The Impact of Government Ownership on Bank Risk

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Abstract

We use cross-country data on a sample of large European banks to evaluate the impact of government ownership on bank risk. We distinguish between default risk (likelihood of creditors' losses) and operating risk (likelihood of negative equity). Our analysis is based on the joint use of issuer ratings, a synthetic measure of a bank's probability of default, and individual ratings, which omit the influence of any external support and focus on a bank's operating risk. We report two main results. First, government-owned banks (GOBs) have lower default risk but higher operating risk than private banks, indicating the presence of governmental protection that induces higher risk taking. Second, GOBs' operating risk and governmental protection tend to increase in election years. These results are consistent with the idea that GOBs pursue political goals and have important policy implications for recently nationalized European banks.

Keywords: European banking; Government ownership; Bank risk

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1. Introduction

Within the European banking industry, privately owned banks (POBs) and government-owned banks (GOBs) have always coexisted. Although their roots are different, large GOBs and POBs have typically evolved into a similar full-service banking model, thereby competing in the same markets, under the same regulatory framework. Indeed, most of these banks are virtually indistinguishable in terms of their range of activities, being active at both the domestic and international levels.

Following the 2007-2009 financial crisis, many European banks were bailed out by their national governments through a range of provisions that included not only the government underwriting of debt instruments at favorable conditions and government guarantees of uninsured debt, but also equity capital injections. This inevitably led to an increase in the role played by European governments in bank ownership. Large banking groups such as Royal Bank of Scotland and Lloyds TSB in the UK, Allied Irish Bank in Ireland, Dexia in Belgium, ABN Amro in the Netherlands, Hypo Real Estate in Germany, and Fortis in the Benelux have been partially nationalized and many of them are still controlled by their governments. This nationalization of part of the European banking industry has, in turn, revived the debate concerning the advisability and consequences of government bank ownership.

As argued by Demirgüç-Kunt and Detragiache (2002), government ownership subsidizes GOBs and induces a more aggressive risk-taking behaviour. This in turn can distort competition and prevent the proper functioning of market discipline. In this paper we analyze the impact of government ownership on bank risk-taking behavior. In particular, we investigate whether GOBs and POBs have different risk profiles and try to shed light on the cause of this difference. To compare the risk profiles of GOBs and POBs, we distinguish between default risk and operating risk. We define *default risk* as the probability that a bank's creditors suffer losses as a consequence of a delay in interest or principal payment, debt restructuring, or bankruptcy. We define *operating risk* as the probability that a bank's asset value decreases below the value of its liabilities, thereby leading to negative equity capital. The difference between default risk and operating risk

arises because of an external support – such as government intervention to rescue banks with negative equity capital – which would prevent a technically insolvent bank from default. We measure default risk with traditional issuer credit ratings, while operating risk is proxied by individual ratings, which focus on banks' intrinsic economic and financial conditions and do not take into account any external support. More detailed explanation about the difference between issuer and individual ratings will be provided later in the paper.

While all (large) banks may benefit from some sort of government guarantee, there are reasons to believe that GOBs enjoy stronger protection. Faccio et al. (2006) provide evidence consistent with this idea. They find that politically connected firms are significantly more likely to be bailed out than similar non-connected firms. Arguably, the likelihood of government intervention is higher if the ultimate entity responsible for a bank's insolvency is the government itself, as the bank's owner. One can therefore expect that – all else being equal – GOBs have lower default risk because of stronger government protection. Indeed, Brown and Dinç (2011) present evidence that defaults are less common for GOBs than for POBs.

The effect of government ownership on bank operating risk is more ambiguous. In general, government protection should be associated with higher risk taking, since bank shareholders would not fully bear the consequences of negative outcomes, as the cost of excessive risk taking would be borne by the government (Demirgüç-Kunt and Detragiache, 2002). However, one should wonder what would be the effect on bank risk if the government and the bank's owner coincide. The government may internalize the cost of the *ex post* bailout, thus limiting the risk *ex ante*. The actual effect of government ownership on bank operating risk therefore remains an empirical question.

If governmental protection induced GOBs to take on more operating risk, there would be adverse effects in terms of potential distortions to competition, cost of rescuing troubled banks, and so forth. However, one cannot *a priori* negatively evaluate a higher GOBs' risk level. Indeed, such greater operating risk would not be necessarily suboptimal from a social perspective if GOBs' risk-taking activities

pursue social goals and address market failures. For example, GOBs may finance socially profitable projects that are unprofitable for private banks to finance. On the other hand, GOBs are essentially controlled by politicians, who may pursue their own goals rather than social ones. Put another way, taxpayers bear the cost of GOBs' governmental protection. The relevant question then becomes: What are taxpayers paying for? Social goals or political goals?

We address these issues by investigating the following research questions: Is there a significant difference in the default risk of GOBs compared to POBs? Is such a difference related to a different operating risk or is it the consequence of governmental protection? Finally, are GOBs' operating risk and governmental protection related to political motivations? In order to address these questions, we compare the risk profiles (default risk and operating risk) of GOBs with those of POBs and test whether GOBs' risk-taking behavior is sensitive to the electoral cycle. We conduct our tests on a sample of European banks over the 2000-2009 period.

Our empirical results indicate that government ownership impacts bank risk in complex ways. GOBs have a lower default risk than POBs. However, this difference is not the consequence of better economic and financial conditions, since GOBs have higher operating risk than POBs. The lower default risk of GOBs, associated with their higher operating risk, suggests the presence of governmental protection that induces higher risk taking. Similar results are found when using direct measures of external support, based on the difference between issuer and individual ratings. Also, we find that GOBs' operating risk and external support tend to increase in election years. This result is consistent with the political role (as opposed to the social role) of the government as a bank shareholder.

This study makes three main contributions to the literature. First, it focuses on GOBs' risk profile. Our methodology is based on the joint use of issuer ratings, a synthetic measure of a bank's probability of default, and individual ratings, which omit the influence of any external support and focus on a bank's operating risk. More specifically, we exploit the difference between a bank's issuer and its

individual rating. This allows us to directly test for the presence of government debt guarantees and separately address a bank's operating and default risk. We are thus able to assess the effect of government ownership on banks' risk-taking behavior and to understand whether such behavior is subject to political influence

Second, different from most available studies on GOBs – which generally take a wide, international comparative approach or limit their analysis to emerging markets or to individual countries – we focus our attention on the European banking industry. Such a focus clearly has some limitations, since our empirical results may be specific to the countries included in our sample. Nonetheless, the use of government ownership of banks for political goals has been documented for emerging markets (e.g., Dinç, 2005), whose institutional characteristics tend to facilitate the political influence of GOBs. Any evidence of the political use of GOBs in developed economies would represent stronger empirical support of the political view of government ownership and, at the same time, strengthen the case for complete privatization of the banking industry. Moreover, a focus on European banks allows us to avoid the problems of dealing with banks belonging to countries characterized by significant differences in banking regulation. Indeed, our sample banks share a system of minimum common banking supervisory rules dictated by European Union directives.

Third, to the best of our knowledge, this is the first study documenting the risk profile of GOBs during a period that also includes the recent financial crisis. During the late 1990s and early 2000s, the government ownership of banks attracted growing criticism in the European Union. More recently, following the 2007-2009 banking crisis, a number of European banks received significant financial support from their governments, often in the form of equity capital injections. These interventions led to an increase in the weight of bank government ownership in the European banking industry. In our sample, the average share of bank equity capital held by governments increased from 5.4% at the end of 2007 to 7.3% at the end of 2009.[1] While the pressure to privatize the

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[1] We compute the average government stake in any year as the average share of equity held by the government in each bank, weighted by the ratio of the bank's book value of equity to the sum of the book value of equity of all banks that year. While the average government stake in our sample

bailed out financial institutions is strong due to the financial difficulties currently faced by most European countries, some observers argue in favour of maintaining these financial institutions in the hands of the public sector because of its stronger ability to finance economic growth.[2] Once again, a proper understanding of the role played by European GOBs becomes crucial to better assess the advisability and timing of a privatization of recently nationalized European banking groups.

This paper proceeds as follows. Section 2 reviews the related literature. Section 3 describes our empirical strategy and Section 4 discusses the data sources and summarizes the empirical sample characteristics. Section 5 presents the empirical results and their economic interpretation. Section 6 concludes by focusing on the policy implications of our empirical results.

2. Related literature

Two alternative theories have been put forward to explain the role of governments as bank owners: *i*) the social view and *ii*) the political view. According to the social view, government ownership of banks facilitates the financing of projects that private banks are unable or unwilling to finance, particularly projects that can help economic development (Stiglitz, 1993). According to this theory, GOBs address market failures and improve social welfare. A larger share of GOBs in the national banking industry should then be associated with higher economic growth.

In contrast, the political view emphasizes political rather than social objectives. According to this alternative theory, GOBs are used by politicians to provide low cost of financing to supporters, who return the favor in the form of votes and political contributions. As Shleifer and Vishny (1997) point out, while government-owned firms are technically "controlled by the public", they are run

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is significantly lower than that reported by La Porta et al. (2002) – who document an average government stake of 26.5% in 1995 in the countries included in our sample that year – it still indicates that governments play a relevant role as bank owners in the European banking industry.

[2] As recently noted by the Financial Stability Board (2009): "While timely repayment of public capital injections is desirable to reduce distortions and fiscal risks, it should only take place if repayment is sustainable from a prudential perspective, against the benchmark of the revised capital and liquidity regulatory requirements to be implemented after the crisis, and does not excessively compromise banks' credit extension to the real economy."

by bureaucrats who can be thought of as having "extremely concentrated control rights, but no significant cash flow rights." Additionally, political bureaucrats have goals that are often in conflict with social welfare improvements and dictated by political interests.

In the last 20 years, an extensive literature has examined the consequences of government ownership of banks. These studies can broadly be classified into two main types:

(i)   Macroeconomic comparative studies, mostly aimed at investigating the consequences of banks' government ownership on economic growth, financial development, and other macroeconomic features at the country level, and

(ii)   Microeconomic studies, mostly aimed at comparing the efficiency, profitability, and, more generally, the performance of GOBs versus POBs at the individual bank level. Some studies look at the rationale behind GOB behavior.

