 in the case of countries with a supervisory power index above the median, and the value of 0 otherwise.

3.3.4 Financial and country-level control variables

We consider several bank financial attributes that the literature suggests as potential drivers of bank profitability.[11] Capitalisation (EQUI) is captured by the equity to assets ratio. While the literature suggests that it influences profitability, the direction of this impact is ambiguous, with some studies pointing to a negative association with bank performance (Gropper et al., 2015; Athanasoglou et al., 2008) and others to a positive one (Molyneux, 1993). To control

[10] See Table 1 for details.

[11] These financial related variables are aggregated in the same manner as described in Section 2.2.1.

for liquidity (LIQUI) we use the ratio of liquid assets to total assets, and we expect it to be positively associated with bank performance (Bourke, 1989). To account for credit risk, we use the non-performing loans ratio (NPL), which equals the ratio of nonperforming loans (net of guaranteed loans) to the sum of loans (before reserves). Consistent with prior literature (Gropper et al., 2015), we expect it to have an inverse relationship with bank performance. Moreover, banking sector size (SIZE), proxied by the natural logarithm of average total assets of the banking sector is also included in the regressions. The impact of bank size on performance could be either positive or negative. As pointed out by Staikouras and Wood (2004), size is a proxy that reflects differences regarding cost (due to size), but also the capability of larger institutions to diversify. Therefore, size could have a positive impact of bank performance because of economies of scale. At the same time, it could also have a negative impact to the extent that diversification is associated with lower levels of risk, subsequently leading to lower levels of returns.

In addition to these variables, we also control for macroeconomic conditions that could potentially drive the relationship between banking sector connectedness and performance. These are: (i) GDP growth (GDP), (ii) inflation (INFL) and (iii) unemployment (UNEMPL). In further analysis discussed in Section 3.2.2 we include in the model several other country-level characteristics. We discuss these during their introduction into the analysis. We present all the variable definitions in Table 1.

[Insert Table 1 Around Here]

3.4. Descriptive statistics

Table 2 provides the descriptive statistics, and Table 3 provides the correlation matrix. The mean ROA equals 0.011, with the minimum being equal to 0.003 and the maximum being equal to 0.023. Turning to the key independent variables, the average FRACBANKS equals 7.46%, while the corresponding figure for private banks (FRACBANKSPR) is 6.3%. Similarly, the average figures for FRACBANKERS and FRACBANKERSPR are 0.65% and 0.59%, respectively.

[Insert Tables 2 and 3 Around Here]

Figures 1 to 4 provide further information about the key independent variables of interest, presenting the variation of the connectedness measures across countries. Overall, there seems to be a wide variation across countries. In the case of FRACBANKS, Georgia, Malta and Belarus appear to have more than half banks considered as connected. Others, like France, Germany, Italy, Japan, USA and the UK have lower levels of banking sector connectedness. When restricting the sample to the private banks in Figures 1 and 4, Georgia retains its position at the top of the list, followed by the United Arab Emirates and Belarus. In the case of FRACBANKERS, the countries with low levels of connectedness are same as before. Although the sample of the countries is relatively restrained, Georgia and Malta appear as the most connected countries, whereas Belgium and Brazil are the least connected ones. A similar pattern appears when focusing on private banks only.

[Insert Figures 1 to 4 Around Here]

4. Empirical results

In the analysis that follows, we first investigate the association between political connections and banking sector profitability (Hypothesis 1). We present various specifications while examining the robustness of the results with alternative methodological approaches and the use of additional control variables. We present this analysis in Section 4.1. Then, we investigate the role of the institutional environment (Hypothesis 2) in Section 4.2.

4.1. Political connections and banking sector profitability (Hypothesis 1)

4.1.1. Baseline specification

The empirical analysis starts with the baseline model of Equation 1, which then envelops to be saturated with additional country-level variables to control for further country-specific effects. Thus, Table 4 reports the results with and without controls for macroeconomic conditions. As in Gropper et al. (2013) we present robust standard errors to address heteroskedasticity problems. Additionally, the baseline model is estimated using two different variations of the political connection measure: (i) the fraction of connected banks (Columns 1 and 3) and (ii) the fraction of connected private banks only (Columns 2 and 4).

[Insert Table 4 Around Here]

The results suggest that political connections are associated in a positive and statistically significant manner with banking sector performance. This finding holds for both versions of the political connections measure. A closer look at the magnitude of the coefficients of the political connection proxies reveals that the fraction of the connected private banks has a slightly more prominent effect on banking sector profitability. For example, in the case of Columns 1 and 2, the coefficients equal 0.00007 (all banks) and 0.00012 (private banks). Thus, if we were to increase FRACBANKSPR by one standard deviation (i.e., 14.14), we would expect ROA to increase by approximately 0.0016 (i.e., 14.14 x 0.00012). As mentioned in earlier sections of this paper, the direction of the impact of political connections on bank profitability can be ambiguous. The findings of our study are consistent with the ones of the US studies that point to a positive association between political influence and bank profitability (e.g., Gropper et al., 2013, 2015).

Turning to the coefficient of the control variables, capitalisation carries a positive sign that is statistically significant at the 1% level, suggesting that as the banking sector capitalisation increases, the banking sector profitability increases as well. Although this finding differs from that of Gropper et al. (2015), the direction of the relationship between ROA and capitalization in the existing literature is in general mixed (Athanasoglou et al., 2008; Gropper et al., 2015; Moyneux, 1993). In contrast, size, liquidity and the non-performing loans ratio appear to be insignificant. As it concerns the variables for the macroeconomic conditions, GDP growth and inflation have a positive and statistically significant coefficient, which are in accordance with previous findings (e.g., Chen et al, 2018). However, unemployment enters the regression with an insignificant sign.

