

Working Paper Series

Magdalena Ignatowski, Charlotte Werger and Josef Korte Between capture and discretion – The determinants of distressed bank treatment and expected government support

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Abstract

In this paper, we analyze how sources of political influence relate to the actual regulatory treatment of distressed banks and to the expectation of bank support provided by the government. We assemble a unique dataset that links U.S. banks' sources of influence (e.g., lobbying expenditures, proximity to the relevant legislative committee, prior affiliation with regulatory or government institutions) to bank financial data, actual bank supervisory actions, and market-inferred expected government support. Employing this novel data, we cast some light on how regulatory decision making is affected by these sources of influence. Our findings suggest that banks' influence matters for the regulatory treatment of distressed banks, as well as for the expectation of support regardless of bank distress. Several conditions increase the effectiveness of sources of influence in actual regulatory treatment: Lobbying activities are more effective with increasing lobbying expenditures, deteriorating capital ratios, and with the aid of former politicians.

JEL classification: D72, G21, G28

Keywords: bank regulation, lobbying, bank sources of influence, regulatory discretion, Prompt Corrective Action

Non-technical summary

Since the recent financial crisis, two particular noteworthy phenomena have arisen in the U.S. banking industry. First, we have observed an increase in activities to exert influence on regulation and supervision, such as lobbying, campaign contributions, and wielding political connections, throughout the financial industry. Second, we have seen the financial industry receiving wide-spread support from its regulators and governments in many countries. Moreover, there seems to be strong variation in the way banks were treated: While the regulatory rules and standards were rigorously applied to some banks, more discretion was exercised for others. To better understand the interaction between the financial industry and their regulators and supervisors, we intend to investigate these two phenomena further. We address a series of relevant questions by exploring if and how banks' sources of influence drive the expectation of government support to banks and the actual regulatory treatment of banks once they encounter financial difficulties.

We assemble a unique dataset that links U.S. banks' sources of influence to bank financial data, actual bank supervisory actions, and market-inferred expected government support. Our sample covers about 780 banks for the period 2003Q3-2012Q4 on a quarterly frequency. Our main explanatory variables constitute different sources through which banks can exert influence: past lobbying activities, proximity to the relevant policymakers (i.e., House of Representatives Subcommittee on Financial Institutions and Consumer Credit), and prior affiliation of directors with regulatory or government institutions. To probe regulatory treatment of financially distressed banks, we utilize prompt corrective actions and closure decisions, thereby focusing on a subsample of regulatory undercapitalized banks for which supervisory actions become necessary. According to U.S. legislation, regulators are forced to intervene when a bank's capital falls below certain threshold levels. However, they have discretion to require additional actions, besides the mandatory sanctions and obligations. These additional discretionary actions imposed by the issuance of a Prompt Corrective Action directive (PCA) constitute a more rigorous treatment and a strong negative signal about the bank's financial health. In addition, we employ Fitch support ratings as a proxy for expected government support (regardless of bank distress). According to Fitch, these ratings indicate the conditional probability that a bank will receive external support, given it is in distress.

First, we investigate whether banks' sources of influence reduce the chances of receiving a PCA and provide evidence for the effective impact of these sources on the regulatory treatment of distressed banks. The results show that banks that have lobbied in the past and fall below the undercapitalized threshold have a 12% lower probability of receiving additional discretionary actions. The economic size and significance of banks' influence exertion is similar when we test proximity to relevant subcommittee members and prior regulatory or government affiliations of board members. Then, we examine expected government support and find that past lobbying activities and other sources of influence lead to an improvement of about 1.6 points in the current rating compared to banks that do not engage in influence exertion. Economically speaking, this effect is significant, as researchers at the IMF have shown that banks with better support ratings enjoy an "implicit subsidy" in the form of cheaper funding costs.

The effects we find hold for alternative explanations and specifications, i.e., different timelines, alternative definitions of lobbying activities, and alternative estimation models. For instance, we test for systematic differences between banks with and without political influence that might justify the diverging regulatory treatment. The results of these tests are in line with our initial findings, implying that there are no significant differences which might impact our results. Moreover, we examine whether our results suffer from reversed causality. One could argue that far-sighted banks that anticipate being in financial difficulties soon might prepare for more preferential treatment in distress through influence exertion. We address this argument with different robustness tests, e.g., employing pre-crisis lobbying to estimate regulatory treatment after the onset of the financial crisis and matching banks on their asset quality, and are able to prove to a great extent that our findings are robust to reversed causality concerns.

Several conditions even further increase the effectiveness of banks' influence exertion: The probability of a more preferential treatment in distress increases with lobbying expenditures, but we prove even small amounts to be effective, suggesting that the magnitude of lobbying expenditures is not crucial but rather the existence of a channel between the bank and the lobbied institution. Besides lowering the probability of obtaining additional discretionary measures, we show that lobbying activities decelerate the propensity for additional sanctions with deteriorating capital ratios. Engaging a former member of congress as lobbyist and campaign contributions from the financial industry to legislative committee representatives are found to amplify the favorable treatment. However, there seems to be a limit to the efficacy of influence when it comes to closure decisions. Lobbying and other sources of political influence are no longer effective in averting bank closure when banks are in deep financial distress.

Our findings are instructive for understanding the determinants of regulatory decisions and help to explain the sources of influence that banks can leverage. In light of current global reforms of financial regulation, it is important to be aware that regulatory treatment is not immune to the influence of banks, and that we might expect this influence to even further increase. Thus, our findings might motivate policy makers and legislators to make bank regulation and supervision more robust to influences from the regulated industry in order to avoid regulatory capture dominating regulatory discretion.

1 Introduction

The recent financial crisis has been argued to be instructive and eye-opening on a lot of issues. When it comes to bank regulators' actions, two particularly noteworthy phenomena were observable. The first phenomenon concerns the support that the banking industry received from its regulators and the governments in many countries. Cooperation between regulators and the regulated industry is hardly new and need not be unhealthy to the functioning of both. However, at the height of the financial meltdown in 2008/2009, when regulators saw themselves confronted with unprecedented decision-making on vital issues such as bank closure or bailout and new regulations, a rather interesting turn in this cooperation occurred. Activities intended to influence regulation and supervision, such as lobbying, campaign contributions, or wielding political connections, spread throughout the financial industry. For example, registered annual expenditures for lobbying on financial topics by financial institutions in the U.S. more than tripled from around USD 500 million in 2000 to peak at USD 1,800 million in 2010 (see Figure 1). Moreover, following policies of bank bailouts, the fate of banks and their highly indebted sovereigns have become intricately linked, culminating in the "hazardous tango" described by Merler and Pisani-Ferry (2012) and Acharya et al. (2014).

[Figure 1]

One might possibly call this outright regulatory capture, if it were not for a second noteworthy phenomenon that emerges at a closer look. While regulation and standards were rigorously applied to some banks, more discretion was exercised for others. This becomes most obvious when looking at regulatory intervention and closure decisions. In the U.S., for example, the Federal Deposit Insurance Corporation closed nearly 500 banks through their standard intervention procedure, while hundreds of other banks received capital injections through the Troubled Asset Relief Program (TARP). The conditions were similar in Europe, where regulatory discretion was vastly exercised in bank closure decisions.

These two phenomena warrant more detailed analysis. We address a series of important and novel questions in this paper by investigating if and how banks' sources of influence drive the expectation of government support to banks and the actual regulatory treatment of banks once they encounter difficulties. Can banks leverage lobbying activities or political connections to influence their regulatory treatment when they are in distress? Is there any limit to the impact of these sources of influence? Regardless of bank distress, do banks in general benefit from sources of influence through higher expected support? In other words, we investigate if and under what conditions banks effectively utilize sources of influence on de facto regulatory treatment and expected government support. However, one word of caution: We cannot conclude whether this influence leads to efficient or inefficient results. Thus, we do not address the economic efficiency of regulatory treatment influenced by lobbying or political connections, but examine the effectiveness of several sources of influence on selected regulatory policies. The rationale for the link between banks' influence and regulatory treatment might be found in the self-interest and private incentives of regulators and legislators that induce them to handle certain banks particularly beneficial (e.g., expecting campaign contributions or attractive exit jobs).

The influence of regulated industries on their regulation has been studied in general and the sources of influence have been modeled in the existing literature (e.g., Stigler, 1971; Besley and Coate, 2001; Dal Bó, 2006). However, specific evidence on how individual banks can influence their regulatory treatment is still scarce. While the connection between bank lobbying and TARP capital support decisions has been studied by Duchin and Sosyura (2012), there is not much evidence on individual banks' sources of influence that affect their regulatory treatment or their expected support measures as evaluated by rating agencies.

We employ a unique (and partly novel) dataset of regulatory actions and market-inferred expected bank support, as well as data on bank financial reporting, bank lobbying, and political connections in the U.S. In our empirical setup, we use the latter sources of influence data as explanatory variables to test for their effect on the defacto regulatory treatment of distressed banks, i.e., whether they change the probability that banks which fall below the regulatory thresholds for undercapitalization in the Prompt Corrective Action (PCA) framework receive discretionary treatment. Our tests show that lobbying activities and political connections through proximity to relevant legislative committees and prior regulatory or government affiliation of bank directors lower the probability of obtaining additional discretionary regulatory measures (in addition to the mandatory actions in the PCA framework that become effective automatically). The effects we find hold for alternative explanations and are robust to different variable and model specifications, as well as reverse causality concerns. Several conditions even further increase the effectiveness of banks' influence exertion: The probability of a more preferential treatment when in distress increases with lobbying expenditures. However, we find that even small amounts are effective, which indicates that the mere existence of a channel between the bank and the lobbied institution rather than the magnitude of lobbying expenditures is crucial for having an impact on regulatory treatment. Besides lowering the probability of obtaining additional discretionary measures, we find that lobbying activities decelerate the propensity for additional sanctions with deteriorating capital ratios. Engaging a former member of congress as a lobbyist and campaign contributions from the financial industry to legislative committee members are found to amplify the favorable regulatory treatment. However, there seems to be a limit to the efficacy of influence when it comes to the closure decisions of the most severely distressed banks. When employing a more general measure of preferential treatment regardless of bank distress, expected government support to banks (measured by the Fitch support ratings), we find that both lobbying activities and proximity to relevant legislative committees significantly increase the expectation that a distressed bank will receive a government bailout.

We focus our analysis on the U.S. because of data availability, although our results likely have wider implications. Our findings are instructive for the determinants of regulatory decision making and help to understand the effectiveness of banks' sources of influence in current regulatory practice. Thus, our findings are highly relevant for the institutional setup of bank regulation and should motivate legislators to make bank regulation (and supervision) more robust to influences from the regulated industry, not only in the U.S., but also elsewhere.