The first type of studies (macro) includes Barth et al. (2001) and La Porta et al. (2002), who find that countries with a larger share of GOBs in the banking industry have a lower level of financial development and register lower economic growth. Beck and Levine (2002) also fail to find any positive effect of GOBs on economic growth. Caprio and Peria (2000) show that greater government ownership of banks tends to increase the likelihood of banking crises. These studies therefore find no evidence supporting the social view. Adrianova et al. (2010), however, find that – all else being equal – countries with a high degree of banks' government ownership have grown faster than countries with little banks' government ownership.

The second type of studies (micro) is aimed at extending to the banking industry the traditional question concerning the impact of government ownership on firm efficiency and profitability. Indeed, an extensive empirical literature documents the inefficiency of government-owned non-banking firms, the political motives behind the public provision of services, and the benefits of privatization (e.g., Megginson et al., 1994; Barberis et al., 1996; Lopez-de-Silanes et al., 1997;

Frydman et al., 1999; La Porta and Lopez-de-Silanes, 1999). Micro studies can be further classified into two categories: *i*) studies that compare the performance (efficiency/profitability) of GOBs versus POBs and *ii*) studies that investigate the motivation behind GOB behavior.

Several papers document that GOBs are less efficient than POBs (La Porta et al., 2002; Barth et al., 2004; Beck et al., 2004; Berger et al., 2004; Berger et al., 2005; Micco et al., 2007, Iannotta et al., 2007). However, Altunbas et al. (2001), focusing on the German banking industry, find little evidence that POBs are more efficient than GOBs, although the latter have slight cost and profit advantages over POBs.

Among micro studies, only three explicitly investigate the rationale behind GOB behavior. Sapienza (2004) examines the lending behavior of Italian GOBs and finds that they mostly favor borrowers located in depressed areas, consistent with the social view. However, the author also finds that the lending behavior of Italian GOBs is affected by the electoral results of the party affiliated with the bank: consistent with the political view, the stronger the political party in the borrower's area, the lower the interest rates charged. Dinç (2005) shows that in emerging markets GOBs increase their lending in election years relative to private banks. No such effect is found in developed economies. Finally, Micco et al. (2007) find that the efficiency of emerging market GOBs varies with the electoral cycle.

The two categories of micro studies – involving the performance of GOBs versus that of POBs and the rationale of GOB behavior – are clearly connected. Indeed, lower GOB profitability and efficiency may be related to the fact that GOBs finance projects with high social returns that POBs are not willing to fund due to their low private returns (social view). Alternatively, GOBs may be less profitable and efficient than POBs because they are run by political bureaucrats and have goals in contrast with value creation (political view). To sum up, GOBs may pursue political and social goals at the cost of lower efficiency and profitability. The same type of link should characterize not only GOB efficiency and profitability but also their risk profile. Indeed, irrespective of the theoretical

motivation for banks' government ownership (social or political), it is clear that a bank's "mission" affects its behavior and consequently its risk profile.

In this respect, our paper combines the two abovementioned types of micro studies. On one hand, we focus our analysis on the risk profile of GOBs versus POBs. On the other hand, to understand the rationale behind GOB risk-taking behavior, we examine the difference between GOBs' and POBs' risk profiles over the electoral cycle.

3. Research methodology

3.1. Measuring bank risk

The main goal of this study is to test for any systematic difference between the risk profiles of GOBs and POBs. There are different ways to measure the risk of a bank. The first and most common is based on the use of accounting ratios measuring the bank's liquidity, leverage, asset quality, profitability, and so forth. These ratios are easy to compute and have the advantage of being generally available for all banks. However, besides being all based on accounting values, they have a major drawback in that they do not allow to construct a unique measure of default risk to be used as the dependent variable of a multivariate regression. A typical problem in analyzing risk using accounting ratios is endogeneity. For instance, regressing leverage over return on equity may be problematic since leverage can affect return on equity in the first place (Berger, 1995). One attempt to address this problem is represented by the insolvency risk Z score (De Nicolò, 2001), based on a bank's leverage and the mean and volatility of its return on assets. However, this measure appears methodologically weak since it implicitly assumes that the quality of a bank's assets is properly reflected in the volatility of its accounting profit; more importantly, it relies on the standard deviation of the bank's return on assets, which in turn is either measured on a very limited number of observations or relies on distant past observations.

A second approach is based on the use of market variables, such as the spread of a bank's credit default swaps or of its outstanding bonds, the volatility of its

stock return, or its stock's beta. These variables are generally more effective in representing a bank's risk because they reflect the capital markets' perception of risk. In addition, market-based measures allow overcoming the above mentioned problem of accounting ratios, since they incorporate a wide number of factors: not only the bank's economic and financial conditions (capitalization, liquidity, profitability, asset quality, etc.) but also its management quality, organization, governance, and so on. However, for the purpose of this study, market-based variables are problematic since they reflect not only a bank's operating risk but also the implicit support from the governmental entities participating in its equity capital. In other words, market-based variables properly measure only default risk. In addition, market-based measures are often unavailable for GOBs. As an example, out of our 128 sample banks in 2008, only 50 were listed in a stock exchange.

A third approach is based on credit ratings. Two main types of bank ratings exist. The most common and well known − *issuer* ratings − represent a synthetic measure of a bank's probability of default and reflect not only a bank's profitability, asset quality, risk, management quality, and macroeconomic conditions, but also the potential support from an external entity such as a parent company, regulatory agency, and/or local or national government. The second type, the *individual* ratings − such as Fitch Ratings' Individual ratings (FRI) and Moody's Bank Financial Strength ratings (MBFS) − are similar to traditional issuer ratings but differ in that they examine a bank's insolvency risk as reflected in its financial conditions and omit the influence of any external support. As such, these ratings represent an ideal measure of a bank's probability of becoming technically insolvent, not taking into account whether this potential insolvency would trigger government intervention or not.[3]

These different types of banks' credit ratings offer two important advantages. First, they allow us to overcome the abovementioned problems of accounting

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[3] Individual ratings are not new in banking research. Using a sample of subordinated bonds issued over 1991–2000:Q1, Sironi (2003) finds that spreads at issuance reflect quite accurately banks' individual ratings. More recently, Gropp et al. (2011) estimate the likelihood of external support as the difference between issuer ratings (which account for external bail outs) and individual ratings (which ignore the possibility of any external intervention).

ratios since they represent a clear-cut exogenous variable. Second, using both types of ratings allows us to explicitly distinguish between a bank's default risk, which also incorporates the possibility of government intervention, and its operating risk, which is independent from this external factor. Credit ratings therefore also allow us to overcome the abovementioned problem posed by market-based risk variables.

Despite the importance of credit ratings in financial regulation, their accuracy is sometimes questioned. Nonetheless, empirical evidence consistently indicates that credit ratings are an important determinant of bond yield spreads for both banks and non-banking issuers (Elton et al., 2001; Gabbi and Sironi, 2005). Most importantly, ratings are considered very accurate as *relative* risk measures. Indeed, agencies make it clear that their ratings do not reflect the absolute probability of default since they are just an ordinal ranking of risk. The *ex post* statistics of default by rating class invariantly confirm their extreme accuracy as relative measures. This paper does not aim to estimate banks' probability of default; rather, it compares the risk of GOBs *relative* to that of POBs. For the purpose of this paper, credit ratings therefore appear to be reliable risk proxies.

3.2. Direct measures of external support

As mentioned earlier, while government ownership should reduce GOBs' default risk (i.e., better issuer ratings), its effect on operating risk (i.e., individual ratings) is subtle. Governmental protection may generate moral hazard, inducing GOBs to take on more operating risk. On the other hand, since the government itself would bear the cost of bailing out insolvent GOBs, they may actually limit their operating risk. Therefore, as an alternative way to investigate the effect of government ownership on bank risk taking, one could look at the difference between default risk and operating risk. Such a difference would reflect the extent of governmental support.

We employ two different measures of support. The first is based on the mere difference between individual and issuer ratings, both converted into a numerical scale. Fitch's individual and issuer ratings are not directly comparable since the

two scales are different. In contrast, Moody's provides a conversion table (Table 1.3) that allows one to compare issuer and individual ratings. Our first proxy for a bank's external support is thus the absolute difference between Moody's issuer and individual ratings. The second measure is the Support Rating provided by Fitch. This type of rating reflects the likelihood of external intervention to rescue troubled banks. Table 1.4 reports the Support Rating scale and the bailout probability corresponding to each rating class.[4]

3.3. The empirical framework

3.3.1. Comparing the risk and external support of GOBs versus POBs

To compare GOBs versus POBs in terms of default/operating risk and external support, we estimate the following OLS regressions with robust standard errors clustered at the country level:

$$Rating_{i,t} = f(Gob_{i,t}, SIZE_{i,t}, GDPCGH_{i,t}, LIST_{i,t}, Controls_{i,t}) + \varepsilon_{i,t} \qquad (1)$$

$$Support_{i,t} = f(Gob_{i,t}, SIZE_{i,t}, GDPCGH_{i,t}, LIST_{i,t}, Controls_{i,t}) + \varepsilon_{i,t} \qquad (2)$$

Rating, our dependent variable expressing a bank's risk, can be either *ISSUER* or *INDIVIDUAL*. The variable *ISSUER* is the average numerical value of Moody's (Moody's Long Term Debt Senior, MLTDS), Standard & Poor's (Standard & Poor's Long Term, S&PLT), and Fitch Ratings (Fitch Ratings Long Term, FLT) ratings. The variable *INDIVIDUAL* is the average of the MBFS and FRI ratings converted into a numerical scale.[5] Both *ISSUER* and *INDIVIDUAL* are the official ratings at the end of the fiscal year.

As mentioned above, we also employ the difference between *ISSUER* and *INDIVIDUAL* since this allows us to directly test for the presence of government

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[4] Since Fitch does not explicitly assign bailout probabilities to each Support Rating class, we use those employed by Gropp et al. (2011).
[5] Table 1 reports the rating scales for both issuer (Table 1.1) and individual ratings (Table 1.2). When the average value is not an integer, we round it to the lower value (less risky). We also tested an alternative methodology based on rounding to the higher value and obtained equivalent results.

guarantees. More specifically, we use a support variable (*Support*) that can be either the absolute difference between Moody's issuer and individual ratings converted into a numerical scale (*SUPPMOODYS*) or the bailout probability associated with the Support Rating provided by Fitch *(SUPPFITCH)*.