4.1.2. **Robustness tests**

As a further exercise, in unreported estimations we re-estimate the baseline model while: (i) clustering the standard errors at the country level, and (ii) using the approach suggested by

Mundlak (1978).[12] Furthermore, we estimate the baseline model while restricting the sample to the year 2005. Therefore, we relax the assumption made earlier, that the measure of political connectedness remains constant in the short term. We opt to include this exercise in our analysis to ensure that expanding the time frame +/- 2 years does not distort our findings. Third, we estimate the baseline model while using the aggregate data from the World Bank's Global Development Indicators Database instead of the S&P Market Intelligence Database.[13]

Komera and Tiwari (2022) find that larger firms benefit more from political connections. As they mention, it is possible that larger firms are better positioned, in terms of bearing the costs of political connections and accruing the associated benefits, allowing them to exploit the resource advantages of political connections more efficiently than otherwise smaller firms. In our case, we have countries with a varied range of banking sector size. Indicatively, the sample includes large banking sectors, such as the Chinese and Indian banking sectors, which rank at the top of the list in size as measured by the natural logarithm of average total assets, with figures equal to 21.35 and 21.18 respectively. At the same time, our sample includes countries with much smaller banking sectors, such as Malta and Cambodia, which rank at the bottom of the list in size as measured by the natural logarithm of average total assets, with figures being equal to 12.59 and 13.066 respectively. Therefore,

[12] This approach was proposed as a solution to the debatable choice between a random and a fixed effects model when handling panel data. In the former case, the individual effect is seen as a random variable, whereas in the latter case it is seen as a parameter to be estimated for each cross-section observation. Wooldridge (2010) argues that this discussion is more often than not wrongheaded, claiming that it almost always makes sense to treat this parameter as a random draw from the population, much like the dependent and regressors are thought of. In fact, he argues that "this approach is certainly appropriate from an omitted variables or neglected heterogeneity perspective" (p. 252). However, he also acknowledges that the main issue with the individual effect is whether or not it is correlated with the remaining co-variates in the model, with a random effects model being synonymous of zero correlation between the two. To relax this assumption, Mundlak (1978) suggested the addition of cross-sectional means. As the baseline model contains time-invariant variables, such as those of interest (i.e. the political connection measures), a fixed effects model is practically impossible to implement as it would lead to omitting the variable of interest. However, Mundlak terms can be added as an alternative solution. In technical terms, this means that the group-means of the time-variant variables are included in the random effects model as additional regressors. This is also referred to as a "hybrid model", as it combines within and between effects. See for instance Allison (2009) and Schunck (2013) for a more detailed discussion.

[13] To conserve space, we do not present the above-mentioned estimations; however, they are all available upon request.

following earlier studies (e.g., Lambert, 2019) we examine whether large and small banking sectors drive the baseline results. We re-estimate the baseline model while excluding countries whose banking sector is amongst the largest or smallest ones (i.e., the variable size takes values that fall in the top or bottom 1% percentile, respectively). The results are reported in Table 5. Columns 1-2 refer to the obtained results when top 1% in size banking sectors are excluded, whereas columns 3-4 report the results when we exclude the countries with the bottom 1% in terms of the size of their banking sectors are excluded. In all the cases, the political connections indicator enters the regression with a positive and statically significant coefficient.

[Insert Table 5 Around Here]

The political connection variables of Braun and Raddatz (2010) have a minimum value of zero, as it is evident in Table 2. Braun and Raddatz (2010) point out that one of their concerns refers to the reliability of the data regarding countries with zero connections, and, therefore, as a robustness check they re-estimate their core model by dropping countries with no connections (i.e., countries for which political connection matches are not identified). Thus, as a further test, we follow their approach and report the results in Table 6. This additional test is not only useful to further confirm the findings reported in the previous section, but it is also valuable in terms of exploring another source of variation of the data. Dropping the connectedness measures with zero values, enables us to assess the variation at the intensive margin, that is only cases with identified connections.

Finally, the last test reported in this sub-section intends to assess the impact of political connections on banking sector performance, while using an alternative proxy of political influence by Braun and Raddatz (2010). This measure reflects the fraction of connected bank directors that previously had a political position. As in the case of the main political connection proxy that reflects the fraction of connected banking institutions, higher values correspond to an increased level of connectedness. The results with the use of the connected directors for all the banks (FRANCBANKERS) and the private only banks (FRANCBANKERSPR) are reported in Columns 3 and 4 of Table 6. We continue finding a positive and statistically significant relationship between the connectedness measures and banking sector performance. It is worth mentioning that the coefficients of this measure are slightly higher than those of the core measure of connectedness used in the baseline

regressions.

[Insert Table 6 Around Here]

4.1.3. Controlling for additional country-specific characteristics

Given the cross-country set-up of the analysis, in this section we saturate the model with additional country-level characteristics that capture heterogeneity among countries. Therefore, we control in turn for: (i) political risk and institutional environment, (ii) financial and banking sector characteristics, (iii) government bank ownership, (iv) economic freedom, (v) country-level income level. We present these estimations in Table 7.

To control for the overall institutional environment and political risk, we use an aggregate index from the ICRG. This index considers a total of 12 indicators, like law and order, bureaucratic quality, democratic accountability, control of corruption, etc. with higher scores indicating lower political risk and better institutional environment.[14] We present these estimations in Columns 1 and 2. The main results hold.

Second, we control for an array of banking and financial market characteristics. In more detail, in Columns 3 and 4 we account for banking sector concentration (CONC), stock market capitalization (STOCKMARK), and the following banking regulations and supervision using data from Barth et al. (2013): restrictions in banking activities (ACTRES), supervisory power (SPVPOWER), and stringency of capital regulations (CAPREG).[15] Contrary to our expectations, these indicators have no impact on banking sector profitability, and we continue finding that the measures of political connectedness enter the regressions with a positive and statistically significant coefficient.

As mentioned earlier, proximity to politicians may also be achieved through government ownership. In other words, government ownership of banks could potentially be a way of "bringing" closer banks and government officials. Therefore, in Columns 5 and 6

[14] More precisely, the 12 indicators are: (i) Government stability, (ii) Socioeconomic conditions, (ii) Investment profile, (iv) Internal conflict, (v)External conflict, (vi) Corruption, (vii) Military in politics, (viii) Religion in politics, (ix) Law and order, (x) Ethnic tensions, (xi) Democratic Accountability, (xii) Bureaucracy Quality. In all the cases, and by extension in the case of the aggregate figure of political risk, higher values denote better outcomes.