The remainder of this paper is organized as follows. In Section 2, we discuss the related literature and how our analysis contributes to it. Section 3 provides background information on our dataset, and summary statistics of the main variables. In Section 4, our core empirical analysis is presented, which is the model relating sources of political influence to de facto regulatory treatment of distressed banks. In Section 5, we evaluate the effects of sources of influence on potential government support as an extension to our core empirical analysis. Concluding remarks are in Section 6.

2 Sources of influence and the political economy of banking - Related literature and contribution

The influence of regulated industries on their regulation has primarily been studied in industries that involve natural monopolies warranting regulation, e.g., utilities (Dal Bó, 2006). The early theory on regulatory influence was based on the observation that - contrary to the predictions by the public interest literature - regulatory outcomes often benefit regulated industries and regulation is an empirical phenomenon even in industries not warranting it by their economic structure. Stigler (1971), Posner (1974), and Peltzman (1976) pioneered the development of the literature has developed theoretical predictions for the sources of regulatory influence and explanations of how firms can influence policy outcomes (e.g., Besley and Coate, 2001; Helpman and Persson, 2001).

Based on the theoretical and empirical literature, we categorize several sources of political influence as follows:

- Financial resources channeled to regulators and policymakers (e.g., in the form of bribes or campaign contributions);
- Revolving doors that are an indirect way of channeling benefits to regulators and policymakers by attractive pre- or post-employment positions in the industry;
- Superior presence of information, as it is facilitated through lobbying activities, for example
- Public pressure or voting resources exercised (e.g., in the form of lobby campaigns) or experienced during specific periods in the election cycle.

This literature offers several findings that are related to ideas of political and regulatory influence by firms and banks and explores the idea that regulation is exposed to (and also a product of) pressures by different private and public interests.

To begin with the sources of influence, Besley and Coate (2001) and Helpman and Persson (2001), among others, have developed theoretical models explaining how firm lobbying or political connections can be effective in influencing policy outcomes. However, there is a paucity of empirical research that tests some of these theoretical implications. Many studies focus on campaign contributions and often report that campaign contributions do not matter to a greater extent (Dal Bó, 2006) and that individuals rather than special interest groups are the main contributors (Ansolabehere et al., 2003). Mian et al. (2013) contradict these findings and suggest that campaign contributions do in fact partly contribute to changes in policy. They find that "campaign contributions from the mortgage industry, and constituent interests, measured by the share of subprime borrowers in a congressional district, may have influenced U.S. government policy towards subprime mortgage credit expansion from 2002 to 2007". Looking at firm lobbying, Chen et al. (2015) find that companies that lobby intensely are more profitable, on average, than those that do not. Kerr et al. (2014) study the determinants and dynamics of firm lobbying and find that over the 1998-2006 period: (i) few firms actually lobby; (ii) lobbying status is associated with firm size; and (iii) lobbying is constant over time. Igan et al. (2012) use U.S. lobbying data from financial firms and focus on the mortgage lending behavior of banks. They find that those banks that intensely lobby on mortgage-related issues have riskier and faster growing loan portfolios and securitize higher portions of these loans.

Several contributions address the outcome that we are interested in: the regulatory treatment of firms and banks, and how this may be the product of a political economy setup. As set out in Kane (1990) and Boot and Thakor (1993), regulators' decisions might be guided by self-interest, inducing them to pursue reputation building or collude with the banking industry. Indeed, Demirgüç-Kunt et al. (2008) show that generous deposit insurance schemes are adopted in countries where the banking sector is dominated by weak banks that benefit from regulatory forbearance and weak market discipline. Barth et al. (2004) argue that government-led banking regulation and supervision is associated with weak bank sectors and that regulatory agencies in many countries are heavily politically influenced. Brown and Dinç (2005) show that shortly before elections banks are less likely to receive government intervention than after elections. In a later paper, Brown and Dinç (2011) extend this finding and state that also macroeconomic factors and bank-sector characteristics play an important role in determining government interventions. With regard to regulatory discretion, Boot and Thakor (1993), Mailath and Mester (1994), Acharya and Yorulmazer (2007), and DeYoung et al. (2013), among others, have modeled implicitly or explicitly why, how, and to what extent regulators use their discretion; however, empirical evidence on the drivers of discretion is scarce.

The two above streams of literature are connected by empirical contributions that investigate the direct link between banks' (as well as other firms') sources of influence and political and regulatory outcomes, particularly individual regulatory treatment. Regarding firms, Faccio et al. (2006) find that politically connected firms

with prior government affiliation of at least one of its top executives or large shareholders are more likely to be bailed out than comparable firms without political connections. Turning to banks, Ramirez and De Long (2001) provide evidence that the U.S. Senate vote on the Glass-Steagall Act of 1933 on universal banking restrictions was significantly influenced by special interest groups (including national banks). Imai (2009) shows that banks with strong political ties were declared insolvent much later than those without political influential power during Japan's financial turbulence of 1999-2002. Behn et al. (2014) examine bailouts of distressed German savings banks. The authors show that distressed banks are less likely to receive public bailouts in the year before elections than in years following elections and in highly competitive election campaigns. Duchin and Sosyura (2012) examine lobbying and campaign contributions to determine to what extent banks are politically connected, and demonstrate that politically connected banks are more likely to receive capital injections under the TARP bailout program. Igan and Mishra (2011) investigate lobbying and congressional voting behavior and find that banks' influential activities are likely to alter legislators' attitudes towards deregulation. Our paper complements this recent literature. In addition to proving that banks can effectively leverage sources influence to gain favorable regulatory treatment, we contribute to the existing literature by testing for conditions that further increase the effectiveness of banks' political activities (e.g., engaging a former member of congress as lobbyist), as well as investigating limits to the efficacy of influence.

Thus far, most of the literature has been focused on particular legislation, macro-level decisions or actual bank bailout decisions during crisis periods (e.g., providing TARP funding or not) when measuring support to the financial industry. While the determinants and rationale for bailout (e.g., Perotti and Suarez, 2002; Gorton and Huang, 2004; Acharya and Yorulmazer, 2008; Acharya et al., 2011; Philippon and Schnabl, 2013) and closure decisions (e.g., Wheelock and Wilson, 2000; Perotti and Suarez, 2002; Kasa and Spiegel, 2008; Cole and White, 2012) have been extensively discussed in the literature, a particular regulatory action in the U.S. banking regulatory arsenal that enables banks to recover quickly from looming undercapitalization (even before bailout or closure decisions become urgent), the Prompt Corrective Action framework, has not been remarkably investigated so far in terms of determinants. Literature on PCA has been focused on the optimal structure of capital regulation (e.g., Peek and Rosengren, 1996; Freixas and Parigi, 2007; Shim, 2011) and on the impact of PCA on capital and risk (e.g., Dahl and Spivey, 1995; Aggarwal and Jacques, 2001), but the application of discretionary provisions implied in the PCA regulation has scarcely been studied.

In this paper, we propose the use of additional discretionary measures within the PCA framework as a proxy for regulators' individual bank treatment to investigate regulatory preferential treatment. In addition, we apply a market-based dataset of bank-specific support ratings provided by Fitch for the identification of expected government support to banks (rather than using industry aggregates, as done, for example, by Igan and Mishra (2011)). Not only is this a novel measure, but it also allows us to look at expected government support to banks over an extended period of time, covering periods before and after the recent financial crisis. Regarding the sources of political interest, we do not intend to analyze the factors that have been shown to drive regulatory policies on a national scale (e.g., election cycles or the state of the economy), but rather more granular sources of influence that banks can directly leverage (e.g., lobbying activities, political connections). Therefore, we assemble a unique dataset that combines banks' various political activities (e.g., lobbying expenditures, proximity to the relevant legislative committee, prior aliation with regulatory or government institutions).

¹To the best of our knowledge, Kocherlakota and Shim (2007) are the only ones to study the usage of PCA versus forbearance. They show that the usage of PCA is determined by the shock to the value of banking assets.

3 Data and variable definitions

3.1 Dataset description

We use a unique dataset composed of three subsets: (i) regulatory intervention data and expected government support for banks; (ii) data on banks' lobbying activities, proximity to policymakers, and prior affiliation of directors with regulatory or government institutions; and (iii) financial data on banks. Each subset is assembled from various data sources and combined into one dataset.

Regulatory intervention data

As a first source for the regulatory intervention data, we identify PCA directives and bank closure decisions as proxies for actual regulatory treatment. The PCA rule book was introduced by the Federal Deposit Insurance Corporation Improvement Act (FDICIA) in 1991 with the goal to prevent supervisory forbearance in dealing with troubled banks. It requires insured depository institutions to take certain actions (e.g., provide a capital restoration plan) as well as stipulates certain provisions (e.g., limits on senior manager compensation and dividends, restrictions on growth and expansion) when a bank falls below predefined regulatory capital ratio thresholds.² The first stage of capital insufficiency is defined by the regulator as "undercapitalized", the second stage is called "significantly undercapitalized", and the third and most severe stage is "critically undercapitalized". While certain actions and provisions are mandatory at each stage and are automatically imposed by operation of law, the regulator has the discretion to impose additional actions (e.g., dismiss board, divest subsidiaries) through the issuance of a PCA directive that is publically announced. Announcements of formal regulatory actions can lead to noticeable market reactions (Jordan et al., 2000). Therefore, imposing discretionary provisions in addition to mandatory actions can send a more substantial negative signal about the bank's financial condition to its stakeholders than only obtaining mandatory actions. We interpret these discretionary provisions as a less preferential treatment not only because of additional (and probably more rigorous) actions but also due to the signaling effect. Data on PCA directives are available on the websites of the four primary regulators, the Federal Deposit Insurance Corporation (FDIC), the Federal Reserve Board, the Office of the Comptroller of the Currency (OCC), and the Office of Thrift Supervision (OTS). For bank closure decisions, we employ the FDIC's publicly available failed bank list to identify which banks have been resolved by the FDIC and to obtain closure dates. We collect data for both types of regulatory actions for the years 2003 to 2012 and manually match it to bank financial data based on bank name and location.

As a second source for the regulatory intervention data, we use Fitch support ratings and support rating changes for all banks listed in the Bankscope database. By composition, these support ratings capture the rating agency's opinion on the likelihood of external support to a bank should this become necessary (Fitch Ratings, 2013). In that regard, support ratings (or "ratings floor") have frequently been used in the empirical literature as a proxy for bailout probability (e.g., Gropp et al., 2006, 2011; Acharya et al., 2014; Mariathasan et al., 2014). A detailed description of the rating composition and the different rating classes is provided in Appendix B.