Gob is a variable denoting whether the bank is government-owned. We use three alternative definitions of GOB. The first is an indicator variable – *GOB* – that is based on a rather broad definition: it takes the value one if any percentage of the bank equity capital is held[6] by either a national or a local government, and zero otherwise. Alternatively, we employ an indicator variable, *GOB10,* which defines a bank as government-owned if a public authority holds at least 10% of the bank's equity capital.[7] We also use a continuous variable (*GOBPERC*) that is the percentage of the bank equity held by the national/local government. To control for nonlinearities, we either include a quadratic term or use the log value of one plus the government's percentage stake.

If GOBs have a higher operating risk, our *Gob* variable should *positively* affect the *individual* rating (i.e., worse rating). In addition, if GOBs enjoy an implicit form of government protection, as we expect, then this variable should have a *negative* impact on the *issuer* rating (i.e., better rating) and a *positive* effect on *Support* variables.

The variable *SIZE* is the log of total assets.[8] As pointed out by McAllister and McManus (1993), larger banks have better risk diversification opportunities and thus lower cost of funding than smaller ones. In addition, the existence of nonfinancial scale economies should allow larger banks to benefit from cost efficiency gains, even if the inherent complexity of larger banks mitigates this effect. As a result, all else being equal, we expect larger banks to exhibit relatively better ratings (i.e., negative coefficient sign). A larger size may lead to a better rating also because of some too-big-to-fail mechanism. If this is the case, then we expect *SIZE* to be significantly related to issuer ratings but not to individual ones. If, instead, *SIZE* has other benefits in terms of a lower credit risk (e.g., because of

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[6] Either directly or through other entities.
[7] Results obtained by using *GOB20* (equal to one if the government holds at least 20% of the bank's equity, and zero otherwise) are qualitatively similar.
[8] To obtain comparable values, we convert the total assets of banks in the sample into euros.

profit diversification, scale economies, etc.), it should also remain significant when individual ratings are analyzed.

The variable *GDPCHG* is the annual gross domestic product (GDP) growth rate of the country where bank *i* is located. The variable *LIST* is a dummy variable equal to one if the bank is listed in a stock exchange, and zero otherwise. Controlling for this factor is important since this can affect a bank's risk-taking behavior, independent of the nature of its ownership (GOB versus POB). To account for country-specific effects, we always include year and country dummies.

In some specifications we employ a set of accounting variables, including the following ratios: *i*) operating profit to total earning assets (*PROFIT*), *ii*) book value of equity to total assets (*CAPITAL*), and *iii*) loan loss provisions to total loans (*LOANLOSS*).

3.3.2. Sensitivity to the electoral cycle

The second part of our analysis investigates whether the evolution of GOB and POB operating risk and external support across the electoral cycle shows a statistically significant difference. This allows us to understand whether GOB risk-taking behavior is subject to political influences (political view). While a full understanding of the rationales behind GOBs behavior would require a micro type of analysis based on individual loans prices and borrowers features – such as that conducted by Sapienza (2004), who focused on the Italian case – our approach allows us to indirectly infer the role of European GOBs by comparing the sensitivity of their operating risk and external support to the electoral cycle. If the political view were correct, one would expect GOBs' operating risk and governmental support to increase during electoral years. The underlying idea is that if GOBs' actions are motivated by political reasons, then this political influence should get stronger during election times and, more generally, be correlated with the electoral cycle.

Following Dinç (2005), we estimate two different OLS regressions with robust standard errors clustered at the country level and including banks' fixed effects:

$$INDIVIDUAL_{i,t} = f(ELECTION_{i,t}, Gob_{i,t} \times ELECTION_{i,t}, SIZE_{i,t}, GDPCGH_{i,t},$$
$$Controls) + \varepsilon_{i,t} \qquad (3)$$

$$SUPPMOODYS_{i,t} = f(ELECTION_{i,t}, Gob_{i,t} \times ELECTION_{i,t}, SIZE_{i,t}, \qquad (4)$$
$$GDPCGH_{i,t}, Controls) + \varepsilon_{i,t}$$

where $ELECTION_{i,t}$ is a dummy variable that equals one when a national election[9] takes place in year t in the country where bank i is located, and zero otherwise.[10] Robust standard errors clustered at the country level are estimated. In some specifications we also include the variables $ELECTION_{t-1}$ and $ELECTION_{t-2}$ (equal to one if the election takes place in years t-1 and t-2, respectively) and their interaction with Gob variables. The reason for including these lagged terms is that politically motivated actions may have detectable consequences on banks' ratings only one or two years after the election year.

This analysis employs only $SUPPMOODYS$ as a proxy for external support. Both $SUPPMOODYS$ and $SUPPFITCH$ reflect the extent of external support. However, while $SUPPMOODYS$ reflects the difference between issuer and individual ratings, $SUPPFITCH$ is based on Fitch's assessment of the bailout probability. The problem with this latter variable is that for most of our sample GOBs, its value is equal to one (108 out of 123 observations). Consequently, any attempt to detect the sensitivity of this variable to the electoral cycle would be pointless.

A statistically significant positive coefficient for the interacted variable $GOB \times ELECTION$ in Equations (3) and (4) would indicate that – consistent with the political view – GOBs are subject to political influence since their operating risk and governmental support increase during election years.

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[9] We consider all elections for a national executive figure, such as a president (presidential elections), or for a national legislative body, such as a parliament, legislature, constituent assembly, or other directly elected representative bodies (parliamentary elections).

[10] As in Dinç (2005), we include bank fixed effects.

4. Data sources and sample characteristics

We use Standard & Poor's issuer ratings, Fitch Ratings' individual and issuer ratings, and income statement, balance sheet, and ownership information data from 2000 to 2009 (inclusive) of European banks from the Bureau van Dijk's Bankscope database, while Moody's individual and issuer ratings were provided directly by Moody's. We focus on the largest commercial banks[11] in 16 European countries,[12] defined as banks that have total assets of at least (the equivalent of) €10 billion in (at least) one fiscal year-end in 2000-2009. Our approach is therefore different from that adopted by La Porta et al. (2002) and Dinç (2005), who select the 10 largest banks in each country. The focus on the largest European banks is partly due to data limitations, since credit ratings are only available for large banks, and partly related to the subject of our investigation, since government ownership is typically associated with larger banks. By limiting our analysis to only the largest banks, we also manage to achieve a more balanced sample in terms of bank size, with a lower standard deviation for sample banks size and no significant difference between the average sizes of GOBs and POBs.[13]

Banks that experienced mergers or acquisitions are treated as follows. If Bankscope continues to use the accounts of the surviving bank for the new entity after a merger or acquisition, the surviving bank remains in the sample. If Bankscope starts a new account for the new entity, banks involved in that merger exit the sample. As a result, we end up with an unbalanced data set consisting of 210 banks from 16 countries, for a total of 1,541 bank-year observations for which we have ratings, ownership, and accounting data.

Bank ownership information is obtained from the Shareholder Information section of the Bankscope database. Since Bankscope reports online only current ownership information, historical shareholder information were obtained from the 2000-2008 (December) Bankscope CDs. When Bankscope's shareholder database did not have enough information to determine whether a bank is government

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[11] Investment, trust, and mortgage banks are therefore excluded.
[12] Austria, Belgium, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, and the UK.
[13] On the other side, we inevitably end up with a less balanced sample in terms of country composition.

owned, privately owned, or a mutual, we gathered bank ownership information using additional sources such as the individual bank's financial statements.

The dates of all the national elections during the sample period were recorded using the European Election Database of the Council of European Social Science Data Archives. Macroeconomic variables were obtained from the International Monetary Fund.

Table 2.1 reports the number of banks and the number of bank-year observations for each country and for the GOB (both *GOB* and *GOB10*) subsamples, while Table 2.2 reports descriptive statistics for bank government ownership in the sample countries. GOBs are mostly located in a few European countries, notably Germany, France, Italy, and Austria. Other countries, such as Spain and Finland, have no GOBs. The average GOB equity stake held by the government entity is relatively stable over time and equal to two-thirds (66.7%). This equity stake is, on average, higher in Austria, Germany, Luxembourg, and Portugal and lower in Greece, Italy, and France.

5. Empirical results

5.1. Descriptive and univariate analysis

Tables 3.1 and 3.2 report sample descriptive statistics for *ISSUER*, *INDIVIDUAL*, the support variables *SUPPMOODYS* and *SUPPFITCH*, *SIZE* (expressed as the amount of total assets), and the control variables *CAPITAL*, *PROFIT*, and *LOANLOSS*. Statistics are provided for the entire sample and are also broken up into year subsamples to detect any trend. In Table 4 we perform *t*-tests for the equality of GOB versus POB variable means. We find that GOBs exhibit better issuer ratings and worse individual ratings than POBs. The tests on support variables confirm that GOBs benefit from stronger external support, as expected.

While the difference in *SIZE* is not statistically significant, GOBs and POBs differ in terms of other accountings variables: GOBs are less capitalized, less profitable and have a higher ratio of loan loss provisions to total loans, indicating

poorer asset quality. These results are consistent with Dinç (2005) and are confirmed with both definitions of GOB (*GOB* and *GOB10*).

As already mentioned, the average size of GOBs and POBs in our sample are not statistically different. Consequently, the results of our analysis should not be affected by any too-big-to-fail mechanism.

5.2. Are GOBs riskier?

Table 5.1 reports the results of multivariate regressions based on Equation (1) above. Columns 1 to 4 report OLS regressions of *issuer* rating on *Gob*, using the three alternative definitions of GOB: *GOB*, *GOB10,* and *GOBPERC*. These results indicate that the typical GOB is better rated than the typical POB. In other words, GOBs are perceived as characterized by a lower default risk by rating agencies. Other results are consistent with expectations: larger and more profitable banks have better ratings, as shown by the negative and statistically significant coefficient of *SIZE*. In addition, note the statistically significant positive coefficient of the dummy variable *LIST* in the issuer rating regression, indicating that – all else being equal – listed banks are considered by rating agencies to have a higher default risk.