[15] The Bank Regulation and Supervision Survey has been conducted in waves, with the different versions becoming available in 2001, 2003, 2007, 2011, 2019. Given the timeframe of the present analysis, the information that we use is from the second wave (i.e., 2003).

we also control for the percentage of government owned banks (OWNERSHIP) in each country.[16] The results do not change.

Earlier evidence suggests that economic freedom influences bank performance (Gropper et al., 2015; Asteriou et al., 2021). Therefore, in columns 7 and 8 we control for economic freedom (ECONFREEDOM) using the relevant index from the Fraser institute. This index measures the extent of economic freedom in a variety of countries around the world based on the following sub-indices: (i) size of government, (ii) legal structure and security of property rights, (iii) access to sound money, freedom to trade internationally, (iv)regulation of credit, labour and business. Higher values of the index reflect greater Economic Freedom and vice versa. ECONFREEDOM appears to have no statistically significant effect on profitability, and it has no impact on the so far obtained results.

Finally, we control for the income group of each country. In more detail, we use information from the World Bank that classifies the countries in the following income groups: (i) low income, (ii) lower middle income, (iii) higher middle income, and (iv) high income. The estimations in Columns 9 and 10 include dummy variables for these groups. The idea is to capture country-level characteristics that are common within income groups and vary across groups, and that we have possibly ignored them in the so far presented estimations. The inclusion of these dummies in the regressions does not change our main findings.

[Insert Table7 Around Here]

4.2. Political connections, bank profitability and the role of institutions (Hypothesis 2)

Having established robust evidence that political connections exercise a positive impact on banking sector profitability, we turn our attention to the second set of hypotheses, to investigate the potentially conditional role of the institutional environment. To account for this, we introduce an interaction term of political connectedness with: (i) the dummy variable for the control of corruption in columns (1) and (2), (ii) the dummy variable for the rule of law and order in columns (3) and (4), and (iii) the dummy variable for the bank supervisory power index in columns (5) and (6).

With the inclusion of the interaction term in the regression the interpretation of the

[16] OWNWERSHIP corresponds to the "percentage of banking system's assets that are 50% or more government owned" in each country. Information is from Barth et al. (2013).

coefficients is not the same as if they were ordinary coefficients in a strictly additive model. For example, the coefficient of FRACBANKS in column 1 shows the effect of political connections on the profitability of the banking sector, while holding the dummy for the control of corruption fixed at zero (i.e., weak institutional environment in terms of control of corruption or in other words high corruption). Apparently, the key variable of interest is the interaction term (FRACBANKS x HIGH CONTROL CORRUPTION) that shows that positive impact of FRACBANKS is mitigated in countries with strong control of corruption. In more detail, the conditional effect of FRACBANKS on banking sector profitability equals 0.000185 when the dummy for the control of corruption equals zero, and it becomes 0.000042 when the dummy equals one.

Similarly, the results in columns 3 and 4 (Table 8) show that the interaction of political connectiveness with the dummy for the legal system enters with a negative and statistically significant coefficient. Therefore, the impact of connectedness on bank profitability is lower in countries with higher rule of law and order or in other words in countries with a stronger institutional environment.

Finally, the results in Columns 5 and 6 (Table 8) show that the interaction of political connections with the dummy for bank supervisory power is not statistically significant. Therefore, the impact of political connectedness on bank profitability does not differ between countries with high and low supervisory power.

[Insert Table 8 Around Here]

5. Summary and Conclusions

The political connections of corporations can take various forms and they have attracted a lot of attention in the literature. However, research focusing on the banking sector is limited compared to non-financial sectors, and most of the papers provide country-specific evidence. The present study uses a sample of 59 countries during the years 2003-2007 to examine the impact of political connectedness on the profitability of the banking sector, and most importantly to explore the moderating role of the institutional environment.

First, we confirm a positive association between political connectedness and profitability. This finding is robust to the inclusion of various control variables that capture cross-country heterogeneity, and to the use of slightly different measures of connectedness.

Further analysis shows that the control of corruption, and the rule of law and order have a determining role in this relationship. It appears that political connectedness becomes less valuable in countries with strong institutions. In contrast, the supervisory power of the banking regulators does not appear to play a moderating role.

These findings have certain implications for policy makers and banking institutions. From the perspective of bank shareholders, appointing directors with political connections will pay-off in terms of enhanced profitability. Bank shareholders will also have to consider the country of operations, as political connections might be more valuable for some banks than others, depending on the institutional environment of the country. In terms of policy making the authorities should possibly consider whether they should somehow regulate such connections. If their main concern is banking sector profitability, then our results show that connections should not be penalized. However, other studies show a negative relationship between bank political connectedness and GDP per capita (Braun and Raddatz, 2010). Therefore, policy makers may have to consider such trade-offs. While this does not fall into the scope of the present study, future research could possibly consider the effect of bank political connectedness on both the banking sector and the society as a whole. Last but not least, we acknowledge that due to data limitation the core political connectedness variable employed in this study has restricted the time frame of the analysis to the years 2003-2007, where the political connections measures were held constant. Therefore, future research could focus on individual banks and examine the conditional role of bank-specific characteristics in a time frame of consecutive points to study the dynamic impact of the connection performance nexus in an international set-up.

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Table 1: Variable Description

This table describes all the variables used in our analysis.