Banks' sources of influence data

We assemble data from various sources to construct our indicators for bank lobbying activities and political connections to policymakers and regulators. We obtain data on lobbying activities from the reports filed in

²See Benston and Kaufman (1997) and Spong (2000) for a detailed explanation of PCA.

³In the extreme case of a "critically undercapitalized" bank (i.e., tangible equity ratio falls below 2 percent) the bank has to be put in receivership unless the primary regulator with the concurrence of the FDIC determines that other actions would be more appropriate for the purpose of prompt corrective action.

accordance with the Lobbying Disclosure Act (LDA). The Act requires all firms or individuals conducting lobbying activities involving a member of the federal legislative or executive branch or any federal employee to register with the Secretary of the Senate. If that firm or individual spends more than USD 10,000 on lobbying activities in a period, a report has to be filed semi-annually (until 2007) or quarterly (from 2008 onwards) with the Senate Office of Public Records (SOPR). These lobbying disclosure reports contain detailed information on the lobbying expenditure amount, the lobbying firm, and the individual lobbyists, the immediate and ultimate client, whether former members of the Congress were employed by the lobbying firm, as well as the government agencies and institutions that were contacted, and the issues that were discussed. We collect the actual data for the years 1999 to 2012 from the Center for Responsive Politics (CPR), a non-profit and non-partisan organization that assembles the data directly from the SOPR and provides a full lobbying activities database. We restrict the dataset to all lobbying activities that are related to banks and financial markets, i.e., all lobbying activities carried out by or for a financial firm (according to the classification in the relevant reports) or that deal with an issue related to banking and finance. We manually match the lobbying activities to bank financial data based on bank name and location. As firms can lobby either through their in-house lobbyists or can hire external lobbying firms, we identify and match banks from both the clients and lobby firm/registrants information. We use the information on holding structures and conglomerates obtained from the bank financial data (described below) to compute and analyze not only the lobbying expenditures by a bank directly, but also the spending through its holding structure and through related firms, constituting the full lobbying amount that this particular company might benefit from.⁵

Combining the data on lobbying activities and bank financial data enables us to cast light on the details of bank lobbying. Figure 2 displays the share of banks over different asset size classes that have a lobbying history (defined as reporting lobbying expenditures within their conglomerate at some point over the last four years). It is evident that the share is increasing in banks' asset size, with only about 2% of small banks and more than 80% of banks with total assets above USD 50 billion reporting some lobbying in their conglomerate.

[Figure 2]

We use data on the congressional districts of the members of the U.S. House of Representatives Subcommittee on Financial Institutions and Consumer Credit that we connect to the district of incorporation of individual banks as a first proxy for political connections. The subcommittee overseas all financial regulators and matters related to the safety and soundness of the financial system. We obtain the information on subcommittee membership from congressional records available on the website of the U.S. Library of Congress and identify all members starting at the 108th Congress (2003-2004) to the 112th Congress (2011-2012). We identify whether a bank has a subcommittee member in the proximity based on the banks' headquarter locations and the subcommittee members' congressional districts using ZIP Codes as the matching variable.⁶

Figure 3 shows the share of banks that have political connections through a subcommittee member over different asset size classes. This source of influence seems to be more often available to larger banks, of which around 25% have such political connections, while only 8% of small banks do. This correlation with bank asset size might also be explained by the phenomenon that politicians choose their field of specialization to cater

⁴The reporting form provides a list of 76 issues from which at least one has to be selected as area of interest of the lobbying activities by the firm or individual filing the report. We define the following issues as being related to banking and finance: accounting (ACC), banking (BAN), bankruptcy (BNK), financial institutions, investments, and securities (FIN), housing and mortgages (HOU), and minting and money (MON).

⁵Note that we do not attribute lobbying expenditures by banking industry interest groups and associations to individual banks because most of these have dozens or even thousands of member associations (which would result in very low shares of the total lobbying expenditures being assigned to most of them) and it is not conceivable why a general contribution should benefit a particular bank.

⁶The relationship of ZIP Codes and congressional districts is obtained from the website of the U.S. Census Bureau. Note that we only consider ZIP Codes that can be uniquely assigned to one distinct congressional district.

their constituency. Thus, politicians from districts in which large banks are present are probably more likely to choose financial institutions as a field of activity, which would not be an indicator of preferential treatment on its own.

[Figure 3]

Moreover, we also collect data on campaign contributions using the Federal Election Commission political contributions reports provided by the CPR. The campaign contributions data cover contributions from Political Action Committees (PACs; channels for political contributions) to candidates' election campaigns, to political parties, and to other PACs. The data are bi-annual, covering federal elections every second year from 1998 to 2012. The CRP moreover makes a distinction between direct and indirect contributions to candidates. Direct contribution amounts are legally restricted and serve a specific candidate's purpose. Indirect contributions are not subject to contribution limits and are made completely independent of the candidate. We focus on direct contributions and select all PACs that are classified in the CRP database as affiliated with the financial industry. We then aggregate all direct contributions from financial industry PACs to each of the candidates running in the corresponding election cycle and identify all subcommittee members in the subsequent Congress. This gives us an additional dimension to the political connection between the financial industry and their subcommittee members, as we can measure the amounts of campaign contributions from the financial industry.

As an additional proxy for political connections, we employ data on the former employment of the board of directors of publically listed bank holding companies and identify all affiliations with relevant regulators (FDIC, Federal Reserve Board, OCC, OTS), government bodies (Congress, Department of the Treasury, Executive Office of the President) or federal agencies (Federal Financial Institutions Examination Council, Federal Financing Bank, Federal Housing Finance Agency, Securities and Exchange Commission, National Economic Council). We obtain these data from BoardEx. The Securities and Exchange Commission requires all publically listed companies to reveal their directors' employment history over the past five years. Since we cannot evaluate the accuracy and completeness of the information for non-listed companies, we restrict the information we obtain from BoardEx to only listed bank holding companies and match these data manually to top holding company data based on name and location.⁷ We focus on all members of the banks' board of directors who are active from the third quarter of 2003 to the second quarter of 2012.

Bank financial data

We construct the bank financials dataset based on two main sources. On the individual bank level, we assemble data from the Consolidated Reports of Condition and Income (FFIEC031/041), commonly known as call reports. These reports cover financial data that any U.S. bank with a state or national charter is required to file on a quarterly basis. Our sample contains the full set of banks (up to 8,943 individual institutions) and financial data for the period covering the third quarter of 2003 to the fourth quarter of 2012. In a second step, we obtain identifiers for the top holders (i.e., the ultimate owner of any individual bank) from the FDIC's Statistics on Depository Institutions (SDI) to match the individual banks to their respective bank holding companies.

3.2 Variable definitions and summary statistics

Our final sample covers quarterly observations from the third quarter of 2003 to the fourth quarter of 2012. To ensure consistent eligibility triggers for regulatory actions, we only consider bank-quarter observations where banks fall below the "undercapitalized" regulatory threshold at which mandatory prompt corrective actions are imposed on the bank and the regulator can consider issuing additional discretionary actions through a PCA

⁷Note that only bank holding companies (and not banks) are publically listed in the U.S.

directive (and only for banks in the "critically undercapitalized" category as a foundation for closure decisions). We find 782 banks that have ever fallen below the undercapitalized threshold, resulting in 2,849 undercapitalized bank-quarter observations with non-missing information for lobbying activities. Regarding proximity to the legislative committee, we find 792 undercapitalized banks (2,866 undercapitalized bank-quarter observations) with non-missing information. Note that the "undercapitalized" sample is defined as below the first regulatory threshold for undercapitalization and also includes the "significantly undercapitalized" and "critically undercapitalized" subsamples. Regarding the regulatory capital category at which the supervisory institution should consider closing the bank, our sample contains 392 (402) banks ever being "critically undercapitalized", yielding 629 (641) bank-quarter observations with non-missing information for lobbying activities (proximity to the relevant legislative committee). Note that these are rather minor subsamples of the U.S. bank universe consisting of small banks. The prevalence of lobbying activities among smaller banks is low (see Figure 2), however small banks that lobby spend rather significant amounts relative to their size.

Table 1 presents summary statistics on the main variables. Panel A contains the sample of undercapitalized bank-quarter observations. Panel B provides an overview over the sample of bank-quarter observations with Fitch support ratings that we use to estimate expected government support. Table 15 provides detailed descriptions and data sources for each variable and Table 16 shows the correlations between all variables (Appendix A).

[Table 1]

Dependent variables

The PCA indicator variable takes a value equal to 1 if a bank received a PCA directive (respectively if an existing PCA directive has not been terminated) in the next quarter and implies whether the regulator imposed additional discretionary actions (besides mandatory prompt corrective actions) conditional that the bank has fallen below certain capital ratio thresholds. In 15% of undercapitalized bank-quarter observations, a PCA directive has been employed; in 24% of significantly undercapitalized observations, a PCA directive was binding; in 50% of critically undercapitalized observations, banks have been closed or resolved.

Fitch support ratings are constructed to capture the likelihood that a bank will have access to external support (e.g., from the government) should the bank incur distress. The ratings range from 1 (a bank with an extremely high probability of external support) to 5 (a bank with a probability of external support, but it cannot be relied upon). Important for our analysis is to understand that the Fitch support ratings do not fluctuate heavily over time and seem to be rather stable. This practically removes the time-dimension we could explore in our empirical analysis. We find that the 1 and 5 ratings are the most frequent, and the intermediary ratings are much less frequently assigned. The mean value for the Fitch ratings in our sample lies at around 4, as the share of banks assigned with high ratings is larger than those with low ratings (high expected government support).

Main explanatory variables

The past lobbying indicator (past lobbying) indicates whether there have been any lobbying activities in the last four years at the conglomerate level including all entities belonging to a respective holding company.¹⁰

⁸Note that this sample of banks differs substantially from the sample of TARP recipient employed by Duchin and Sosyura (2012). We find only 35 banks that received TARP funding and have been undercapitalized during the financial crisis (only 11 banks when restricting to critically undercapitalized).

⁹Note that in the regulatory treatment sample, we are looking at banks that are undercapitalized and that got into distress. In general, these tend to be small banks. In the expected government support sample, we are dealing with large banks that are rated by Fitch. This might lead to differences in the mean values between both samples.