Columns 5 to 8 of Table 5.1 report the results of the same type of regressions, with the addition of the accounting ratios as control variables. While the goodness of fit of our regressions slightly improves when these variables are included as controls, the result concerning the *Gob* variables remains unchanged. This indicates that the lower default risk of GOBs is not related to the better economic and financial conditions (profitability, leverage, liquidity, efficiency, asset quality, etc.) of this type of institutions.

An alternative way to check this result is to substitute the accounting variables with the banks' individual ratings. This is done in columns 9 to 12 of Table 5.1, where dummy variables for the banks' individual ratings are included. These dummy variables are all statistically significant and have monotonically increasing positive coefficients, as expected (not reported). This simply means

that, as expected, a bank's issuer rating is strongly affected by its own individual rating. Note, however, that, even if we control for individual ratings − which reflect banks' economic and financial conditions, that is, their operating risk − all our variables related to GOB remain statistically significant, confirming that the lower default risk of GOBs is not explained by better economic and financial conditions.

Our economic interpretation of these results is that GOBs are perceived by rating agencies as benefiting from governmental guarantees. The question is whether such guarantees induce GOBs to take on more operating risk. One way to address this issue is to use banks' individual ratings as the dependent variable. Columns 13 to 16 of Table 5.1 report OLS regressions of *individual* rating on the *Gob* variables, which are statistically significant with a positive coefficient (i.e., the typical European GOB is worse rated than the typical POB). These results not only confirm that the lower default risk of GOBs is due to the existence of government explicit and/or implicit guarantees, but also indicate that, once analyzed in isolation from their external protection system, GOBs exhibit a higher operating risk. Once again, the *SIZE* coefficient is negative and strongly significant, indicating that, all else being equal, larger banks are perceived to have a lower operating risk. The results are qualitatively similar when controlling for accounting variables (columns 17 to 20 of Table 5.1), which are significant with the expected sign.

The difference between GOBs' default and operating risk indirectly indicates the presence of governmental support. Table 5.2 reports results obtained by using two direct measures of external support (*SUPPMOODYS* and *SUPPFITCH*). The results confirm that GOBs benefit from greater external support than POBs. Note that the coefficients of both the quadratic specification (*GOBPERC* + *GOBPERC²*) and the logarithmic one [ln(1 + *GOBPERC*)] are statistically significant, with the expected sign, indicating that the relation between government ownership and governmental support is not linear.

5.3. Robustness tests on ratings results

So far our results indicate that GOBs have a higher operating risk and benefit from greater governmental support than POBs. These findings are robust to a number of checks. Table 5.3 reports the coefficients of the GOB variable for alternative specifications of Equations (1) (issuer and individual ratings) and (2) (support variables). The results are unchanged when running ordered logit regressions – as opposed to OLS (row 1). To control for any bias due to smaller banks, we exclude observations in the bottom size decile each year. The results, reported in row 2, are confirmed. In row 3, we exclude observations related to the financial crisis period (2007-2009). Once again, the results are unchanged, although the statistical significance is somewhat lower when using individual ratings as the dependent variable. Our findings are also confirmed when clustering standard errors at both the country and bank levels (row 4) and when employing ratings from each rating agency individually (rows 5 to 7). Since German banks account for a large portion of our sample, we also run regressions focusing on observations related to non-German banks only (row 8). When the issuer rating is the dependent variable, the statistical significance of GOB coefficient is lower. In other words, it is not entirely clear whether non-German GOBs have better issuer ratings than non-German POBs. However, the results on individual ratings confirm that non-German GOBs take on more operating risk.

5.4. Do GOBs' operating risk and external support change over the political cycle?

5.4.1. Operating risk and external support

We now move to our third research question: Are GOB operating risk and governmental protection related to political motivations? This more specifically allows us to investigate the two theories underlying the government ownership of banks, the social view and the political view. Government ownership of banks can be socially desirable if GOBs mitigate market failures. However, the presence of a government entity among a bank's shareholders implies that politicians can influence the bank's behavior. To test whether such influence is aimed at pursuing

political goals (as opposed to social ones), we examine the effect of electoral cycles on GOB operating risk and external support.

More specifically, we adapt the approach used by Dinç (2005) to our research question and run OLS regressions of *INDIVIDUAL* and *SUPPMOODYS* on an election dummy, the interaction between elections and *GOB*, and bank fixed effects.[14] We include up to two lagged terms of the election dummy and its interaction with *GOB* to capture the delayed effects of elections on GOB risk-taking behavior as measured by ratings.

Table 6.1 reports the results. The interaction terms of the two dummies *GOB* and *ELECTION* are positive and significant up to the 1% level, when using both the *INDIVIDUAL* variable and the *SUPPMOODYS* variable. This is true also when we include lagged values. This means that GOB operating risk and external support tend to increase in election years and in the two following years.

Table 6.2 reports the results for the same type of robustness checks we run in the first part of our empirical analysis. The main findings are confirmed.

5.4.2. Lending behavior and profitability

So far our results indicate that GOBs have a higher operating risk and benefit from greater external support than POBs and that these differences are more pronounced during election years. One economic interpretation of these empirical results is that GOBs increase their operating risk during election years by inefficiently expanding their loan portfolios to favor political supporters. This interpretation is consistent with Dinç (2005), who finds that emerging markets GOBs tend to expand their loan portfolios during election years. Such lending behavior is compatible with our results for the electoral cycle, since the inefficient expansion of loans arguably leads to higher operating risk.

To empirically investigate this economic interpretation, we again follow Dinç's (2005) methodology to test for the hypothesis that the lending behavior of GOBs and POBs differs over electoral cycles. In addition, we test whether GOB

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[14] We obtain similar results by replacing the bank fixed effects with the GOB variable.

profitability is affected by the electoral cycle. More specifically, we estimate the following OLS regression, with the inclusion of banks' fixed effects:

$$LOANSCHG_{i,t} = f(ELECTION_{i,t}, Gob_{i,t} \times ELECTION_{i,t}, GDPCGH_{i,t},$$
$$Accounting_{i, t-1}) + \varepsilon_{i,t} \tag{5}$$

where *LOANSCHG* - the dependent variable - is the change in bank *i*'s total loans in year *t*, normalized by total assets from the previous year, that is (Total Loans$_t$ - Total Loans$_{t-1}$)/Total Assets$_{t-1}$. We use the annual GDP growth rate (*GDPCHG*) to control for demand-side effects on loans. *Accounting* is a set of bank-specific variables reflecting factors that affect a bank's loans growth, namely, *i*) $SIZE_{t-1}$, the log of total assets as of year *t*-1; *ii*) $LOANS_{t-1}$, the ratio of loans to total earning assets as of year *t*-1, *iii*) $DEPOSITS_{t-1}$, the ratio of retail deposits to total funding as of year *t*-1, and *iv*) $CAPITAL_{t-1}$, total equity divided by total assets as of year *t*-1. We use the lagged values for all four variables to avoid endogeneity problems.

Besides investigating the effect of the electoral cycle on GOB loans, we also look at the effect of elections on GOB profitability by replacing *LOANSCHG* with *PROFITCHG* (the annual change in profit) in Equation (5):

$$PROFITCHG_{i,t} = f(ELECTION_{i,t}, Gob_{i,t} \times ELECTION_{i,t}, GDPCGH_{i,t},$$
$$Accounting_{i,t-1}, Controls) + \varepsilon_{i,t} \tag{6}$$

A statistically significant coefficient for the interactive term *GOB×ELECTION* in Equations (5) (positive) and (6) (negative) would indicate that – consistent with the political view – GOBs are subject to political influence and expand their loan portfolios. The results, reported in Table 7, are consistent with our expectations. Indeed, the interacted variable based on the two dummies *ELECTION* and *GOB* is positive and significant, indicating that GOBs tend to expand their loan portfolios more than private banks during elections. This is true using both *GOB* and *GOB10.* The results involving the *PROFITCHG* regressions are also consistent

with our expectations, since the interactive terms are negative and significant, indicating that GOB profitability tends to decrease during election years.

In conclusion, these results indicate that – consistent with the political view – Western European GOBs appear to be subject to political pressures.

6. Conclusions

This study investigates whether any significant difference exists in the default and operating risk of government-owned banks with respect to private banks. We find that, on average, government-owned banks have a lower default risk – as reflected in better issuer ratings – than their private counterparts. However, this lower default risk does not derive from a lower operating risk – as would be reflected in better economic and financial conditions – but, rather, from governmental support. Thanks to this government protection mechanism, GOBs are likely to benefit from a lower cost of funding when issuing debt securities in capital markets. In addition, government protection shields GOBs from the effects of market discipline and provides them with an incentive to increase risk taking. Indeed, despite their lower default risk, GOBs have a higher operating risk – as reflected in their worse economic and financial conditions – compared to POBs.

One could argue that these results do not necessarily strengthen the case against bank government ownership. Indeed, government-owned banks – like any other state-owned enterprise – should address market failures and therefore contribute to economic development (e.g., by granting loans to socially valuable investment projects that do not receive private funding). Such behavior would inevitably deteriorate their asset quality and increase their risk profile. However, our empirical evidence contradicts this logical argument. Indeed, our results indicate that government-owned banks are more subject to political pressures, resulting in higher operating risk and governmental protection during and immediately after election years.

These results have two important policy implications. First, they indicate that a number of large Western European banks – competing in the same markets where large private banks operate – still benefit from an unfair competitive advantage

and are sheltered from the virtuous mechanism of market discipline emphasized by the third pillar of the Basel Committee Capital Accord. More specifically, if a bank's default risk, as reflected in its issuer rating, is independent from its intrinsic risk of insolvency, then risk-averse investors will not have any incentive in punishing riskier government-owned banks through an increase in their cost of debt funds by requiring higher spreads. If European banking regulators are committed to leveling the playing field, safeguarding banks' asset quality, improving banking industry efficiency, and strengthening market discipline, then the elimination of explicit government protection is not, according to the results of this study, a sufficient condition. Even without explicit public support, banks' government ownership is perceived as a protection mechanism for bank liabilities.