Variable	Description	Source
A. Political connections		
FRABANKS	Fraction of banks with Bankscope data on board of directors that had a former politician on their boards	Braun and Raddatz (2010)
FRABANKSPR	Fraction of banks with Bankscope data on board of directors that had a former politician on their boards (for private banks)	Braun and Raddatz (2010)
FRABANKERS	Fraction of bank directors that had a previous political position	Braun and Raddatz (2010)
FRABANKERSPR	Fraction of bank directors that had a previous political position (for private banks)	Braun and Raddatz (2010)
B. Financial Characteristics		
ROA	Net income as a percent of total assets (aggregated mean at country level)	S&P Market Intelligence (former SNL Financial) and authors' calculations for aggregation
EQUI	Total equity capital as a percent of total assets (aggregated mean at country level)	S&P Market Intelligence (former SNL Financial) and authors' calculations for aggregation
SIZE	Natural logarithm of total assets (aggregated mean at country level)	S&P Market Intelligence (former SNL Financial) and authors' calculations for aggregation
LIQUI	(Cash&Balances Due+Securities+Fed Funds Sold&Repos+Trading Account Assets-Pledged Securities)/ Total Liabilities (aggregated mean at country level)	S&P Market Intelligence (former SNL Financial) and authors' calculations for aggregation
NPL	Nonperforming loans, net of guaranteed loans, as a percent of loans before reserves (aggregated mean at country level)	S&P Market Intelligence (former SNL Financial) and authors' calculations for aggregation
C. Country Characteristics		
GDPGR	Gross Domestic Product (GDP) growth	World Bank
INFL	Consumer Price Index	World Bank
UNEMPL	Unemployment (% of total labor force)	World Bank
POLRISK	Index consisting of the following 12 indicators: (i) Government stability, (ii) Socioeconomic conditions, (ii) Investment profile, (iv) Internal conflict, (v)External conflict, (vi) Corruption, (vii) Military in politics, (viii) Religion in politics, (ix) Law and order, (x) Ethnic tensions, (xi) Democratic Accountability, (xii) Bureaucracy Quality. In all the cases, and by extension in the case of the aggregate figure of political risk, higher	International Country Risk Guide (ICRG)

	values denote better outcomes	
CONC	Banking sector concentration	World Bank
STOCKMARK	Stock market capitalisation as measured by the ratio of market capitalisation of listed, domestic companies to GDP	World Bank
ACTRES	Overall restriction on banking activities. Higher values indicate more restrictive environment.	Barth, James R., Caprio, Gerard, Jr., and Ross Levine (2013)
CAPREG	Capital regulatory index. Higher values indicate higher stringency.	Barth, James R., Caprio, Gerard, Jr., and Ross Levine (2013)
SPVPOWER	Extent to which the supervisory authorities have the authority to take specific actions to prevent and correct problems. Higher values indicate greater power. (1) Does the supervisory agency have the right to meet with external auditors to discuss their report without the approval of the bank? (2) Are auditors required by law to communicate directly to the supervisory agency any presumed involvement of bank directors or senior managers in illicit activities, fraud, or insider abuse? (3) Can supervisors take legal action against external auditors for negligence? (4) Can the supervisory authority force a bank to change its internal organizational structure? (5) Are off-balance sheet items disclosed to supervisors? (6) Can the supervisory agency order the bank's directors or management to constitute provisions to cover actual or potential losses? (7-9) Can the supervisory agency suspend the directors' decision to distribute: (i) Dividends? (ii) Bonuses? (iii) Management fees? (10) Can the supervisory agency supersede the rights of bank shareholders and declare a bank insolvent? (11) Can the supervisory agency suspend some or all ownership rights? (12-14) Can the supervisory agency (i) supersede shareholder rights, (ii) remove and replace management, and (iii) remove and replace directors?	Barth, James R., Caprio, Gerard, Jr., and Ross Levine (2013)
OWNERSHIP	The extent to which the banking system's assets are government owned (percentage)	Barth, James R., Caprio, Gerard, Jr., and Ross Levine (2013)
ECFREEDOM	The EFW index measures the extent to which the institutions and policies of a nation are consistent with this protective function and the freedom of individuals to make their own economic decisions. Higher values indicate higher economic freedom and vice versa.	Fraser Institute

INCOME	Categorical variable reflecting the country's income group as classified by the World Bank into the following categories: low income, lower middle income, upper middle income, high income	World Bank
STRONG_LEGAL	Dummy variable that takes the value 1 in the case of countries with a score above the median for the ICRG dimension "Law and Order", and the value of 0 otherwise. This ICRG dimension provides an assessment of (i) the strength and impartiality of the legal system (i.e. the law sub-dimension), and (ii) the popular observance of the law (i.e. the order sub-dimension).	Authors, based on data from International Country Risk Guide (ICRG)
STRONG_CORR	Dummy variable that takes the value 1 in the case of countries with a score above the median for the ICRG dimension "Corruption", and the value of 0 otherwise. This ICRG dimension provides an assessment of control of corruption within the political system. It takes into account: (i) financial corruption in the form of demands for special payments and bribes connected with import and export licenses, exchange controls, tax assessments, police protection, or loans, and (ii) actual or potential corruption in the form of excessive patronage, nepotism, job reservations, 'favor-for- favors', secret party funding, and suspiciously close ties between politics and business.	Authors, based on data from International Country Risk Guide (ICRG)
HIGH_SPVPOWER	Dummy variable that takes the value 1 in the case of countries with a score above the median for SPVPOWER, and the value of 0 otherwise.	Authors, based on data from Barth, James R., Caprio, Gerard, Jr., and Ross Levine (2013)

Table 2: Descriptive statistics

This table presents the descriptive statistics of all the variables used in our analysis.

Variable	Obs	Mean	Std. dev.	Min	Max
ROA	148	0.011	0.005	0.003	0.023
FRACBANKS	148	7.466	14.210	0	100
FRACBANKSPR	148	6.304	14.146	0	100
FRACBANKERS	148	0.649	1.384	0	8
FRACBANKERSPR	148	0.581	1.543	0	8
EQUI	148	8.137	2.497	4.216	12.841
SIZE	148	18.090	1.872	12.595	21.354
LIQUI	148	31.103	10.089	14.036	52.306
NPL	148	5.522	5.226	0.322	18.698
GDPGR	148	4.945	2.814	-0.934	11.395
INFL	148	4.381	4.145	-1.616	24.552
UNEMPL	146	6.116	3.125	1.18	19.07
POLRISK	138	77.518	10.080	49.336	93.666
CONC	144	64.624	21.941	20.85	100
STOCKMARK	140	82.049	66.081	6.62	464.72
ACTRES	139	6.881	1.973	3	12
CAPREG	133	6.030	1.633	3	9
SPVPOWER	144	11.210	2.498	5.384	16
OWNERSHIP	119	13.709	18.036	0	75.27
ECFREEDOM	145	7.840	0.886	5.76	9.6
STRONG_LEGAL	148	0.581	0.495	0	1
STRONG_CORR	148	0.581	0.495	0	1
HIGH_SPVPOWER	148	0.527	0.501	0	1

Table 3: Correlation Matrix

This table presents the correlation coefficients of the variables used in our analysis.