¹⁰We believe that a longer retrospective view is necessary to account for causality between lobbying efforts and preferential regulatory treatment, although the time span of four years is arbitrarily chosen. We test different definitions of lobbying activities

Lobbying expenditure should not be understood as a mere direct financial transfer from a firm or bank to a regulatory or legislative institution but rather as an indication of an actively maintained liaison between a firm or bank lobbyist and the institution that can be leveraged as a source of influence. Also, regulators or legislators can expect potential benefits in the future from these established contacts (e.g., in the form of further lobbying activities or revolving doors). Therefore, we define lobbying activities as a dummy variable rather than a continuous variable of the financial lobbying expenditures, highlighting the fact that there exists a channel between the bank and the lobbied institution. We find past lobbying history according to our definition at the conglomerate level for 2% of the observations. A smaller fraction of these lobbying activities is conducted with the help of a former politician: around 0.1% of all observations at the conglomerate level report lobbying involving a former member of Congress, 1.8% lobbying without such involvement. Moreover, we vary the aggregation level (top holding level only), time dimension (pre-crisis lobbying activities), and scale (continuous lobbying spent) of lobbying activities in our robustness tests.

With regard to proximity to the relevant legislative committee (subcom rep), we assign a dummy variable equal to 1 to each bank if any entity within the bank's conglomerate is located in the congressional district of a member of the relevant legislative committee. Following this definition, 10 percent of bank-quarter observations are connected to a subcommittee member who is a member of the Subcommittee on Financial Institutions. For robustness reasons, we modify the time horizon of political connections through proximity to the relevant legislative committee (past four years at least).

We define prior regulatory or government affiliations (prior affiliation) as equal to 1 if any member of the board of directors of the top holding company held an office with any relevant regulator, government body, or federal agency and 0 otherwise.¹¹ We obtain only 306 undercapitalized bank-quarter observations because we restrict the board of directors data to publically listed bank holding companies. We find political connections through board prior affiliation for 14% of these observations.

Control variables

We use bank-level controls referring to the absolute size of the bank, which is an important proxy for systemic importance. Note that the average bank size in the sample of undercapitalized bank-quarter observations is rather small with 519 million USD. We furthermore control for asset quality using non-performing loan shares, as a regulator might be more inclined to issue an additional regulatory measure to a bank with a sub-par quality of assets. Return on assets controls for the efficiency of a bank's operations. Since the probability of receiving a more severe treatment increases with declining capital sufficiency, we include the leverage ratio as a capital ratio. We apply the regulatory definition of leverage ratio as used in the PCA rule book and defined as Tier 1 capital divided by average assets. Tier 1 ratio and risk-based capital ratio are included in an extension of the regulatory treatment model. We control for business models using relative shares of deposits and non-interest income (see Brunnermeier et al. (2012) for a discussion of how non-interest income is an indicator for systemic risk). The organizational structure of banks can also matter for receiving regulatory treatment or expected government support, e.g., regulators might treat banks belonging to bank holding companies differently from independent banks. We thus include indicator variables identifying independent banks and banks belonging to global systemically important financial institution bank holding companies (G-SIFIs) as defined by the Financial Stability Board in November 2013. Moreover, we control for the TARP recipients, as the capital injections should have influenced leverage ratios. 12 Lastly, we also include year dummies as well as charter and regulator dummies in certain model specifications to account for unobserved heterogeneity in PCA decisions

for robustness reasons.

¹¹Note that we only consider previous jobs and roles with (given) start or end dates before the start of the bank director role.
¹²TARP recipient status might be also considered as a regulatory outcome variable. When excluding this indicator from our regression, we obtain results similar in economic size and significance.

that might be constant over time, regulators, and bank charters.

4 Sources of influence and regulatory treatment of distressed banks

In the first step of our empirical analysis, we focus on the de facto actions taken by the regulator: PCA and closure decisions. Regarding the PCA decisions, we distinguish between issuing a PCA directive (additional discretionary provisions) and no additional provisions imposed conditional on a capital distress situation that requires prompt corrective actions. In an extension of this model, we also investigate closure decisions and distinguish whether a bank has been closed conditional on whether it has fallen into the critically undercapitalized capital category that requires putting the bank into receivership within 90 days. As the dependent variable, we define a dummy variable that indicates whether a bank receives preferential treatment (i.e., no additional discretionary actions, no closure) and employ a linear probability model¹³ to estimate the probability of regulatory action. Our baseline model for regulatory treatment is depicted in the following equation:

$$(Regulatory\ treatment_{i,t+1} \mid c_{i,t} = 1) = \alpha + \beta \cdot source\ of\ influence_{i,t} + \gamma_t + X_{i,t} + \varepsilon_{i,t}. \tag{1}$$

In model (1), $regulatory treatment_{i,t+1}$ is a dummy variable equal to 1 if bank i receives a PCA directive or if an existing PCA directive is not terminated (is closed or resolved) in year and quarter t+1 (and 0 otherwise). $c_{i,t} = 1$ constitutes the condition that bank i falls into the undercapitalized or even significantly undercapitalized category at which certain mandatory actions and provisions are triggered by the PCA regulation (falls into the critically undercapitalized category) in year and quarter t. The variable of interest is source of $influence_{i,t}$. We identify three possible source of influence: lobbying activities, proximity to the relevant legislative committee, and prior regulatory or government affiliation. For lobbying activities, we define a variable indicating whether bank i, its top holding company, or any other institution belonging to its holding company has ever lobbied for financial issues in the past four years. 14 We expect banks to have close political connections through proximity to legislative decision makers (member of the Financial Institutions and Consumer Credit subcommittee) and board of directors' previous affiliation with regulatory or government institutions. The variable for proximity to the relevant legislative committee takes the value 1 if bank i, its top holding company, or any other institution belonging to its holding company is located in the congressional district of a subcommittee member at time t. The variable for prior affiliation equals 1 if any member of the board of directors of bank i, its top holding company, or any other institution belonging to its holding company at time t has held an office with any relevant regulator, government body, or federal agency prior to time t. γ_t is a time indicator variable for each year. $X_{i,t}$ is a matrix of bank level control variables. $\varepsilon_{i,t}$ is the disturbance term for which we assume standard properties. β is the major parameter to be estimated. Our main hypothesis is that lobbying efforts and closer proximity to legislatively relevant representatives should facilitate receiving favorable treatment. If bank lobbying activities and political connections indeed influence regulatory treatment of a bank once it becomes distressed, we expect a negative and significant coefficient β (i.e., source of influence are expected to decrease the probability of a PCA directive or of being closed).

The model might suffer from endogeneity through omitted variables or reverse causality. We try to exclude omitted variable bias by using sufficient control variables and fixed effects. However, endogeneity might also arise, for example, if banks lobby because they assume to encounter financial problems soon or if representatives join the subcommittee because they know that banks in their congressional district might soon need their help.

 $^{^{-13}}$ We choose a linear model despite the binary structure of the dependent variable due to the incidental parameters problem: Nonlinear models (such as probit and logit) cannot consistently estimate fixed effects and coefficients of control variables in panel datasets with large N (number of groups) but limited time periods. For robustness reasons, we employ a fixed effect logit model as an alternative estimation method.

¹⁴In addition, we explore a variety of alternative measures of lobbying activities for robustness purposes.

While we cannot conclusively rule this out, it does not seem to impair the main result that lobbying activities or political connections are considered (and prove to be) effective sources of influence. Furthermore, this endogeneity problem is reduced if the sample is limited to banks that are in financial distress as defined above. When doing so, banks that are not undercapitalized and hence might have decided to abstain from lobbying in anticipation of this (as would be essential to the reverse causality argument), are removed from the sample. If we suspect reverse causality, our estimates would be biased upwards (i.e., we would suspect $Cov(X, \epsilon) > 0$) since regulatory treatment could be positively predictive of lobbying activities. Nevertheless, to account for reverse causality concerns, we conduct a series of robustness tests varying the time horizon of the lobbying activities and political connection variables and matching the sample of banks on their asset quality.

Results for the baseline model

Table 2 shows the baseline estimation results for the probability of receiving a PCA directive employing lobbying activities as the source of influence. Our main variable of interest, past lobbying, is an indicator variable that takes the value 1 if there have been any lobbying activities at the conglomerate level in the past four years and 0 otherwise. Panel A shows the results of all tests on the sample of undercapitalized bank-quarter observations (including significantly undercapitalized and critically undercapitalized subsamples). Panel B shows the results for the significantly undercapitalized subsample (including the critically undercapitalized subsample). We calculate simple correlations between the lobbying indicator and the probability of a PCA directive (column 1). The results indicate that past lobbying has a negative (decreasing) and at least at 5% level significant effect on the probability of receiving additional measures given that the bank is in financial distress. When adding time-varying bank control variables and year dummies (column 2), the coefficients for past lobbying become highly significant. 16 The economic size of the effect is considerable: Banks that have lobbied in the past and fall below the undercapitalized threshold have a 12% lower probability of receiving additional discretionary provisions; when falling below the significantly undercapitalized threshold, they have an 18% lower probability. For robustness, we add sets of dummy variables that might determine the regulatory treatment in the next two model specifications. First, time-invariant heterogeneity across regulators who are the ultimate decision makers when it comes to PCA decisions might affect regulatory treatment, e.g., one regulator might always issue additional discretionary actions when a bank becomes undercapitalized. Hence, we add fixed effects for the four primary bank regulators (column 3). Second, state-chartered banks are also supervised by state regulators in addition to federal supervision. Regulatory decisions at the federal level might turn out differently if a state regulator is involved (Agarwal et al., 2014). In column 4, we add dummy variables for the bank charter type to control for state-regulated banks. Our results hold in both model specifications.

[Table 2]

Table 3 presents the results of the baseline estimations for PCA decisions using proximity to the relevant legislative committee as the channel for banks' influence exertion. The main explanatory variable, *subcom rep*, equals 1 if the bank or any entity within the bank's conglomerate is located in the congressional district of a member of the Subcommittee on Financial Institutions. The results that we obtain for the proximity to the relevant legislative committee are similar to the results for lobbying activities in direction and significance. When considering the specification with bank controls and year dummies, we find that the proximity to relevant subcommittee members lowers the probability of receiving additional discretionary provisions by 4% in the case of undercapitalization and by 10% when falling below the significantly undercapitalized threshold.

¹⁵The OLS estimator converges to the true value β if and only if the covariance between the covariates X and the error term ε equals zero, i.e., $plim(\hat{\beta}) = \beta + \frac{Cov(X, \varepsilon)}{Var(X)}$. If $Cov(X, \varepsilon) > 0$, then $plim(\hat{\beta}) > \beta$ and we would thus be overestimating the true effect.

¹⁶Note that we include year fixed effects instead of quarter fixed effects to avoid over-specification of the model.