The second policy implication is related to the debate concerning the advisability and timing of the privatization of the large banks that were recently nationalized in a number of European countries following the 2007-2009 financial crisis. Our results concerning the higher risk profile and poor economic and social roles of government-owned banks support – in addition to the cash needs of budget-constrained Western European governments – a rapid return to the private sector of the recently nationalized banks.

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Table 1.1 Issuer Rating Scales

Rating Type Number	Moody's Long Term Debt Senior (MLTDS)	Standard & Poor's Long Term (S&PLT)	Fitch Ratings Long Term (FLT)
1	Aaa	AAA	AAA
2	Aa1	AA+	AA+
3	Aa2	AA	AA
4	Aa3	AA-	AA-
5	A1	A+	A+
6	A2	A	A
7	A3	A-	A-
8	Baa1	BBB+	BBB+
9	Baa2	BBB	BBB
10	Baa3	BBB-	BBB-
11	Ba1	BB+	BB+
12	Ba2	BB	BB
13	Ba3	BB-	BB-
14	B1	B+	B+
15	B2	B	B
16	B3	B-	B-
17	Caa1	CCC+	CCC+
18	Caa2	CCC	CCC
19	Caa3	CCC-	CCC-
20	Ca	CC	CC
21	C	C	C
22	-	D	DDD
23	-	SD	DD
24	-	-	D

Reported is the numerical equivalent of each class of issuer ratings.

Table 1.2 Individual Rating Scales

Rating Type Number	Moody's Bank Financial Strength (MBFS)	Fitch Ratings Individual (FRI)
1	A	A
2	B+	A/B
3	B	B
4	C+	B/C
5	C	C
6	D+	C/D
7	D	D
8	E+	D/E
9	E	E

Reported is the numerical equivalent of each class of individual ratings.

Table 1.3 Moody's Rating Mapping

Moody's Bank Financial Strength (MBFS)	Moody's Long Term Debt Senior (MLTDS)
A	Aaa
A-	Aa1
B+	Aa2
B	Aa3
B-	A1
C+	A2
C	A3
C-	Baa1
C-	Baa2
D+	Baa3
D+	Ba1
D	Ba2
D-	Ba3
E+	B1
E+	B2
E+	B3
E	Caa1
E	Caa2
E	Caa3

Reported is the numerical equivalent of both Moody's financial strength (individual) and issuer ratings according to Moody's rating mapping, as provided by Moody's Investors Service (2005).

Table 1.4 Fitch's Support Ratings and Bailout Probabilities

Support Rating	Assigned bailout probability (SUPPFITCH)
1	1.00
2	0.90
3	0.50
4	0.25
5	0.00

Reported is the bailout probability assigned by Gropp et al. (2011) to each class of Fitch's support ratings.

Table 2.1 Number of Banks and Observations

| | Banks | Obs. | GOB | | | GOB10 | | | Average government stake (%, equity weighted) |
			Banks	Obs.	Obs. %	Banks	Obs.	Obs. %	
Entire sample	210	1,541	45	227	14.73	43	210	13.63	6.10
2000	158	158	25	25	15.82	23	23	14.56	5.92
2001	173	173	26	26	15.03	24	24	13.87	6.70
2002	173	173	28	28	16.18	26	26	15.05	7.54
2003	171	171	28	28	16.37	26	26	15.20	6.79
2004	165	165	23	23	13.94	20	20	12.12	4.57
2005	145	145	19	19	13.10	17	17	11.72	6.01
2006	156	156	20	20	12.82	18	18	11.54	5.63
2007	154	154	20	20	12.99	19	19	12.34	5.39
2008	127	127	19	19	14.96	18	18	14.17	5.61
2009	119	119	19	19	15.97	19	19	15.97	7.30
AT	10	72	3	6	8.33	3	6	8.33	1.56
BE	3	23	1	1	4.35	1	1	4.35	0.78
CH	3	25	1	5	20.00	1	5	20.00	0.44
DE	43	287	21	146	50.87	21	146	50.87	31.84
ES	25	234	0	0	0.00	0	0	0.00	0.00
FI	5	30	0	0	0.00	0	0	0.00	0.00
FR	23	168	5	5	2.98	2	3	1.79	0.67
GR	6	55	3	18	32.73	2	11	20.00	4.82
IE	5	46	2	2	4.35	2	2	4.35	3.75
IT	37	214	5	12	5.61	2	3	1.40	0.25
LU	2	17	1	7	41.18	1	7	41.18	22.73
NL	5	36	1	4	11.11	1	4	11.11	0.18
NO	3	15	1	4	26.67	1	4	26.67	23.81
PT	7	61	1	10	16.39	1	10	16.39	25.63
SE	6	47	1	4	8.51	1	1	8.51	4.97
UK	27	211	3	3	1.42	3	3	1.42	1.68

Reported are the number of banks and bank–years, classified by year and country; the number of GOBs and GOB–years, classified by year and country; and the sample equity-weighted average government stake, classified by year and country (weights are computed as the ratio of each bank's book value of equity to the sum of the book value of equity of all banks in the year/country). GOBs are defined in two alternative ways:

GOB   is a dummy variable that equals one if any percentage of the bank's equity capital is held by either a national or local government, and zero otherwise, and

GOB10 is a dummy variable that equals one if either a national or local government holds at least 10% of the bank's equity capital, and zero otherwise.

Table 2.2 Government Ownership Percentage

	Obs.	GOVPERC Mean (St. Dev.)
Entire sample	227	67.62 (36.16)
2000	25	57.35 (41.33)
2001	26	65.41 (37.48)
2002	28	71.31 (36.23)
2003	28	72.73 (35.68)
2004	23	73.45 (35.50)
2005	19	68.32 (36.57)
2006	20	67.05 (36.40)
2007	20	73.15 (32.52)
2008	19	69.14 (34.80)
2009	19	56.73 (35.88)
AT	6	91.63 (12.88)
BE	1	16.87 -
CH	5	64.56 (5.45)
DE	146	74.55 (29.96)
ES	0	-
FI	0	-
FR	5	45.90 (49.38)
GR	18	36.79 (40.76)
IE	2	57.17 (60.56)
IT	12	12.70 (28.22)
LU	7	100.00 (0.00)
NL	4	15.00 (0.00)
NO	4	84.00 (32.00)
PT	10	100.00 (0.00)
SE	4	19.00 (0.00)
UK	3	81.91 (31.32)

Reported are mean and standard deviation (in parentheses) of Government Ownership Percentage (GOVPERC) of GOBs, classified by year and country.

Table 3.1 Sample Descriptive Statistics

| | Banks | Obs. | ISSUER Mean (St. Dev.) | INDIVIDUAL Mean (St. Dev.) | Total Assets (billions of euros) Mean (St. Dev.) | Controls | | |
						CAPITAL Mean (St. Dev.)	PROFIT Mean (St. Dev.)	LOANLOSS Mean (St. Dev.)
Entire sample	214	1,541	4.92 (1.79)	3.93 (1.33)	164.17 (275.40)	5.08% (2.38%)	0.92% (0.65%)	0.53% (1.30%)
2000	158	158	4.75 (1.75)	4.00 (1.28)	99.78 (146.96)	5.09% (2.37%)	1.16% (0.72%)	0.41% (0.38%)
2001	173	173	4.80 (1.80)	3.79 (1.15)	107.32 (168.74)	5.08% (2.18%)	1.06% (0.65%)	0.43% (0.37%)
2002	173	173	4.84 (1.88)	3.78 (1.20)	109.80 (164.45)	5.02% (2.07%)	0.99% (0.60%)	0.53% (0.43%)
2003	171	171	4.97 (1.89)	3.76 (1.23)	118.10 (181.84)	5.07% (2.09%)	1.09% (0.61%)	0.52% (0.42%)
2004	165	165	4.81 (2.04)	3.65 (1.17)	141.17 (216.21)	5.08% (2.24%)	1.06% (0.58%)	0.40% (0.37%)
2005	145	145	5.07 (1.58)	3.58 (1.22)	187.40 (268.93)	5.21% (2.66%)	0.74% (0.46%)	0.34% (0.43)
2006	156	156	4.94 (1.59)	3.60 (1.18)	194.27 (295.89)	5.23% (2.59%)	0.73% (0.43%)	0.32% (0.35%)
2007	154	154	4.64 (1.49)	3.84 (1.19)	223.49 (361.84)	5.16% (2.61%)	0.58% (0.70%)	0.35% (0.39%)
2008	127	127	5.02 (1.69)	4.55 (1.55)	261.65 (419.91)	4.56% (2.56%)	0.69% (0.78%)	0.68% (0.54%)
2009	119	119	5.63 (1.96)	5.18 (1.50)	260.83 (402.18)	5.30% (2.57%)	0.95% (0.60%)	1.56% (4.32%)

Reported are mean and standard deviations (in parentheses) of ISSUER, INDIVIDUAL, and the accounting variables. The variables are defined as follows:

ISSUER   is the average numerical value of the bank's MLTD, S&PLT, and FLT ratings.
INDIVIDUAL   is the average numerical value of the bank's MBFS and FRI ratings.
Total Assets is the bank's book value of total assets in billions of euros.
CAPITAL   is the bank's ratio of the book value of equity to total assets.
PROFIT   is the bank's ratio of the operating income minus operating costs to total earning assets.
LOANLOSS   is the bank's ratio of loan loss provisions to total loans.

Table 3.2 Sample Descriptive Statistics

	External Support (Moody's) Mean (St. Dev.) [Obs.]	External Support (Fitch) Mean (St. Dev.) [Obs.]
Entire sample	1.97 (2.38) [773]	0.79 (0.28) [790]
2000	1.97 (2.40)	0.66 (0.35)
2001	1.08 (1.77)	0.66 (0.35)
2002	1.26 (2.16)	0.79 (0.31)
2003	1.17 (2.02)	0.76 (0.32)
2004	0.00 (0.00)	0.78 (0.31)
2005	1.22 (2.27)	0.78 (0.27)
2006	0.78 (1.70)	0.80 (0.27)
2007	2.57 (1.82)	0.81 (0.27)
2008	3.20 (2.16)	0.86 (0.24)
2009	4.39 (2.51)	0.85 (0.24)

Reported are the mean, standard deviation (in parentheses), and number of observations (in square brackets) of the support variables. The variables are defined as follows:

External Support (Moody's) is the absolute difference between the numerical values of the MLTDS and MBFS ratings, as defined in Table 1.3.