	ROA	FRACBANKS	FRACBANKSPR	FRACBANKERS	FRACBANKERSPR	EQUI	SIZE	LIQUI	NPL	GDPGR	INFL	UNEMPL	POLRISK	CONC	STOCKMARK	ACTRES	CAPREG	SPVPOWER	OWNERSHIP	ECFREEDOM	STRONG_LEGAL	STRONG_CORR	HIGH_SPVPOWER
ROA	1																						
FRACBANKS	0.3536	1																					
FRACBANKSPR	0.421	0.5497	1																				
FRACBANKERS	0.3742	0.9284	0.4649	1																			
FRACBANKERSPR	0.4245	0.5426	0.9601	0.4979	1																		
EQUI	0.557	0.251	-0.0348	0.3532	-0.0157	1																	
SIZE	-0.1749	-0.4002	-0.1157	-0.4228	-0.0914	-0.3915	1																
LIQUI	0.0711	0.3289	0.1067	0.3204	0.1218	0.0319	-0.2295	1															
NPL	0.3354	0.3663	0.1139	0.404	0.1102	0.3599	-0.3903	0.1835	1														
GDPGR	0.547	0.0984	0.3287	0.1591	0.3492	0.2797	0.148	-0.0866	0.2231	1													
INFL	0.5014	0.1207	0.2947	0.1365	0.3233	0.3471	0.0418	-0.0484	0.2048	0.4099	1												
UNEMPL	0.2793	-0.1141	-0.1838	-0.0048	-0.1722	0.2951	-0.3039	0.217	0.0613	0.0753	0.0485	1											
POLRISK	-0.4119	-0.0389	-0.13	-0.1195	-0.1245	-0.4155	-0.2172	0.2489	-0.2732	-0.6116	-0.4769	-0.0228	1										
CONC	-0.239	0.037	-0.1576	-0.0069	-0.1375	-0.3776	0.1385	0.0429	-0.1057	-0.2417	-0.3246	-0.0752	0.4832	1									
STOCKMARK	-0.2334	-0.1328	-0.1392	-0.1666	-0.1212	-0.1072	0.2679	-0.039	-0.3685	-0.0723	-0.1695	-0.3301	0.2238	0.2063	1								
ACTRES	0.0017	0.0187	-0.1447	0.0146	-0.1454	0.0607	0.0429	-0.345	0.1146	0	-0.1395	-0.2038	-0.2676	-0.1367	-0.2964	1							
CAPREG	-0.0117	0.04	-0.0179	-0.0482	-0.0262	-0.0939	-0.0929	0.1686	0.1089	-0.0332	0.0379	0.125	0.1373	-0.005	-0.0162	-0.2806	1						
SPVPOWER	0.2441	0.3111	0.226	0.3402	0.2081	0.3083	-0.4703	0.128	0.2186	0.2083	0.2112	-0.0937	-0.0834	-0.1564	0.0747	-0.0969	0.0086	1					
OWNERSHIP	0.2526	0.0626	0.2503	0.0212	0.2275	0.0458	0.2793	0.1133	0.0937	0.4973	0.3655	0.0409	-0.5584	-0.4132	-0.2661	0.1301	0.0674	0.0426	1				
ECFREEDOM	-0.2866	0.0867	0.043	0.0263	0.0109	-0.3417	-0.2306	0.1925	-0.2404	-0.4861	-0.5283	0.0829	0.6565	0.4101	0.2629	-0.3815	0.1972	-0.0652	-0.5598	1			
STRONG_LEGAL	-0.5386	-0.094	-0.3445	-0.0987	-0.3323	-0.3841	-0.0055	0.1534	-0.3619	-0.6271	-0.4878	-0.0593	0.7528	0.4005	0.1679	-0.1689	0.2321	-0.186	-0.4899	0.4908	1		
STRONG_CORR	-0.5162	-0.0468	-0.1878	-0.1598	-0.2491	-0.4105	-0.2124	0.0657	-0.3008	-0.6501	-0.4714	-0.1297	0.7748	0.3634	0.1727	-0.1779	0.2194	-0.0201	-0.478	0.561	0.7481	1	
HIGH_SPVPOWER	0.0764	0.2222	0.1298	0.2599	0.1176	0.2351	-0.5825	0.1367	0.2005	0.0474	0.1953	-0.0689	0.0666	-0.1478	-0.0113	-0.1261	-0.0829	0.8375	-0.0743	-0.0128	-0.0805	0.055	1

Table 4: Baseline results

Table 4 reports the results obtained from the baseline model in Equation 1. Robust standard errors in parentheses. The sample period is 2003-2007. All the variables are at the country-level. The specifications in Columns 1 and 2 control for financial characteristics of the banking sector, whereas columns 3 and 4 additionally control for country-level characteristics. In all regressions the dependent variable is return on assets (ROA). The key variables of interest are the political connectiveness proxies: (i) FRACBANKS, which captures the fraction of banks with a former politician on their board and (ii) FRACBANKSPR, which captures the fraction of private banks with a former politician on their board. EQUI it the equity to total assets ratio; SIZE is the natural logarithm of total assets; LIQUI is a liquidity ratio; NPL is the non-performing loans ratio; GDPGR is GDP growth; INFL is the inflation rate; UNEMPL is the unemployment rate. A full set of time dummies are included. For full variable description see Table 1. The *, ** and *** signs denote statistical significance at the 1, 5 and 10% level.