[Table 3]

We repeat our baseline estimations for the third channel of banks' influence: previous regulatory or government affiliations of the board of directors. The results for these estimations are shown in Table 4. Prior affiliation takes a value equal to 1 if any director of the top holding company has ever held office with a regulatory or government institution. Since we only gather data for bank directors at publically listed bank holding companies due to transparency obligations and data quality, we reduce the number of undercapitalized bank-quarter observations to only 306 (only 181 significantly undercapitalized observations). The results for prior regulatory or government affiliations are in line with the results for lobbying and proximity to decision makers as sources of influence: Banks that can leverage prior regulatory or government affiliations of their board members have a 14% to 16% lower probability of receiving additional discretionary provisions. Despite the small sample size, the estimation results for prior affiliation are significant for all model specifications in the undercapitalized sample. In the significantly undercapitalized sample, the estimation results become insignificant when further dummy controls are added to the model which can be attributed to the small number of observations and relatively large number of indicator variables.

[Table 4]

In sum, we find evidence for the existence of effective channels for banks' influence exertion and for the impact of these sources of influence on the regulatory treatment of distressed banks.

Robustness tests for alternative explanations and specifications

To account for robustness of our baseline results, we test our PCA decision model for alternative explanations and different specifications. Table 5 reports the results of the robustness tests. Panel A shows the robustness results for the regressions with lobbying activities as the source of influence. Panels B and C report the results for proximity to the relevant legislative committee and prior regulatory or government affiliations as the sources of influence, respectively. All robustness tests are conducted on the sample of undercapitalized bank-quarter observations, including bank control variables and year dummies.

As there might be alternative explanations for our findings, we test our models using different sample definitions. If not explicitly stated, the results discussions relate to all three sources of influence employed in the baseline estimations. First, we might find a difference in regulatory treatment because lobbying and non-lobbying banks (banks with and without proximity to the relevant legislative committee or prior board affiliations) are systematically different, especially regarding their condition and capitalization before they entered capital distress. This might encourage different expectations in terms of their long-term viability and potential to emerge from capital distress without any additional provisions. To test for potential systematic differences, we match lobbying and non-lobbying banks (banks with and without proximity to the relevant legislative committee or prior board affiliations) on a two-year moving average leverage ratio and the remaining control variables using propensity score matching (up to 20 nearest neighbors within a caliper of 0.0001) and rerun our models with the matched sample (column 1).¹⁷ The coefficients of the main explanatory variables in the regression with the matched samples are similar in economic size and statistical significance to the baseline results.

Second, banks might have exited the sample through closure or acquisitions, making the urgency for the regulator to intervene obsolete. To account for this, we exclude bank-quarter observations where banks exit the sample in the next quarter. The results of the estimations accounting for bank exits (column 2) are consistent with our baseline results.

¹⁷With this methodology we are able to match 47 non-lobbying banks to samples of banks that do not lobby. Applying the matching procedure for proximity to the relevant legislative committee, we find 292 matches; for prior board affiliations 38 matches.

Third, regulators can also issue other enforcement actions (i.e., cease and desist orders, capital directives, other formal agreements or consent orders) when banks get into financial difficulties and therefore reduce the need for additional discretionary actions. Although these enforcement actions are made public (exactly like PCA directives), they usually represent a more preferential treatment than the additional discretionary actions contained in PCA directives.¹⁸ Therefore we expect the signaling effect to be more severe for PCA directives than for any other enforcement action. We control for other enforcement actions by including a dummy variable that identifies all bank-quarter observations in which other enforcement actions have been issued or were still valid, and rerun our estimations (column 3). We find coefficients for all three sources of influence similar in direction, size and significance as the coefficients of our baseline estimations, meaning that even when controlling for other (and less severe) enforcement actions, bank's influence exertion significantly decrease the probability of severe additional actions.

Fourth, a further argument that might bias our results is that pressure on the regulator to intervene might have increased during the financial crisis, reducing his leeway for lenient regulatory treatment. When restricting the dataset to all bank-quarter observations after the outbreak of the financial crisis, i.e., starting with the third quarter of 2008 (column 4), we find coefficients similar in economic size, and significance as the baseline models with all observations from the third quarter of 2003 to the fourth quarter of 2012. In this context, the question might arise whether there is a difference in the effect of bank influence exertion between the pre-crisis period and the crisis period. We do not obtain reasonable results for our baseline model with lobbying activities as the source of influence for the pre-crisis period (2003Q3-2008Q2) due to the low number of overall observations, PCA issues, and past lobbying activities; yet, we find a significant effect when rerunning the model with proximity to the relevant legislative committee as the source of influence for the pre-crisis period, which is in line with the results for the crisis period. When exploring the effect of sources of influence on the expectation of government support, we apparently find no striking difference between the period before and after the onset of the financial crisis. Therefore, we assume that banks' influence has already been effective before the financial crisis, although distressed bank cases where influence exertion would have been useful were rare.

So far we have used a linear probability model for our estimations. Nonlinear models such as probit or logit would also be suitable to account for the binary nature of our dependent variable. We employ a fixed effects logit model as alternative estimation method to account for this concern. The results are reported in column 5 and are in line with our estimation results for the linear model in terms of significance and direction.

We also test our measures for alternative variable definitions. First, instead of capturing sources of influence at the conglomerate level (that might also include other entities not related to the respective bank), we only consider lobbying activities and proximity to the relevant legislative committee at the top holding company level (past lobbying top and subcom rep top). Likewise, the results are comparable to the baseline model when using this different aggregation level (column 6).

Finally, we test both sources of influence, lobbying activities and proximity to the relevant legislative committee, simultaneously in one model (column 7 in Panel A) to rule out that both sources cancel each other. We find both sources to be significantly effective in decreasing the probability of discretionary PCA actions when considered simultaneously. Apparently, the decreasing effect of lobbying activities seems to be larger than the effect of proximity to the relevant legislative committee.²¹

[Table 5]

¹⁸For example, capital directives imply the order to increase capital to a certain level without further consequences, while cease and desists orders usually prohibit certain activities that are deemed suspect. On the contrary, PCA directives can constitute a real punishment for banks due to dismissal of boards or divestment of business units.

¹⁹For brevity, we do not report the results of these tests in Table 5.

²⁰Compare to Table 13 in Section 5.

²¹Note that due to little overlap between both sources of influence, constructing a interaction term is not meaningful.

Taken together, the effect of banks' influence exertion on the probability of obtaining a PCA directive is robust to a variety of alternative variable and model specifications and holds for different sample splits and alternative explanations.

Robustness tests accounting for reverse causality

As previously mentioned, our model might suffer from endogeneity caused by reverse causality (e.g., banks might lobby because they might be in distress soon). Even though this does not impair our main result that lobbying activities or political connections are effective sources of influence, we conduct several robustness tests to account for reverse causality concerns. The results are reported in Table 6. We employ lobbying activities as the source of influence in Panel A and proximity to the relevant legislative committee in Panel B. All tests are conducted on the sample of undercapitalized bank-quarter observations, including bank control variables and year dummies.

The first concern is that far-sighted banks that anticipate being in financial difficulties soon or make some highly risky investments that might lead them to the edge of solvency might prepare for more preferential treatment in distress through lobbying. To address this argument, we identify lobbying activities during the period before the financial crisis (pre-crisis lobbying) and combine it with regulatory treatment after the onset of the financial crisis (2008Q3-2012Q4) assuming that banks would not have been able to predict future financial turbulence (not to mention the financial crisis itself). We find results consistent with our previous findings when incorporating the larger time lag between influence exertion and regulatory treatment (column 1 in Panel A). A similar concern is that legislators might be prone to join the Subcommittee on Financial Institutions if they know (or at least anticipate) that banks in their congressional district might need their support soon. As such behavior would typically happen at short notice, we control for subcommittee representation and bank location in the congressional district of a subcommittee member for a longer time horizon, i.e., four subsequent years at least (subcom rep for 4 years). The results are in line with our baseline estimation when employing a more conservative definition for proximity to the relevant legislative committee, however at a lower significance level (column 1 in Panel B).

We conduct a further test to ensure that lobbying and non-lobbying banks (banks with and without political connections to subcommittee members) do not systematically differ in their asset quality. Banks that hold risky portfolios or make risky investments and thus increase their likelihood to fail might be more prone to lobby or leverage a subcommittee member. Hence, differences in asset quality might amplify the reverse causality problem. Although we control for asset quality by the non-performing loan ratio in all model specifications, we perform an additional test matching banks with and without influence exertion on the current value and a (past) two-year moving average of the non-performing loan ratio using propensity score matching (up to 20 nearest neighbors within a caliper of 0.0001) and rerun our models with the matched sample (column 2).²² The coefficients of the main explanatory variables in the regression with the matched samples are similar in economic size and statistical significance to the baseline results. As an additional test, we combine both approaches, meaning that we match banks on their asset quality using pre-crisis lobbying as the treatment and rerun the regression on the undercapitalized sample after the onset of the financial crisis. The assumption that banks could not have different anticipations about their future financial state, which would explain lobbying and non-lobbying behavior, should be very stringent in this matched sample. The results in this specification hold and are in line with previous results, indicating that our findings cannot be caused solely by the reverse causality problem.

[Table 6]

²²We are able to match 54 non-lobbying banks to samples of banks that do not lobby. Applying the matching procedure for proximity to the relevant legislative committee, we find 203 matches.

Thus, we are able to prove to a great extent that our findings are robust to reverse causality concerns.

Conditions for effectiveness

In this section, we investigate whether certain conditions exist, which alter or even increase the effect of banks' sources of influence. First, we want to explore how the effect of lobbying on preferential regulatory treatment interacts with different lobbying expenditures (Table 7). We construct a continuous lobbying variable that proxies lobbying intensity (natural logarithm of total lobbying expenditures aggregated over all entities within the conglomerate over the past four years) and replace the indicator lobbying variable with this continuous variable. We find that with rising lobbying expenditures, the probability of receiving additional discretionary provisions decreases (column 1). As a robustness test, we scale lobbying expenditures by total assets of the bank (column 2).²³ The results of this model specification are in line with the previous result for lobbying intensity. Does the size of lobbying expenditures matter to a great extent; more precisely, are only large amounts effective? To investigate this question, we split the sample of lobbying banks into banks with small (below 100,000 USD at the conglomerate level over the past four years) and large lobbying expenditures (above 100,000 USD at the conglomerate level over the past four years) and rerun our model specification with the indicator lobbying variable (past lobbying) separately for small and large lobbying expenditures. The results show that both lobbying with rather small and rather large expenditures is effective in decreasing the probability of additional discretionary actions in distress. This supports our presumption that the magnitude of lobbying expenditures is not crucial but rather the fact that there is a channel between the bank and the lobbied institution that can be leveraged in case of distress.