External Support (Fitch) is the bank's bailout probability corresponding to the assigned Fitch support rating.

Table 4 Bivariate Comparison of ISSUER, INDIVIDUAL, Support, Bailout Probability, and Control Variables

	GOB=1	GOB=0	GOB10=1	GOB10=0
		[*t*-statistic]		[*t*-statistic]
ISSUER (1,541 obs.)	3.98	5.09 [-8.848]***	3.76	5.11 [-10.474]***
INDIVIDUAL (1,541 obs.)	4.83	3.77 [11.448]***	4.86	3.78 [10.408]***
SUPPMOODYS (773 obs.)	4.36	1.47 [14.423]***	4.69	1.44 [16.222]***
SUPPFITCH (790 obs.)	0.968	0.760 [7.605]***	0.985	0.759 [8.198]***
Total Assets (billions of euros) (1,541 obs.)	139	169 [-1.520]	140	168 [-1.344]
CAPITAL (1,541 obs.)	3.76%	5.31% [-9.286]***	3.60%	5.32% [-9.995]***
PROFIT (1,541 obs.)	0.53%	0.98% [-9.998]***	0.47%	0.98% [-11.127]***
LOANLOSS (1,541 obs.)	0.76%	0.48% [3.005]***	0.79%	0.48% [3.207]***

Reported are the mean values of ISSUER, INDIVIDUAL, SUPPMOODYS, SUPPFITCH, and the control variables of GOBs and non-GOBs. GOBs are defined in two alternative ways:

GOB   is a dummy variable that equals one if any percentage of the bank's equity capital is held by either a national or a local government, and zero otherwise.

GOB10 is a dummy variable that equals one if either a national or local government holds at least 10% of the bank's equity capital, and zero otherwise.

The value in square brackets is the *t*-statistic for testing the equality of variable means. The variables are defined as follows:

ISSUER   is the average numerical value of the bank's MLTDS, S&PLT, and FLT ratings.

INDIVIDUAL   is the average numerical value of the bank's MBFS and FRI ratings.

Total Assets   is the bank's book value of total assets in billions of euros.

SUPPMOODYS is the absolute difference between the numerical values of the MLTDS and MBFS ratings, as defined in Table 1.3.

SUPPFITCH   is the bank's bailout probability corresponding to the assigned Fitch support rating.

CAPITAL   is the bank's ratio of the book value of equity to total assets.

PROFIT   is the bank's ratio of the operating income minus operating costs to total earning assets.

LOANLOSS   is the bank's ratio of loan loss provisions to total loans.

***, **, and * indicate statistical significance at the 1%, 5%, and 10% levels, respectively.

<h1 style="text-align:center">Table 5.1 Government Ownership, Issuer, and Individual Ratings</h1>

	A ISSUER												B INDIVIDUAL							
	(1)	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**	**(7)**	**(8)**	**(9)**	**(10)**	**(11)**	**(12)**	**(13)**	**(14)**	**(15)**	**(16)**	**(17)**	**(18)**	**(19)**	**(20)**
GOB	-1.116** (0.031)	-	-	-	-1.215** (0.015)	-	-	-	-1.493*** (0.001)	-	-	-	0.553*** (0.002)	-	-	-	0.421*** (0.003)	-	-	-
GOB10	-	-1.291*** (0.003)	-	-	-	-1.407*** (0.001)	-	-	-	-1.704*** (0.000)	-	-	-	0.611*** (0.008)	-	-	-	0.467** (0.011)	-	-
GOBPERC	-	-	-1.981*** (0.007)	-	-	-	-2.137*** (0.004)	-	-	-	-4.412*** (0.000)	-	-	-	3.673*** (0.000)	-	-	-	3.386*** (0.000)	-
GOBPERC^2	-	-	0.373 (0.567)	-	-	-	0.368 (0.531)	-	-	-	2.550*** (0.000)	-	-	-	-3.298*** (0.000)	-	-	-	-3.195*** (0.000)	-
ln(1+GOBPERC)	-	-	-	-2.311*** (0.001)	-	-	-	-2.539*** (0.000)	-	-	-	-2.837*** (0.000)	-	-	-	0.791* (0.090)	-	-	-	0.524 (0.157)
SIZE	-0.649*** (0.000)	-0.651*** (0.000)	-0.656*** (0.000)	-0.655*** (0.000)	-0.649*** (0.000)	-0.651*** (0.000)	-0.655*** (0.000)	-0.654*** (0.000)	-0.413*** (0.000)	-0.417*** (0.000)	-0.429*** (0.000)	-0.434*** (0.000)	-0.318*** (0.000)	-0.316*** (0.000)	-0.313*** (0.000)	-0.311*** (0.000)	-0.321*** (0.000)	-0.320*** (0.000)	-0.317*** (0.000)	-0.315*** (0.000)
LIST	0.576*** (0.002)	0.549*** (0.003)	0.524*** (0.004)	0.525*** (0.004)	0.616*** (0.000)	0.588*** (0.000)	0.559*** (0.001)	0.560*** (0.001)	0.596*** (0.000)	0.567*** (0.000)	0.561*** (0.000)	0.549*** (0.000)	-0.069 (0.475)	-0.059 (0.554)	-0.087 (0.439)	-0.069 (0.533)	0.001 (0.990)	0.009 (0.931)	-0.023 (0.850)	-0.003 (0.976)
GDPCHG	7.142 (0.538)	6.400 (0.591)	6.891 (0.547)	6.864 (0.549)	11.000 (0.324)	10.365 (0.365)	11.111 (0.305)	11.075 (0.308)	12.537 (0.167)	11.615 (0.210)	12.314 (0.168)	12.485 (0.156)	-9.645 (0.216)	-9.329 (0.220)	-9.547 (0.221)	-9.793 (0.216)	-5.746 (0.438)	-5.547 (0.446)	-5.569 (0.448)	-5.886 (0.432)
Controls	N	N	N	N	Y	Y	Y	Y	N	N	N	N	N	N	N	N	Y	Y	Y	Y
Individual ratings	N	N	N	N	N	N	N	N	Y	Y	Y	Y	N	N	N	N	N	N	N	N
Country dummies	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Year dummies	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
No. of bank-years	1,541	1,541	1,541	1,541	1,541	1,541	1,541	1,541	1,541	1,541	1,541	1,541	1,541	1,541	1,541	1,541	1,541	1,541	1,541	1,541
Adj. R^2	0.477	0.484	0.487	0.487	0.493	0.501	0.505	0.505	0.613	0.623	0.620	0.619	0.428	0.429	0.432	0.422	0.486	0.487	0.491	0.481

Reported are the coefficients and p-values based on robust standard errors corrected for clustering at the country level (in parentheses) of OLS regressions. The dependent variables are the average numerical values of the MLTDS, S&PLT, and FLT ratings (ISSUER) and the average numerical values of the MBFS and FRI ratings (INDIVIDUAL), respectively.

The explanatory variables are defined as follows:

GOB　　　　is a dummy variable that equals one if any percentage of the bank's equity capital is held by either a national or local government, and zero otherwise.

GOB10　　　is a dummy variable that equals one if either a national or local government holds at least 10% of the bank's equity capital, and zero otherwise.

GOBPERC　is the ownership percentage of the bank's equity capital held by either a national or a local government.

SIZE　　　　is the bank's log of total assets.

LIST　　　　is a dummy variable that equals one if the bank is listed, and zero otherwise.

GDPCHG　　is the annual growth rate of the GDP of the bank's country.

***, **, and * indicate statistical significance at the 1%, 5%, and 10% levels, respectively.

Table 5.2 Government Ownership, Support, and Bailout Probability

	A				B			
	External Support (Moody's)				External Support (Fitch)			
	(1)	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**	**(7)**	**(8)**
GOB	2.250***	-	-	-	0.106***	-	-	-
	(0.000)				(0.007)			
GOB10	-	2.605***	-	-	-	0.135***	-	-
		(0.000)				(0.000)		
GOBPERC	-	-	11.165***	-	-	-	0.465***	-
			(0.000)				(0.000)	
GOBPERC^2	-	-	-8.811***	-	-	-	-0.347***	-
			(0.000)				(0.008)	
ln(1+GOBPERC)	-	-	-	3.924***	-	-	-	0.185***
				(0.000)				(0.000)
SIZE	0.076	0.092	0.101	0.090	0.092***	0.092***	0.092***	0.092***
	(0.488)	(0.370)	(0.337)	(0.468)	(0.000)	(0.000)	(0.000)	(0.000)
LIST	-0.475***	-0.422***	-0.447**	-0.401**	-0.117	-0.114	-0.116	-0.115
	(0.003)	(0.007)	(0.012)	(0.034)	(0.134)	(0.143)	(0.139)	(0.142)
GDPCHG	-24.554*	-21.737*	-23.472*	-26.135**	0.105	0.294	0.144	0.053
	(0.054)	(0.060)	(0.068)	(0.044)	(0.791)	(0.492)	(0.705)	(0.890)
Country dummies	Y	Y	Y	Y	Y	Y	Y	Y
Year dummies	Y	Y	Y	Y	Y	Y	Y	Y
No. of bank–years	773	773	773	773	790	790	790	790
Adj. R^2	0.559	0.576	0.577	0.553	0.468	0.472	0.469	0.467

Reported are the coefficients and *p*-values based on robust standard errors corrected for clustering at the country level (in parentheses) of OLS regressions. The dependent variables are the absolute difference between the numerical values of the bank's MLTDS and MBFS ratings, as defined in Table 1.3 [External Support (Moody's)] and the bank's bailout probability corresponding to the assigned Fitch support rating, as defined in Table 1.4 [External Support (Fitch)], respectively. The explanatory variables are defined as follows:

GOB — is a dummy variable that equals one if any percentage of the bank's equity capital is held by either a national or local government, and zero otherwise.