	(1)	(2)	(3)	(4)
FRACBANKS	0.00007**		0.00006*	
	(0.00003)		(0.00003)	
FRACBANKSPR		0.00012***		0.00008**
		(0.00003)		(0.00003)
EQUI	0.00119***	0.00119***	0.00071***	0.00077***
	(0.00017)	(0.00016)	(0.00017)	(0.00016)
SIZE	-0.00002	0.00003	-0.00026	-0.0002
	(0.00029)	(0.00028)	(0.00023)	(0.00024)
LIQUI	0.00001	0.0000	0.00000	0.00001
	(0.00003)	(0.00003)	(0.00002)	(0.00002)
NPL	0.00000	0.00002	-0.00002	-0.00000
	(0.00007)	(0.00007)	(0.00007)	(0.00007)
GDPGR			0.00041**	0.00034**
			(0.00016)	(0.00015)
INFL			0.0004***	0.00037***
			(0.00012)	(0.00011)
UNEMPL			0.00017	0.00015
			(0.00011)	(0.00011)
Constant	0.00088	-0.00089	0.00419	0.00288
	(0.00677)	(0.00674)	(0.00502)	(0.00515)
Observations	148	148	146	146
R-squared	0.406	0.468	0.552	0.575
Time dummies	YES	YES	YES	YES
R-sq	0.406	0.468	0.552	0.575

Table 5: Splitting the sample by banking sector size

Table 5 reports the results obtained when the baseline model is estimated by (i) excluding top 1% in size banking sectors (Columns 1 and 2) and (ii) excluding bottom 1% in size banking sectors (Columns 3 and 4). Robust standard errors in parentheses. The sample period is 2003 - 2007. All the variables are at the country-level. In all regressions the dependent variable is return on assets (ROA). The key variables of interest are the political connectiveness proxies: (i) FRACBANKS, which captures the fraction of banks with a former politician on their board and (ii) FRACBANKSPR, which captures the fraction of private banks with a former politician on their board. EQUI it the equity to total assets ratio; SIZE is the natural logarithm of total assets; LIQUI is a liquidity ratio; NPL is the non-performing loans ratio. A full set of time dummies are included. For full variable description see Table 1. The *, ** and *** signs denote statistical significance at the 1,5 and 10% level.

	Excl. Top 1%		Excl. Bottom 1%	
	(1)	(2)	(3)	(4)
FRACBANKS	0.00007**		0.00009**	
	(0.00003)		(0.00003)	
FRACBANKSPR		0.00012***		0.00011***
		(0.00003)		(0.00003)
EQUI	0.00118***	0.00119***	0.0012***	0.0012***
	(0.00017)	(0.00016)	(0.00017)	(0.00016)
SIZE	-0.00002	0.00003	-0.00014	-0.00005
	(0.0003)	(0.00029)	(0.00028)	(0.00029)
LIQUI	0.00000	0.00002	0.00002	0.00003
	(0.00003)	(0.00003)	(0.00003)	(0.00003)
NPL	0.00000	0.00002	0.00003	0.00004
	(0.00007)	(0.00007)	(0.00007)	(0.00007)
Constant	0.0008	-0.0009	0.00215	0.000454
	(0.00685)	(0.00679)	(0.0067)	(0.00677)
Observations	147	147	146	146
R-squared	0.402	0.464	0.444	0.479
Time dummies	YES	YES	YES	YES
R-sq	0.402	0.464	0.444	0.479

Table 6: Robustness test

Table 6 reports the results obtained when the baseline model of Equation 1 is estimated by (i) excluding cases where no connections are identified (Columns 1 and 2) and (ii) alternative measures of connectedness are used (Columns 3 and4). Robust standard errors in parentheses. The sample period is 2003- 2007. All the variables are at the country-level. In all regressions the dependent variable is return on assets (ROA). The key variables of interest are the political connectiveness proxies: (i) FRACBANKS, which captures the fraction of banks with a former politician on their board and (ii) FRACBANKSPR, which captures the fraction of private banks with a former politician on their board. EQUI it the equity to total assets ratio; SIZE is the natural logarithm of total assets; LIQUI is a liquidity ratio; NPL is the non-performing loans ratio. A full set of time dummies are included. For full variable description see Table 1. The *, ** and *** signs denote statistical significance at the 1,5 and 10% level.

	NO CONNECTIONS		ALTERNATIVE MEASURES	
	(1)	(2)	(3)	(4)
FRACBANKS	0.00011***			
	(0.00003)			
FRACBANKSPR		0.00015***		
		(0.00004)		
FRACBANKERS			0.00087**	
			(0.00036)	
FRACBANKERSPR				0.00130***
				(0.00022)
EQUI	0.00118***	0.00127***	0.00113***	0.00115***
	(0.00018)	(0.00018)	(0.00017)	(0.00015)
SIZE	0.00038	0.00038	0.00000	0.00004
	(0.00028)	(0.00028)	(0.0003)	(0.00028)
LIQUI	0.00001	0.00006*	0.00000	0.00000
	(0.00003)	(0.00003)	(0.00003)	(0.00003)
NPL	0.00002	0.00012*	0.0000	0.00003
	(0.00008)	(0.00007)	(0.00007)	(0.00007)
Constant	-0.0077	-0.0102	0.00098	-0.00018
	(0.0061)	(0.00615)	(0.00683)	(0.00655)
Observations	120	101	148	148
R-squared	0.435	0.531	0.41	0.498
Time dummies	YES	YES	YES	YES
R-sq	0.435	0.531	0.41	0.498

Table 7: Accounting for additional country-specific characteristics

Table 7 reports the results obtained when the baseline model is estimated while accounting for various additional country-level characteristics. Robust standard errors in parentheses. The sample period is 2003- 2007. All the variables are at the country-level. In all regressions the dependent variable is return on assets (ROA). The key variables of interest are the political connectiveness proxies: (i) FRACBANKS, which captures the fraction of banks with a former politician on their board and (ii) FRACBANKSPR, which captures the fraction of private banks with a former politician on their board. EQUI it the equity to total assets ratio; SIZE is the natural logarithm of total assets; LIQUI is a liquidity ratio; NPL is the non-performing loans ratio; GDPGR is GDP growth; INFL is the inflation rate; UNEMPL is the unemployment rate; POLRISK is an inverse indicator of political risk; CONC is the banking sector concentration; STOCKMARKET is the stock market capitalization (% GDP); CAPREG as a capital regulation index; SPVPOWER refers to the extent of bank supervisors' power; ACTRES reflects the extent of overall activity restriction; ECONFREEDOM is an indicator of Economic Freedom; OWERSHIP refers to the extent to which the banking system's assets are government owned (percentage). In Column 5 we re-estimate the baseline equation by including Income dummies. All the estimations include a full set of time dummies are included. For full variable description see Table 1. The *, ** and *** signs denote statistical significance at the 1,5 and 10%