[Table 7]

Second, we test whether there is any interaction effect with the financial health of banks. The results are shown in Table 8. Panel A shows the tests with lobbying activities as the source of influence. In Panel B, we employ proximity to the relevant legislative committee as the source of influence. Note that we do not repeat the regressions for the prior regulatory or government affiliation variable due to the low number of observations. The tests are conducted on the sample of "undercapitalized" bank-quarter observation, including bank control variables and year dummies.

Regarding the financial health of banks, we investigate whether the regulator's propensity to enforce additional actions with decreasing capital ratios is mitigated by influence exertion. We supplement our model with the interaction term $source\ of\ influence_{i,t}*capital\ ratio_{i,t}$, employing three different capital ratios: leverage ratio (column 1), Tier 1 ratio (column 2), and risk-based capital ratio (column 3). If banks' sources of influence indeed counterbalance the propensity of additional actions with deteriorating capitalization, we expect a positive and significant coefficient on the interaction term. Throughout all specifications, capital ratios are significant drivers of additional regulatory actions. Looking at the stand-alone source of influence variables (past lobbying and $subcom\ rep$), we find, as expected, negative and highly significant coefficients. For lobbying activities as the source of influence, the coefficients of the interaction terms are positive and significant, suggesting that banks' lobbying efforts in fact moderate the increasing propensity for additional actions with decreasing capital ratios. Comparing the absolute values of the coefficients for capital ratios with the interaction terms, the interaction term coefficient is always smaller than the stand-alone coefficient. This means that for banks that have lobbied, the probability of obtaining a PCA directive still increases with declining capital levels, however at a much slower pace than for banks without lobbying activities. Looking at proximity to the relevant legislative committee as the source of influence, we only find a slightly significant coefficient (at the 10% level) for the interaction

²³Since total lobbying expenditures of the conglomerate over the past four years can be larger than total bank assets, we restrict the ratio of lobbying expenditures to total assets to 1.

term with leverage ratio, but not for the interaction terms with the other capital ratios. This indicates that subcommittee members do no not mitigate the propensity of more severe measures with decreasing financial state of a bank.

[Table 8]

Third, other conditions related to the sources of influence might drive their effectiveness. In Table 9, we test two hypotheses: (i) lobbying may be more effective when it is conducted by former politicians, who might have personal connections to decisions makers, and (ii) subcommittee members may be more prone to preferential regulatory bank treatment when they received larger campaign contributions from the financial industry during their election period. We analyze the first hypothesis by including two variables: one for the lobbying activities involving a former member of Congress and the other one for the lobbying activities not involving a former member of Congress. We are interested in the difference between these two variables to see whether the effect on regulatory treatment is considerably larger if lobbying is conducted on behalf of a former member of Congress. We find that both lobbying activities significantly decrease the probability of receiving additional discretionary actions, but the relative size of the coefficients suggests that the lobbying activities involving a member of Congress are more effective (although the p-value does not hint to a significant difference between the two coefficients). This result suggests that personal networks and connections can exacerbate the effect of lobbying. Regarding the second hypothesis, we replace the indicator variable for proximity to the relevant legislative committee with a continuous variable measuring the amount of campaign contributions from the financial industry (average sum of contributions received by subcommittee members from congressional districts of all entities within a bank's conglomerate). We find a negative and significant coefficient for financial industry PACs to subcom rep, suggesting that with increasing contributions from financial institutions, the effectiveness of proximity to legislators increases.

[Table 9]

Taken together, our results show that several conditions amplify the effectiveness of bank's political influence. Lobbying activities not only lower the probability of receiving additional actions when encountering financial difficulties, they also decelerate the propensity for additional actions with deteriorating financial health. Moreover, lobbying can be more effective when it involves a former Congress member. Proximity to the relevant legislative committee is more effective the more campaign contributions the subcommittee members received from the financial industry.

Limits of influence

So far we have shown that banks' influence exertion has an effect on obtaining additional discretionary provisions when banks breach the threshold for the undercapitalized regulatory category. However, we want to investigate whether limits to this influence exist. One potential limit is the severity of capital insufficiency. The PCA framework stipulates that banks that fall into the most severe critically undercapitalized regulatory category should be closed or resolved within 90 days. We test banks' political influence on these closure decisions (Table 10). Panel A shows the results of regressions with lobbying activities as the source of influence, while we employ proximity to the relevant legislative committee in Panel B. Note that we do not repeat the regressions for the prior regulatory or government affiliation variable due to the low number of observations. We find that throughout all model specifications, banks' influence has no significant impact on the closure decisions of critically undercapitalized banks, although a negative coefficient in most specifications points to a decreasing effect on closure probabilities.

[Table 10]

To rule out that this "non-finding" is driven by the structure of the data, we draw random samples from the subsample of critically undercapitalized bank observations as well as split the sample by existing PCA directives, other existing enforcement actions, primary regulator, and bank charter type and repeat the estimations on closure decisions. In all subsample specifications, we do not find a significant negative effect on closure decisions, i.e., decreasing the probability of bank closure.²⁴ Although bank sources of influence do not apparently reduce the probability of closure, it might well be that they prolong the duration until closure as regulators might give critically undercapitalized banks time to recover. Hence, we are interested in the length of time until a bank is closed or until it gets out of distress, i.e., the maximum number of quarters being critically undercapitalized. A standard method for analyzing duration data is to employ a hazard model. We use a Weibull distribution for the hazard function as we assume that the hazard of closure increases with distress duration. Table 11 shows the results of this estimation with lobbying activities as the source of influence in Panel A and proximity to the relevant legislative committee as the source of influence in Panel B. In most specifications, the estimated coefficient is negative and the hazard ratio below 1, indicating that sources of influence decrease the hazard of closure in any given period of time and prolong the duration until closure. However, again the estimates are not significant in any of the specifications.

[Table 11]

In sum, these results suggest that although banks can induce a preferential treatment at the onset of financial difficulties, they cannot apparently avert bank closure when they are in deep financial distress.

5 Sources of influence and expected government support

We next explore the effect of lobbying and proximity to the relevant legislative committee on expected government support. For this purpose, we estimate variations of the following model:

$$FSR_{i,t} = \alpha + \beta \cdot source \ of \ influence_{i,t} + \gamma_t + X_{i,t} + \varepsilon_{i,t}$$
 (2)

In model (2), $FSR_{i,t}$ is the Fitch support rating of bank i at year and quarter t. A support rating of 1 indicates the highest probability, while a rating of 5 represents the lowest probability of external support. The variable of interest is again $source\ of\ influence_{i,t}$, which is a variable either indicating whether bank i (or any entity in the respective conglomerate) has lobbied in the past four years, or whether the subcommittee member in the respective congressional district of the financial institution is a member of the Financial Institutions and Consumer Credit subcommittee. We explore a variety of alternative measures of lobbying activities for robustness purposes as well. γ_t is a time indicator variable for each year. $X_{i,t}$ is a matrix of bank level control variables. $\varepsilon_{i,t}$ is the disturbance term for which we assume standard properties. β is the parameter of interest to be estimated. If banks can indeed leverage lobbying activities and proximity to decision makers to increase external support probability, as we would hypothesize, we expect the coefficient β to be negative and significant.

Results for the baseline model

Table 12 contains the estimation results for the model we use to explain the effect of sources of influence on the Fitch support ratings. In Panel A, the source of influence is past lobbying activities, while in Panel B we focus on the subcommittee member in the congressional district. To make sure that we are not measuring any

 $^{^{24}}$ We do not report the results of these robustness tests for brevity.

"too-big-to-fail" effect in our sample, we exclude bank holding companies as well as banks that belong to bank holding companies that have been identified as "systemically important financial institutions" by the Financial Stability Board. Column 1 reports the results of a simple correlation between the source of influence variable and the Fitch support rating. We then step-wise add control variables and year dummies (column 2), regulator dummies (column 3), and bank-charter dummies (column 4) to control for any other factors that can affect our dependent variable.²⁵

In Panel A, our main variable of interest is past lobbying, an indicator variable that takes the value 1 if any entity belonging to the bank's top holding company has lobbied in the past four years. The results show that the effect of lobbying activities on the Fitch support rating is significant, regardless of the controls or dummies employed. Note that the negative coefficient corresponds to a reduction in the Fitch support rating, which implies an increase in the likelihood of expected government support. Throughout the different model setups, we find that past lobbying activities lead to a reduction of about 1.6 points in the current rating compared to banks that do not engage in lobbying. Economically speaking, this effect is significant, as Ueda and di Mauro (2013) show that banks with better support ratings enjoy an "implicit subsidy" in the form of cheaper funding costs. To be more precise, they claim "a one-unit increase in government support for banks in advanced economies has an impact equivalent to 0.55 to 0.9 notches (on a numerical scale from D to AAA) on the overall long-term credit rating at the end-2007", and that "the effect increased to 0.8 to 1.23 notches by the end-2009". The authors go as far as translating the advantage in long-term ratings to a funding advantage in basis points of CDS spreads. For this calculation, we refer to the full paper. In short, the take away is that a reduction in Fitch support ratings should result in lower funding costs, i.e., lobbying and political connections can potentially indirectly reduce funding costs for banks via these support ratings. However, it is important to understand that our sample mostly consists of banks with a 1 or 5 rating. Given this fact and the resulting almost abnormal distribution of the ratings, the jump might actually imply the difference between a bank that has no support and a bank with almost guaranteed support, rather than an evaluation around the mean.²⁶

Panel B shows the same results for the presence of the subcommittee member in the congressional district of the bank. The proximity to politicians leads to a reduction of about 1.1 points in the Fitch support rating, i.e., an increase of support. In reality this corresponds to a significant jump in the Fitch support rating.

[Table 12]

Robustness tests

In order to test the robustness of our baseline results for model (2), we explore the effect of alternative measures of lobbying activities, as well as an alternative estimation procedure and a subsample restricted to the post-crisis time period. Table 13 presents the corresponding results. Panel A shows the results of robustness tests for the regressions with lobbying activities at the conglomerate level as the source of influence, while Panel B reports the robustness results for proximity to the relevant legislative committee as the source of influence. In column 1, we present the results from a matching procedure using propensity score matching to estimate the effect of lobbying activities and subcommittee member proximity on the Fitch support ratings.²⁷ We obtain results when employing the matched sample that are in line with the baseline results, i.e., the sources of influence significantly reduce the support rating and therefore increase the likelihood of support. We then investigate whether our results are potentially driven by increased pressure on regulators and legislators during the financial crisis to

 $^{^{25}}$ We do not repeat this model with the prior affiliation explanatory variable due to the limited amount of observations resulting from combining the BoardEx data with the Fitch support ratings.

 $^{^{26}}$ In order to account for the binary distribution of the Fitch support ratings, we also utilize an alternative estimator such as the logit estimator (after transforming the ratings to a 0-1 scale). This does not change the results at all.