GOB10 — is a dummy variable that equals one if either a national or local government holds at least 10% of the bank's equity capital, and zero otherwise.

GOBPERC — is the ownership percentage of the bank's equity capital held by either a national or local government.

SIZE — is the bank's log of total assets.

LIST — is a dummy variable that equals one if the bank is listed, and zero otherwise.

GDPCHG — is the annual growth rate of the GDP of the bank's country.

***, **, and * indicate statistical significance at the 1%, 5%, and 10% levels, respectively.

Table 5.3 Government Ownership, Issuer, Individual Ratings, Support, and Bailout Probability: Robustness Checks

| | ISSUER | | | | | | | | | INDIVIDUAL | | | | | | External Support (Moody's) | | | External Support (Fitch)‡ | | |
| | A — Controls and individual ratings not included | | | B — Controls included and individual ratings not included | | | C — Controls not included and individual ratings included | | | D — Controls not included | | | E — Controls included | | | F | | | G | | |
	GOB	No. of bank-years	Adj. R^2†	GOB	No. of bank-years	Adj. R^2†	GOB	No. of bank-years	Adj. R^2†	GOB	No. of bank-years	Adj. R^2†	GOB	No. of bank-years	Adj. R^2†	GOB	No. of bank-years	Adj. R^2†	GOB	No. of bank-years	Adj. R^2†
1 Ordered logit	-1.650** (0.011)	1,541	0.174	-1.853*** (0.003)	1,541	0.183	-2.503*** (0.000)	1,541	0.257	0.976*** (0.000)	1,541	0.193	0.790*** (0.000)	1,541	0.224	2.396*** (0.000)	773	0.247	-2.013** (0.029)	790	0.315
2 Observations in the bottom decile of bank size in each year excluded	-1.060** (0.046)	1,392	0.457	-1.154** (0.026)	1,392	0.472	-1.435*** (0.001)	1,392	0.597	0.568*** (0.002)	1,392	0.431	0.437*** (0.003)	1,392	0.486	2.263*** (0.000)	732	0.555	0.087** (0.029)	735	0.441
3 2000-2006 subsample	-1.544** (0.021)	1,141	0.519	-1.558** (0.017)	1,141	0.522	-1.778*** (0.001)	1,141	0.651	0.331** (0.049)	1,141	0.441	0.298** (0.030)	1,141	0.483	2.233*** (0.000)	512	0.535	0.147*** (0.007)	502	0.501
4 Standard errors clustered at both the country and the bank level	-1.116** (0.031)	1,541	0.477	-1.215** (0.015)	1,541	0.493	-1.493*** (0.001)	1,541	0.613	0.553*** (0.002)	1,541	0.428	0.421*** (0.003)	1,541	0.486	2.250*** (0.000)	773	0.559	0.106*** (0.007)	790	0.468
5 Using Moody's ratings only	-1.539*** (0.000)	796	0.469	-1.647*** (0.000)	796	0.487	-1.869*** (0.000)	773	0.604	0.478*** (0.000)	1,273	0.496	0.365*** (0.001)	1,273	0.545	-	-	-	-	-	-
6 Using Fitch's ratings only	-1.066 (0.147)	1,308	0.461	-1.176* (0.093)	1,308	0.479	-1.457* (0.057)	1,229	0.627	0.526** (0.038)	1,233	0.400	0.389* (0.063)	1,233	0.459	-	-	-	-	-	-
7 Using S&P's ratings only	-1.136* (0.073)	740	0.495	-1.211** (0.049)	740	0.504	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8 German banks excluded	-0.231 (0.526)	1,244	0.552	-0.361 (0.372)	1,244	0.575	-0.637* (0.070)	1,244	0.675	0.777*** (0.001)	1,244	0.445	0.572*** (0.006)	1,244	0.508	1.363*** (0.000)	597	0.534	0.079 (0.329)	647	0.436

Reported are the coefficients and *p*-values (in parentheses) for the GOB variable in regressions similar to those reported in columns 1 (Panel A), 5 (Panel B), 9 (Panel C), 13 (Panel D), and 17 (Panel E) of Table 5.1 and in columns 1 (Panel F) and 5 (Panel G) of Table 5.2. The dependent variables are the average numerical values of the MLTDS, S&PLT, and FLT ratings (ISSUER, Panels A, B, and C), the average numerical values of the MBFS and FRI ratings (INDIVIDUAL, Panels D and E), the absolute differences between the numerical values of the bank's MLTDS and MBFS ratings, as defined in Table 1.3 [External Support (Moody's), Panel F], and the bank's bailout probability corresponding to the assigned Fitch support rating, as defined in Table 1.4 [External Support (Fitch), Panel G], respectively. The following model specifications are estimated and reported from top to bottom: ordered logit regressions (row 1 –in such a case the *p*-values are based on robust standard errors corrected for clustering at the country level); OLS regressions run on a subsample in which the observations in the bottom decile of bank size in each year are excluded (row 2 – in such a case the *p*-values are based on robust standard errors corrected for clustering at the country level); OLS regressions run on a subsample in which the observations in 2007, 2008 and 2009 are excluded (row 3 – in such a case the *p*-values are based on robust standard errors corrected for clustering at the country level); OLS regressions run on the entire sample with robust standard errors corrected for clustering at both the country level and the bank level (row 4); OLS regressions run on the subsample of Moody's ratings (row 5 – in such a case the dependent variables are the MLTDS ratings (ISSUER) and MBFS ratings (INDIVIDUAL) and the *p*-values are based on robust standard errors corrected for clustering at the country level); OLS regressions run on the subsample of Fitch's ratings (row 6 – in such a case the dependent variables are the FLT ratings (ISSUER) and FRI ratings (INDIVIDUAL) and the *p*-values are based on robust standard errors corrected for clustering at the country level); OLS regressions run on the subsample of Standard & Poor's ratings (row 7 – in such a case the dependent variables are the S&PLT ratings (ISSUER) and the *p*-values are based on robust standard errors corrected for clustering at the country level); and OLS regressions run on a subsample in which the German banks are excluded (row 8 – in such a case the *p*-values are based on robust standard errors corrected for clustering at the country level).

† In the ordered logit specification, the adjusted R^2 is the pseudo-R^2.

‡ In the ordered logit specification, the dependent variable is the Fitch support rating rather than the associated probability.

***, **, and * indicate statistical significance at the 1%, 5%, and 10% levels, respectively.

Table 6.1 Elections, Bank Operating Risk, and Support

	A						B					
	INDIVIDUAL						External Support (Moody's)					
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
GOB×ELECTION$_t$	0.216*	-	-	0.291**	-	0.501***	0.447***	-	-	0.643***	-	0.778***
	(0.066)			(0.038)		(0.005)	(0.002)			(0.001)		(0.000)
GOB×ELECTION$_{t-1}$	-	0.193**	-	0.287**	0.333***	0.531***	-	0.543**	-	0.772***	0.573***	0.901***
		(0.035)		(0.023)	(0.006)	(0.004)		(0.016)		(0.008)	(0.004)	(0.001)
GOB×ELECTION$_{t-2}$	-	-	0.506***	-	0.577***	0.743***	-	-	0.083	-	0.151	0.466
			(0.002)		(0.001)	(0.000)			(0.841)		(0.715)	(0.245)
ELECTION$_t$	-0.112***	-	-	-0.100*	-	-0.121	-0.204**	-	-	-0.187*	-	-0.143
	(0.007)			(0.067)		(0.102)	(0.046)			(0.068)		(0.185)
ELECTION$_{t-1}$	-	0.067	-	0.035	0.050	0.004	-	0.126	-	0.074	0.177	0.131
		(0.380)		(0.692)	(0.570)	(0.972)		(0.201)		(0.456)	(0.133)	(0.319)
ELECTION$_{t-2}$	-	-	-0.082	-	-0.057	-0.094	-	-	0.038	-	0.132	0.079
			(0.113)		(0.394)	(0.282)			(0.717)		(0.307)	(0.572)
SIZE	0.026	0.026	0.041	0.017	0.029	0.019	0.631*	0.589	0.639*	0.596	0.602	0.619
	(0.911)	(0.908)	(0.853)	(0.940)	(0.895)	(0.930)	(0.100)	(0.116)	(0.089)	(0.125)	(0.115)	(0.118)
LIST	-0.258	-0.264*	-0.249	-0.259	-0.249	-0.239	-0.590**	-0.599**	-0.607**	-0.577*	-0.589**	-0.576**
	(0.104)	(0.096)	(0.113)	(0.101)	(0.113)	(0.126)	(0.048)	(0.044)	(0.042)	(0.052)	(0.043)	(0.048)
GDPCHG	-10.552	-10.402	-9.787	-10.445	-9.793	-9.435	-26.919**	-27.233**	-27.263**	-26.478**	-27.083**	-25.744**
	(0.160)	(0.152)	(0.179)	(0.160)	(0.168)	(0.189)	(0.043)	(0.039)	(0.037)	(0.044)	(0.031)	(0.038)
Bank fixed effects	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Country dummies	N	N	N	N	N	N	N	N	N	N	N	N
Year dummies	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
No. of bank-years	1,541	1,541	1,541	1,541	1,541	1,541	773	773	773	773	773	773
Adj. R^2	0.301	0.300	0.305	0.303	0.309	0.317	0.536	0.537	0.533	0.541	0.537	0.542

Reported are the coefficients and *p*-values based on robust standard errors clustered at the country level (in parentheses) of OLS regressions. The dependent variables are the average numerical values of the MBFS and FRI ratings (INDIVIDUAL) and the absolute differences between the numerical values of the bank's MLTDS and MBFS ratings, as defined in Table 1.3 [External Support (Moody's)], respectively.

The explanatory variables are defined as follows:

ELECTION$_t$ is a dummy variable that equals one in a year of national elections in the bank's country, and zero otherwise.

ELECTION$_{t-1}$ is a dummy variable that equals one if national elections occurred in the bank's country in year *t*-1, and zero otherwise.

ELECTION$_{t-2}$ is a dummy variable that equals one if national elections occurred in the bank's country in year *t*-2, and zero otherwise.