	Quality of institutions		Banking sector characteristics		Economic freedom		Government Ownership		Income Group	
VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
FRACBANKS	0.00012***		0.00015***		0.00006**		0.00014***		0.00006*	
	(0.00004)		(0.00005)		(0.00003)		(0.00004)		(0.00003)	
FRACBANKSPR		0.0002***		0.00022***		0.00009**		0.00019***		0.00009**
		(0.00003)		(0.00003)		(0.00003)		(0.00003)		(0.00003)
EQUI	0.00061***	0.00077***	0.0005**	0.0008***	0.0007***	0.00077***	0.00064***	0.00088***	0.00068***	0.00074***
	(0.00017)	(0.00017)	(0.00019)	(0.00018)	(0.00017)	(0.00016)	(0.00018)	(0.00019)	(0.00018)	(0.00017)
SIZE	-0.00018	-0.00007	0.00024	0.00029	-0.00012	-0.00006	-0.00001	0.00007	-0.00033	-0.00029
	(0.00025)	(0.00026)	(0.00034)	(0.00029)	(0.00025)	(0.00024)	(0.00023)	(0.00025)	(0.00024)	(0.00024)
LIQUI	0.00000	0.00000	-0.00003	-0.00000	0.00000	0.00001	-0.00000	0.00000	0.00001	0.00002
	(0.00002)	(0.00003)	(0.00003)	(0.00003)	(0.00003)	(0.00003)	(0.00003)	(0.00003)	(0.00003)	(0.00003)
NPL	-0.00003	0.00001	0.00002	0.00006	0.00000	0.00002	-0.00005	0.00000	-0.00004	-0.00003
	(0.00008)	(0.00007)	(0.00007)	(0.00007)	(0.00008)	(0.00007)	(0.00007)	(0.00007)	(0.00007)	(0.00007)

GDPGR	0.00028	0.00019	0.00061***	0.00036*	0.00035**	0.00026*	0.00086***	0.00067***	0.00036**	0.00028*
	(0.00017)	(0.00015)	(0.00018)	(0.00018)	(0.00016)	(0.00015)	(0.0002)	(0.00022)	(0.00016)	(0.00016)
INFL	0.0004***	0.00031**	0.00029**	0.00022*	0.00043***	0.00038***	0.00033***	0.0002*	0.0004***	0.00036***
	(0.00013)	(0.00013)	(0.00013)	(0.00012)	(0.00013)	(0.00013)	(0.00011)	(0.00011)	(0.00012)	(0.00011)
UNEMPL	0.00031***	0.00033***	0.00035***	0.0004***	0.00021*	0.00019	0.00023**	0.00025**	0.00018	0.00016
	(0.0001)	(0.0001)	(0.00013)	(0.00011)	(0.00011)	(0.00011)	(0.00011)	(0.00011)	(0.00012)	(0.00012)
CONC			0.00000	0.00002						
			(0.00001)	(0.00001)						
STOCKMARKET			-0.00000	-0.00000						
			(0.00000)	(0.00000)						
CAPREG			-0.00007	0.00001						
			(0.0001)	(0.00018)						
SPVPOWER			0.00006	0.00007						
			(0.00016)	(0.00015)						
ACTRES			0.00009	0.00035						
			(0.00024)	(0.00025)						
POLRISK	-0.00006	-0.00005								
	(0.00004)	(0.00004)								
ECONFREEDOM					0.00012	-0.00003				
					(0.00046)	(0.00044)				
OWNERSHIP							-0.00001	-0.00002		
							(0.00002)	(0.00001)		
Constant	0.0087	0.00463	-0.00566	-0.0103	0.00056	0.00048	-0.00202	-0.00481	0.00582	0.00486
	(0.00761)	(0.00806)	(0.00729)	(0.00675)	(0.00687)	(0.00672)	(0.00486)	(0.00539)	(0.00533)	(0.00543)
Observations	138	138	123	123	145	145	117	117	146	146
Income dummies									YES	YES
Time dummies	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES

R-sq	0.575	0.631	0.577	0.618	0.552	0.577	0.617	0.656	0.556	0.581

Table 8: The conditional role of institutions

Table 8 reports the results from Equation 2 that includes interaction terms between the political connection variables and different indicators of the institutional environment. The sample period is 2003-2007. Robust standard errors in parentheses. All the variables are at the country-level. In all regressions the dependent variable is the return on assets (ROA). FRACBANKS captures the fraction of banks with a former politician on their board and FRACBANKSPR captures the fraction of private banks with a former politician on their board. STRONG_CORR is a dummy variable that takes the value of 1 when a country's level of control of corruption is above the sample median and 0 otherwise. STRONG_LEGAL is a dummy variable that takes the value 1 when a country scores above median values for the ICRG dimension of "Law and Order" and 0 otherwise. HIGH_SPVPOWER is a dummy that takes the value 1 a country scores above median values for SPVPOWER and 0 otherwise. All the estimations include the following country-level variables which are not reported to conserve space: EQUI (equity to total assets ratio), SIZE (natural logarithm of total assets), LIQUI (liquidity ratio), NPL (non-performing loans ratio), GDPGR (GDP growth), INFL (inflation rate), UNEMPL (unemployment rate), time dummies, and a constant. For full variable description see Table 1. The *, ** and *** signs denote statistical significance at the 1,5 and 10% level .

	(1)	(2)	(3)	(4)	(5)	(6)
FRACBANKS	0.00018***		0.00022***		0.000216**	
	(0.00005)		(0.00004)		(0.0001)	
STRONG_CORR	-0.00136	-0.00144*				
	(0.00089)	(0.00085)				
FRACBANKS X STRONG_CORR	-0.00014***					
	(0.00005)					
FRACBANKSPR		0.00017***		0.00016***		0.000158
		(0.00003)		(0.00003)		(0.00009)
FRACBANKSPR X STRONG_CORR		-0.00012***				
		(0.00004)				
STRONG_LEGAL			-0.00045	-0.00076		
			(0.00106)	(0.00099)		
FRACBANKS X STRONG_LEGAL			-0.00018***			
			(0.00005)			

FRACBANKSPR X STRONG_LEGAL				-0.00012***		
				(0.00003)		
HIGH_SPVPOWER					-0.00149	-0.00172*
					(0.00093)	(0.00088)
FRACBANKS X HIGH_SPVPOWER					-0.00016	
					(0.00011)	
FRACBANKSPR X HIGH_SPVPOWER						-0.00007
						(0.0001)
Control Variables	YES	YES	YES	YES	YES	YES
Observations	146	146	146	146	146	146
R-sq	0.595	0.619	0.599	0.608	0.582	0.597

Figure 1

Figure 1 depicts the fraction of connected banks per country for private banks only.