27With this methodology we are able to match 180 non-lobbying banks to samples of banks that do not lobby and the same

amount of matches for the proximity to the relevant legislative committee sample.

intervene in troubled banks (columns 2 and 3). We rerun the estimation on a pre-crisis sample (2003Q3-2008Q2) and compare it to estimations using a sample after that Lehman collapse (2008Q3-2012Q4). Again, we find that the effect does not change for the lobbying variable, nor for the subcommittee variable.

We also test whether our results hinge on the definition of our lobby and subcommittee variables. We therefore explore alternative specifications in which we vary the aggregation level (conglomerate vs. top holding level) and scale (continuous vs. dichotomous) as we did in the regulatory treatment robustness tests. The results in columns 4-6 in Panel A confirm that our results are robust for alternative specifications of the lobby variable. For the alternative definition of the subcommittee variable, we find that proximity to decision makers of all entities of the conglomerate rather than only of the top holding company is important, as the alternative definition of our variable (column 4 in Panel B) does not seem to be significant anymore.

[Table 13]

Conditions for effectiveness

In Table 14, we extend upon our baseline results for model (2) and explore again whether lobbying with the aid of a former politician (Congress member) becomes more effective and whether campaign contributions increase the benefit of having close proximity to decision makers. In column (1), the coefficient for lobbying with a former Congress member; the size of the coefficients indicates that lobbying with a former Congress member becomes almost twice as effective. Our results show that this difference is significant (p-value < .000). This is in line with our earlier findings. We repeat the exercise of adding campaign contributions data to our subcommittee variable and only present the interaction term (column 2). The interaction term suggests that if candidates received relatively large campaign contributions from the financial industry, the beneficial effect of proximity to decision makers becomes stronger.

[Table 14]

6 Conclusion

In this paper, we provides evidence that banks can effectively leverage sources of influence such as lobbying activities or political connections to gain favorable regulatory treatment when undercapitalized as well as to increase the likelihood of receiving government support in case of distress. Our results are robust to a variety of alternative variable specifications, different sample splits, alternative explanations, as well as reverse causality concerns. We find evidence on conditions that determine the effectiveness of these sources of influence. Increasing lobbying expenditures raise the probability of preferential regulatory treatment, but even small lobbying expenditures prove to be effective. Besides lowering the probability of receiving less beneficial treatment, we find that lobbying activities decelerate the propensity for additional discretionary measures with deteriorating capital ratios. Lobbying becomes more effective by involving former politicians as lobbyists. The effectiveness of proximity to the relevant legislative committee increases with the amount of campaign contributions from the financial industry that elected legislators receive. However, there seems to be a limit to the efficacy of political influence when it comes to the closure decisions of the most severely distressed banks.

Our findings are instructive for the determinants of regulatory decisions and help to understand the sources of influence that banks can leverage. However, we want to point out four caveats of our analysis. First, we only study actual and expected regulatory treatment in the case of bank distress as a regulatory outcome. Other areas and modes of preferential treatment or beneficial policy outcomes might also be conceivable. Second, the sample of banks for the analysis of actual regulatory treatment consists of rather small banks with a low prevalence of lobbying activities and political connections. However, since we find evidence for the effect of smaller banks'

political influence, we can assume that political influence by larger banks may be similarly effective due to their higher lobbying activities and better political connections. Third, we do not account for indirect lobbying expenditures via banking associations and network organizations. As such, one could expect the real effect of lobbying to be even stronger. Finally, we take only into account sources of influence that are officially reported. There may be many more activities take place unofficially, i.e., without being reported. Thus, future research efforts exploring the magnitude of political influence on other modes of regulatory treatment, for the group of large banks, and by means of different sources of influence might add further insights about the effect of influence.

Moreover, several further questions beyond the scope of our paper might also be worth exploring. We focus solely on the effectiveness of sources of influence on regulatory treatment without evaluating the impact on the overall economy. Therefore, we highly encourage studying the economic efficiency of regulatory treatment influenced by lobbying or political connections, e.g., linking lobbying activities to financial stability or macroe-conomic factors. Another question that arises is how our results would translate into other regions. The U.S. Lobby Disclosure Act requires firms to report their politically connected expenditures, which creates a level of transparency unlike anywhere else. The forced transparency could change the behavior of U.S. firms relative to firms in other jurisdictions that have no mandatory reporting. Given that lobbying takes place behind closed doors in other parts of the world, the impact of lobbying activities may be even larger. Lastly, the extent to which supervisors and regulators are sensitive to lobbying activities could very well depend on their intrinsic structure, e.g., the way these institutions are financed. For example, if a supervisory body is (partly) financed by the financial industry itself, it could be more susceptive to lobbying. An interesting exercise would be to investigate how the degree of independence from both political pressure and the financial industry would affect the impact on regulatory treatment.

Our evidence indicates that expenditures on lobbying are on the rise, and that banks are increasing their influence activities. In light of current global reforms of financial regulation, it is important to be aware that regulatory treatment is not immune to the influence of banks, and that we might expect this influence to further increase. Thus, our findings might motivate legislators to make bank regulation and supervision more robust to influences from the regulated industry. We do not advocate fully rule-based regulation and supervision as discretion in regulatory decisions is not detrimental by default and can even enhance the economic outcome, e.g., when the supervisor has superior knowledge about future business prospects. However, we believe that extensive transparency requirements and strict rules as to influence exertion such as lobbying or hiring former regulators can certainly help to avoid regulatory capture dominating regulatory discretion.

References

- Acharya, V. V., Drechsler, I., and Schnabl, P. (2014). "A Pyrrhic Victory? Bank Bailouts and Sovereign Credit Risk." *Journal of Finance*, 69(6), 2689–2739.
- Acharya, V. V., Shin, H. S., and Yorulmazer, T. (2011). "Crisis Resolution and Bank Liquidity." Review of Financial Studies, 24(6), 2166–2205.
- Acharya, V. V., and Yorulmazer, T. (2007). "Too many to fail—An analysis of time-inconsistency in bank closure policies." *Journal of Financial Intermediation*, 16(1), 1–31.
- Acharya, V. V., and Yorulmazer, T. (2008). "Cash-in-the-Market Pricing and Optimal Resolution of Bank Failures." *Review of Financial Studies*, 21(6), 2705–2742.
- Agarwal, S., Lucca, D., Seru, A., and Trebbi, F. (2014). "Inconsistent Regulators: Evidence from Banking." Quarterly Journal of Economics, 129(2), 889–938.
- Aggarwal, R., and Jacques, K. T. (2001). "The impact of FDICIA and prompt corrective action on bank capital and risk: Estimates using a simultaneous equations model." Journal of Banking & Finance, 25(6), 1139–1160.
- Ansolabehere, S., de Figueiredo, J. M., and Snyder, J. M. (2003). "Why is There so Little Money in U.S. Politics?" *Journal of Economic Perspectives*, 17(1), 105–130.
- Barth, J. R., Caprio, G. J., and Levine, R. (2004). "Bank regulation and supervision: what works best?" *Journal of Financial Intermediation*, 13(2), 205–248.
- Behn, M., Haselmann, R., Kick, T., and Vig, V. (2014). "The Political Economy of Bank Bailouts." Working paper.
- Benston, G. J., and Kaufman, G. G. (1997). "FDICIA After Five Years." Journal of Economic Perspectives, 11(3), 139–158.
- Besley, T., and Coate, S. (2001). "Lobbying and welfare in a representative democracy." *Review of Economic Studies*, 68(1), 67–82.
- Boot, A. W. A., and Thakor, A. V. (1993). "Self-Interested Bank Regulation." *American Economic Review*, 83(2), 206–12.
- Brown, C. O., and Dinç, I. S. (2005). "The Politics of Bank Failures: Evidence from Emerging Markets." Quarterly Journal of Economics, 120(4), 1413–1444.
- Brown, C. O., and Dinç, I. S. (2011). "Too Many to Fail? Evidence of Regulatory Forbearance When the Banking Sector Is Weak." Review of Financial Studies, 24(4), 1378–1405.
- Brunnermeier, M. K., Dong, G. N., and Palia, D. (2012). "Banks' Non-Interest Income and Systemic Risk." Working paper, Princeton University.
- Chen, H., Parsley, D., and Yang, Y.-W. (2015). "Corporate Lobbying and Firm Performance." *Journal of Business Finance & Accounting, forthcoming.*
- Cole, R., and White, L. (2012). "Déjà Vu All Over Again: The Causes of U.S. Commercial Bank Failures This Time Around." *Journal of Financial Services Research*, 42(1), 5–29.

- Dahl, D., and Spivey, M. F. (1995). "Prompt corrective action and bank efforts to recover from undercapitalization." *Journal of Banking & Finance*, 19(2), 225–243.
- Dal Bó, E. (2006). "Regulatory Capture: A Review." Oxford Review of Economic Policy, 22(2), 203–225.
- Demirgüç-Kunt, A., Kane, E. J., and Laeven, L. (2008). "Determinants of deposit-insurance adoption and design." *Journal of Financial Intermediation*, 17(3), 407–438.
- DeYoung, R., Kowalik, M., and Reidhill, J. (2013). "A theory of failed bank resolution: Technological change and political economics." *Journal of Financial Stability*, 9(4), 612–627.
- Duchin, R., and Sosyura, D. (2012). "The politics of government investment." *Journal of Financial Economics*, 106(1), 24–48.
- Faccio, M., Masulis, R. W., R. W., and McConnell, J. J. (2006). "Political Connections and Corporate Bailouts." Journal of Finance, 61(6), 2597–2635.
- Fitch Ratings (2013). "Definitions of Ratings and Other Forms of Opinion." Technical document, Fitch Ratings.
- Freixas, X., and Parigi, B. M. (2007). "Banking regulation and prompt corrective action." Working Paper No. 2136, CESifo.
- Gorton, G., and Huang, L. (2004). "Liquidity, Efficiency, and Bank Bailouts." *American Economic Review*, 94(3), 455–483.
- Gropp, R., Hakenes, H., and Schnabel, I. (2011). "Competition, Risk-shifting, and Public Bail-out Policies." Review of Financial Studies, 24(6), 2084–2120.
- Gropp, R., Vesala, J., and Vulpes, G. (2006). "Equity and Bond Market Signals as Leading Indicators of Bank Fragility." *Journal of Money, Credit & Banking*, 38(2), 399–428.
- Helpman, E., and Persson, T. (2001). "Lobbying and Legislative Bargaining." The B.E. Journal of Economic Analysis & Policy, 1(1), 1–33.
- Igan, D., and Mishra, P. (2011). "Three's company: Wall Street, Capitol Hill, and K Street." MPRA Paper 44220, University Library of Munich, Germany.
- Igan, D., Mishra, P., and Tressel, T. (2012). "A Fistful of Dollars: Lobbying and the Financial Crisis." NBER Macroeconomics Annual, 26(1), 195–230.
- Imai, M. (2009). "Political Influence and Declarations of Bank Insolvency in Japan." *Journal of Money, Credit & Banking*, 41(1), 131–158.
- Jordan, J. S., Peek, J., and Rosengren, E. S. (2000). "The Market Reaction to the Disclosure of Supervisory Actions: Implications for Bank Transparency." *Journal of Financial Intermediation*, 9(3), 298–319.
- Kane, E. J. (1990). "Principal-Agent Problems in S&L Salvage." Journal of Finance, 45(3), 755–64.
- Kasa, K., and Spiegel, M. M. (2008). "The role of relative performance in bank closure decisions." Federal Reserve Bank of San Francisco Economic Review, 17–29.
- Kerr, W. R., Lincoln, W. F., and Mishra, P. (2014). "The Dynamics of Firm Lobbying." American Economic Journal: Economic Policy, 6(4), 343–79.