GOB   is a dummy variable that equals one if any percentage of the bank's equity capital is held by either a national or a local government, and zero otherwise.

SIZE   is the log of the bank's total assets.

LIST   is a dummy variable that equals one if the bank is listed, and zero otherwise.

GDPCHG   is the annual growth rate of the GDP of the bank's country.

***, **, and * indicate statistical significance at the 1%, 5%, and 10% levels, respectively.

Table 6.2 Elections, Bank Operating Risk, and Support: Robustness Checks

		A INDIVIDUAL				B External Support (Moody's)			
	GOB×ELECTION$_t$	GOB×ELECTION$_{t-1}$	GOB×ELECTION$_{t-2}$	No. of bank-years	Adj. R^2	GOB×ELECTION$_t$	GOB×ELECTION$_{t-1}$	GOB×ELECTION$_{t-2}$	No. of bank-years	Adj. R^2
1 Observations in the bottom decile of bank size in each year excluded	0.222* (0.078)	-	-		0.322	0.455*** (0.006)	-	-		0.529
	-	0.201** (0.036)	-		0.321	-	0.506** (0.028)	-		0.530
	-	-	0.514*** (0.002)	1,392	0.327	-	-	0.063 (0.888)	732	0.525
	0.296** (0.041)	0.297** (0.022)	-		0.324	0.652*** (0.004)	0.739** (0.017)	-		0.534
	-	0.342*** (0.004)	0.587*** (0.001)		0.331	-	0.527*** (0.008)	0.114 (0.801)		0.530
	0.507*** (0.005)	0.541*** (0.004)	0.750*** (0.000)		0.339	0.772*** (0.000)	0.853*** (0.001)	0.417 (0.329)		0.534
2 2000-2006 subsample	0.078 (0.242)	-	-		0.050	0.525** (0.010)	-	-		0.145
	-	0.193*** (0.000)	-		0.057	-	0.236 (0.256)	-		0.133
	-	-	0.072 (0.164)	1,141	0.048	-	-	0.109 (0.374)	512	0.132
	0.163* (0.079)	0.245*** (0.003)	-		0.062	0.699* (0.051)	0.507 (0.188)	-		0.151
	-	0.226*** (0.001)	0.137* (0.050)		0.057	-	0.257 (0.207)	0.184 (0.214)		0.132
	0.247* (0.067)	0.335*** (0.009)	0.255* (0.061)		0.068	0.741** (0.042)	0.572 (0.144)	0.472* (0.079)		0.154
3 Standard errors clustered at both the country and the bank level	0.216* (0.087)	-	-		0.701	0.447*** (0.006)	-	-		0.747
	-	0.193** (0.050)	-		0.701	-	0.543** (0.032)	-		0.748
	-	-	0.506*** (0.004)	1,541	0.703	-	-	0.083 (0.858)	773	0.746
	0.291* (0.054)	0.287** (0.035)	-		0.702	0.643*** (0.003)	0.772** (0.018)	-		0.750
	-	0.333** (0.011)	0.577*** (0.003)		0.705	-	0.573** (0.011)	0.151 (0.746)		0.748
	0.501*** (0.008)	0.531*** (0.008)	0.743*** (0.001)		0.708	0.778*** (0.000)	0.901*** (0.002)	0.466 (0.303)		0.750
4 German banks excluded	0.292 (0.189)	-	-		0.360	0.280 (0.411)	-	-		0.641
	-	0.074 (0.687)	-		0.356	-	0.053 (0.896)	-		0.639
	-	-	0.659** (0.015)	1,244	0.364	-	-	0.686 (0.217)	597	0.642
	0.325 (0.218)	0.161 (0.510)	-		0.360	0.308 (0.419)	0.147 (0.744)	-		0.640
	-	0.231 (0.353)	0.704** (0.024)		0.363	-	0.231 (0.552)	0.715 (0.215)		0.642
	0.440 (0.137)	0.363 (0.278)	0.774** (0.028)		0.370	0.619 (0.119)	0.442 (0.289)	0.929 (0.141)		0.643

Reported are the coefficients and *p*-values (in parentheses) for the GOB×ELECTION$_t$, GOB×ELECTION$_{t-1}$, and ELECTION$_{t-2}$ variables in regressions similar to those reported in Table 6.1. The dependent variables are the average numerical values of the MBFS and FRI ratings (INDIVIDUAL, Panel A) and the absolute differences between the numerical values of the bank's MLTDS and MBFS ratings, as defined in Table 1.3 [External Support (Moody's), Panel B], respectively. The following model specifications are estimated and reported from top to bottom: OLS regressions run on a subsample in which the observations in the bottom decile of bank size in each year are excluded (row 1 – in such a case the *p*-values are based on robust standard errors corrected for clustering at the country level); OLS regressions run on a subsample in which the observations in 2007, 2008, and 2009 are excluded (row 2 – in such a case the *p*-values are based on robust standard errors corrected for clustering at the country level); OLS regressions run on the entire sample with robust standard errors corrected for clustering at both the country level and the bank level (row 3); and OLS regressions run on a subsample in which the German banks are excluded (row 4 – in such a case the *p*-values are based on robust standard errors corrected for clustering at the country level).
***, **, and * indicate statistical significance at the 1%, 5%, and 10% levels, respectively.

Table 7 Elections, Bank Lending, and Bank Performance

	LOANSCHG						PROFITCHG					
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
GOB×ELECTION$_t$	0.029***	-	-	-	0.033***	-	-6.761***	-	-	-	-6.741***	-
	(0.001)				(0.004)		(0.005)				(0.006)	
GOB10×ELECTION$_t$	-	0.028***	-	-	-	0.032**	-	-7.709***	-	-	-	-7.667***
		(0.004)				(0.012)		(0.000)				(0.001)
GOB×ELECTION$_{t-1}$	-	-	-0.000	-	0.012	-	-	-	2.340***	-	0.066	-
			(0.981)		(0.348)				(0.001)		(0.854)	
GOB10×ELECTION$_{t-1}$	-	-	-	0.000	-	0.012	-	-	-	2.601***	-	0.144
				(0.980)		(0.379)				(0.000)		(0.706)
ELECTION$_t$	-0.014**	-0.014**	-	-	-0.016*	-0.016*	-0.442	-0.424	-	-	-0.428	-0.416
	(0.015)	(0.023)			(0.058)	(0.067)	(0.194)	(0.223)			(0.237)	(0.261)
ELECTION$_{t-1}$	-	-	0.001	0.001	-0.005	-0.005	-	-	0.306	0.304	0.040	0.026
			(0.931)	(0.943)	(0.625)	(0.625)			(0.407)	(0.410)	(0.890)	(0.929)
SIZE$_{t-1}$	-0.011***	-0.011***	-0.011***	-0.011***	-0.011***	-0.011***	-0.202	-0.221	-0.177	-0.195	-0.201	-0.220
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.355)	(0.325)	(0.402)	(0.368)	(0.357)	(0.327)
GDPCHG	0.382	0.371	0.403	0.392	0.373	0.361	-21.574	-23.718	-11.041	-12.598	-21.475	-23.654
	(0.614)	(0.621)	(0.585)	(0.593)	(0.624)	(0.632)	(0.502)	(0.470)	(0.676)	(0.640)	(0.502)	(0.469)
LOANS$_{t-1}$	0.004	0.002	0.004	0.002	0.004	0.003	-3.604	-3.877	-3.407	-3.611	-3.602	-3.873
	(0.893)	(0.944)	(0.895)	(0.948)	(0.880)	(0.931)	(0.284)	(0.267)	(0.294)	(0.282)	(0.285)	(0.268)
DEPOSITS$_{t-1}$	-0.005	-0.004	-0.006	-0.005	-0.004	-0.003	-1.202**	-1.224**	-1.262**	-1.263**	-1.206**	-1.227**
	(0.830)	(0.861)	(0.796)	(0.823)	(0.849)	(0.878)	(0.037)	(0.028)	(0.023)	(0.019)	(0.035)	(0.027)
CAPITAL$_{t-1}$	0.426***	0.423***	0.424***	0.423***	0.421***	0.419***	27.353	28.526	25.055	25.776	27.328	28.475
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.304)	(0.289)	(0.327)	(0.319)	(0.305)	(0.291)
Bank fixed effects	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Country dummies	N	N	N	N	N	N	N	N	N	N	N	N
Year dummies	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
No. of bank-years	1,541	1,541	1,541	1,541	1,541	1,541	1,541	1,541	1,541	1,541	1,541	1,541
Adj. R^2	0.145	0.145	0.142	0.142	0.145	0.144	0.003	0.004	-0.005	-0.004	0.001	0.003

Reported are the coefficients and *p*-values based on robust standard errors clustered at the country level (in parentheses) of OLS regressions. The dependent variable are the increase in total loans that year normalized by total assets from the previous year (LOANSCHG), that is, (*Total loans$_t$ – Total Loans$_{t-1}$*)/*Total Assets$_{t-1}$*, and the increase in the profit that year normalized by profit from the previous year (PROFITCHG), that is, (*Profit$_t$ – Profit$_{t-1}$*)/*Profits$_{t-1}$*. The explanatory variables are defined as follows:

GOB is a dummy variable that equals one if any percentage of the bank's equity capital is held by either a national or local government, and zero otherwise.

GOB10 is a dummy variable that equals one if either a national or local government holds at least 10% of the bank's equity capital, and zero otherwise.

ELECTION$_t$ is a dummy variable that equals one in a year of national elections in the bank's country, and zero otherwise.

ELECTION$_{t-}$ is a dummy variable that equals one if national elections occurred in the bank's country in year *t*-1, and zero otherwise.

SIZE$_{t-1}$ is the log of the bank's total assets as of year *t*-1.

GDPCHG is the annual growth rate of the GDP of the bank's country.

LOANS$_{t-1}$ is the bank's ratio of loans to total earning assets as of year *t*-1.

DEPOSITS$_{t-}$ is the bank's ratio of retail deposits to total funding as of year *t*-1.

CAPITAL$_{t-1}$ is the bank's ratio of the book value of equity to total assets as of year *t*-1.

***, **, and * indicate statistical significance at the 1%, 5%, and 10% levels, respectively.