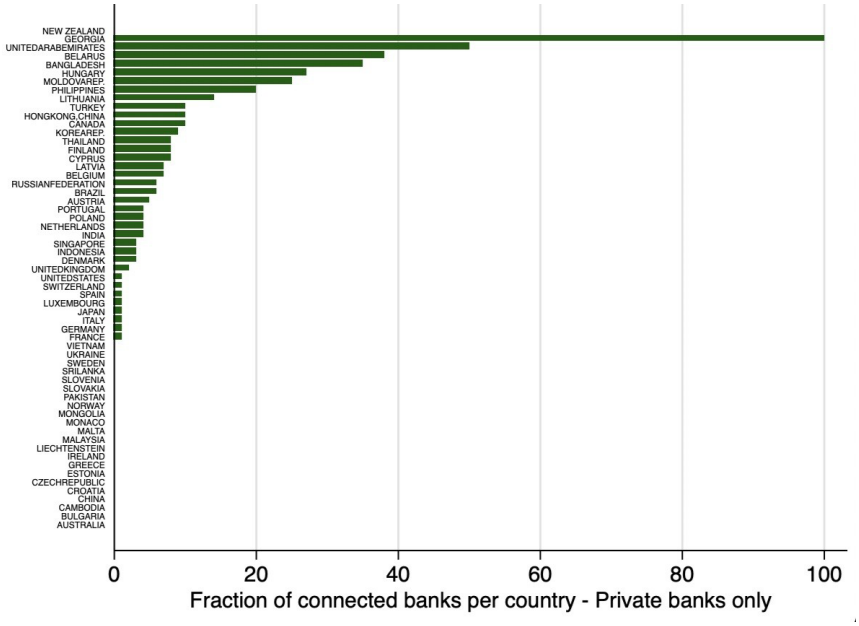

Figure 2

Figure 2 depicts the fraction of connected banks per country for all types of banks.

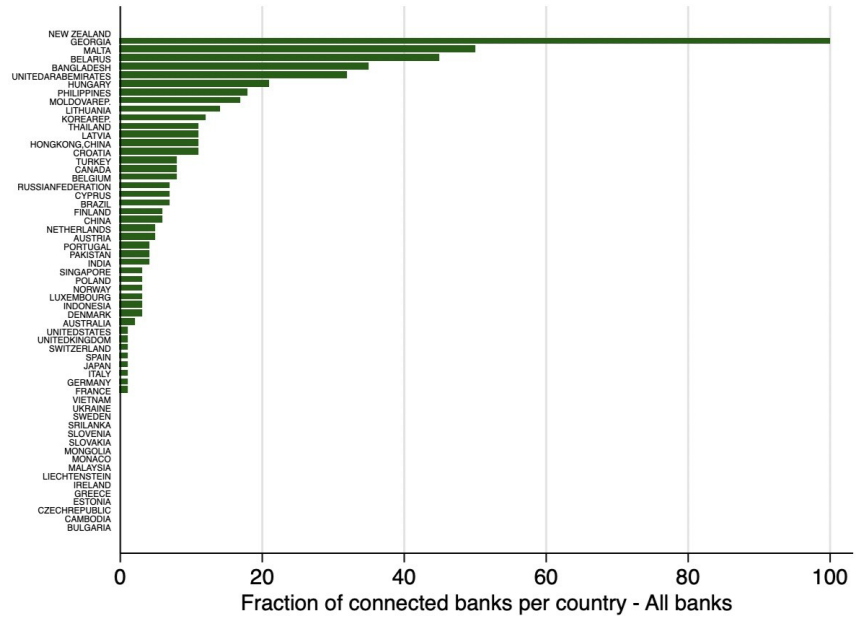

Figure 3

Figure 3 depicts the fraction of connected bankers per country for all banks.

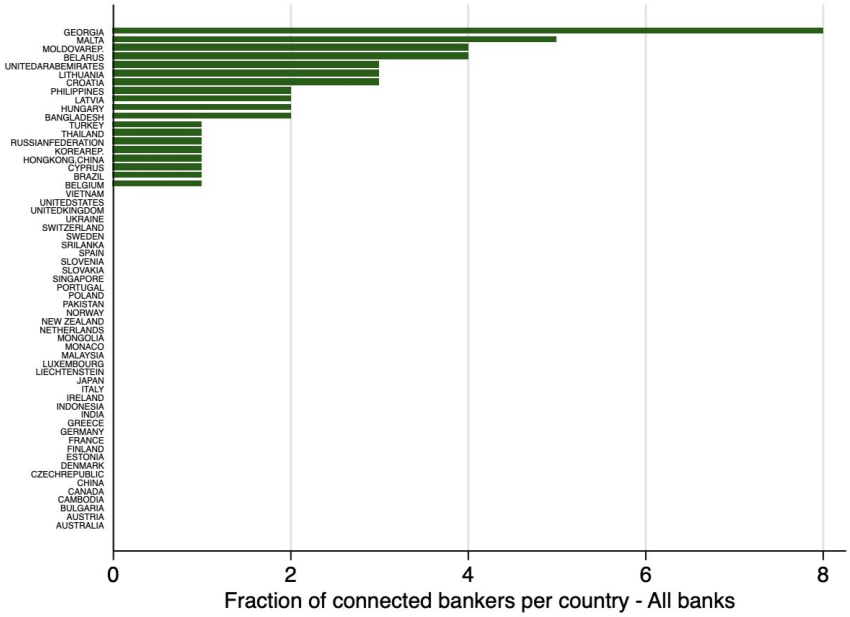

Figure 4

Figure 4 depicts the fraction of connected bankers per country for private banks only.