- Kocherlakota, N. R., and Shim, I. (2007). "Forbearance and Prompt Corrective Action." Journal of Money, Credit & Banking, 39(5), 1107–1129.
- Mailath, G. J., and Mester, L. J. (1994). "A Positive Analysis of Bank Closure." Journal of Financial Intermediation, 3(3), 272–299.
- Mariathasan, M., Merrouche, O., and Werger, C. (2014). "Bailouts And Moral Hazard: How Implicit Government Guarantees Affect Financial Stability." Working paper, CAREFIN, Bocconi University.
- Merler, S., and Pisani-Ferry, J. (2012). "Hazardous tango: sovereign-bank interdependence and financial stability in the euro area." *Financial Stability Review*, 16, 201–210.
- Mian, A., Sufi, A., and Trebbi, F. (2013). "The Political Economy of the Subprime Mortgage Credit Expansion." International Quarterly Journal of Political Science, 8(4), 373–408.
- Peek, J., and Rosengren, E. S. (1996). "The use of capital ratios to trigger intervention in problem banks: Too little, too late." New England Economic Review, 49–58.
- Peltzman, S. (1976). "Toward a More General Theory of Regulation." *Journal of Law and Economics*, 19(2), 211–40.
- Perotti, E. C., and Suarez, J. (2002). "Last bank standing: What do I gain if you fail?" European Economic Review, 46(9), 1599–1622.
- Philippon, T., and Schnabl, P. (2013). "Efficient Recapitalization." Journal of Finance, 68(1), 1–42.
- Posner, R. A. (1974). "Theories of Economic Regulation." Bell Journal of Economics, 5(2), 335–358.
- Ramirez, C. D., and De Long, J. B. (2001). "Understanding America's Hesitant Steps toward Financial Capitalism: Politics, the Depression, and the Separation of Commercial and Investment Banking." *Public Choice*, 106 (1-2), 93–116.
- Shim, I. (2011). "Dynamic Prudential Regulation: Is Prompt Corrective Action Optimal?" Journal of Money, Credit & Banking, 43(8), 1625–1661.
- Spong, K. (2000). Banking Regulation Its Purposes, Implementation, and Effects. Division of Supervision and Risk Management Federal Reserve Bankof Kansas City.
- Stigler, G. J. (1971). "The Theory of Economic Regulation." Bell Journal of Economics, 2(1), 3-21.
- Ueda, K., and di Mauro, B. W. (2013). "Quantifying structural subsidy values for systemically important financial institutions." *Journal of Banking & Finance*, 37(10), 3830–3842.
- Wheelock, D. C., and Wilson, P. W. (2000). "Why do Banks Disappear? The Determinants of U.S. Bank Failures and Acquisitions." The Review of Economics and Statistics, 82(1), 127–138.

Figure 1: Lobbying on finance

This figure presents the development of total lobbying expenditures by financial firms (i.e., firms belonging to the financial industry according to the classification on the lobbying activity reports) and on financial issues (i.e., classified to one of the following issues in the filed reports: accounting, banking, bankruptcy, financial institutions, investments, securities, housing and mortgages, minting, and money).

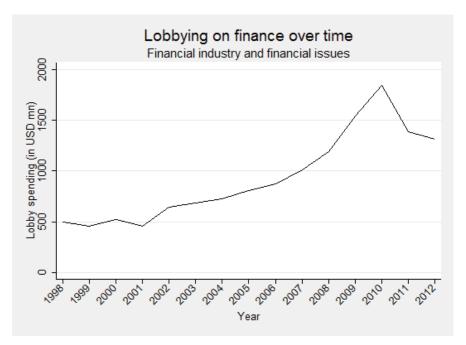


Figure 2: Lobbying history by bank size
This figure presents the share of banks in the U.S. that have a lobbying history over different asset size classes. Lobbying history is defined as reporting lobby spending within the bank conglomerate at some point over the last four years.

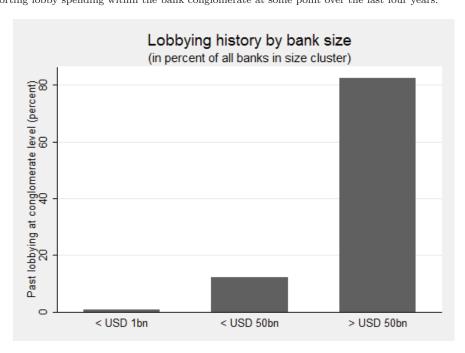


Figure 3: Proximity to the relevant legislative committee by bank size ${\bf P}$

This figure presents the share of banks in the U.S. with proximity to pertinent legislative committee over different asset size classes. Proximity to the relevant legislative committee is defined as the subcommittee member from the congressional district where the bank is incorporated being a member of the Subcommittee on Financial Institutions and Consumer Credit.

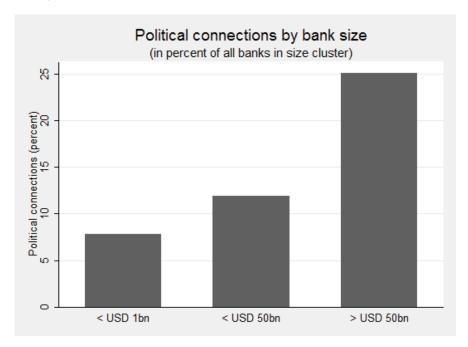


Table 1: Summary statistics

Panel A: Regulatory treatment sample

This table presents summary statistics, reporting variable names, means, standard deviations, minimum and maximum values, and the number of observations for which data are available in our sample. Unless otherwise stated, the data are reported in percentages. For the sake of convenience, all indicator variables are scaled by 100. All observations are at the bank level, constitute bank-quarter observations, and cover the period 2003Q3-2012Q4. In Panel A, we include bank-quarter observations where banks fall into the undercapitalized regulatory capital category (except for the closure indicator where only critically undercapitalized bank-quarter observation are considered). Panel B consists of all quarterly observations of banks with Fitch support ratings. The sources are: Federal Deposit Insurance Corporation, Federal Reserve Board, Office of the Comptroller of the Currency, Office of Thrift Supervision, U.S. Senate Office of Public Records, U.S. Center for Responsive Politics, U.S. Library of Congress, U.S. Census Bureau, FED Chicago BHC database, FDIC SDI database and call reports, and the U.S. Department of the Treasury.

Variable group and name	Mean	SD	Min	Max	N
Dependent variables					
PCA indicator (undercapitalized)	15.48	36.18	0	100	2849
PCA indicator (sign. undercapitalized)	23.80	42.60	0	100	1496
Closure indicator	49.92	50.04	0	100	629
Explanatory variables					
Past lobbying (congl.)	1.90	13.64	0	100	2849
Past lobbying (top hold.)	0.95	9.69	0	100	2849
Pre-crisis lobbying (congl.)	1.10	10.43	0	100	2822
Past lobbying (congl., fcong)	0.11	3.24	0	100	2849
Past lobbying (congl., no fcong)	1.79	13.26	0	100	2849
Past lobbying expenditures (congl.) (in USD th)	5.78	175	0	8528	2849
Subcom rep (congl.)	10.29	30.39	0	100	2866
Subcom rep (top hold.)	11.46	31.86	0	100	1894
Subcom rep for 4 years (congl.)	3.86	19.26	0	100	2799
Fin industry PACs to subcom rep (in USD th)	26.64	90.87	0	674	2295
Prior affiliation (top hold.)	14.38	35.15	0	100	306
Additional bank- and quarter-varying variables					
Total assets (in USD mn)	518	1696	7.73	37737	2849
Leverage ratio (PCA)	3.01	1.95	-31.13	10.56	2849
Tier 1 ratio (PCA)	4.13	2.84	-58.49	24.99	2849
Risk-based capital ratio (PCA)	5.34	3.05	-58.49	25.60	2849
Earnings (RoA)	-1.04	0.92	-2.35	1.53	2849
Non-interest income ratio	15.72	27.73	-20.35	95.8	2849

9.71

79.42

14.50

3.37

0.04

24.39

6.59

8.27

6.29

18.05

1.87

42.95

0.40

4.19

0

0

0

0

Continued on next page

42.53

89.27

22.13

100

100

100

2849

2849

2849

2849

2849

2849

Liquidity ratio

Non-performing loan ratio

Deposit ratio

CPP recipient

Independent bank

GSIFI BHC

Panel B: Expected government support sample

Variable group and name	Mean	SD	Min	Max	N
Dependent variable					
Fitch support ratings	4.06	1.54	1	5	5402
Explanatory variables					
Past lobbying (congl.)	37.06	48.30	0	100	5402
Past lobbying (top hold.)	31.94	46.63	0	100	5402
Past lobbying (congl., fcong)	9.72	29.62	0	100	5402
Past lobbying (congl., no fcong)	28.03	44.92	0	100	5402
Past lobbying expenditures (congl.) (in USD th)	2386	6782	0	39165	5402
Subcom rep (congl.)	23.68	42.52	0	100	3019
Subcom rep (top hold.)	10.41	30.54	0	100	4583
Fin industry PACs to subcom rep (in USD th)	59.04	117.57	0	516.81	4904
Additional bank- and quarter-varying variables					
Total assets (in USD mn)	13206	12902	64.59	33133	5402
Leverage ratio (eq/cap)	11.33	5.97	2.78	67.11	5402
Earnings (RoA)	0.19	0.47	-2.35	1.53	5402
Non-interest income ratio	28.81	21.18	-20.35	95.80	5402
Liquidity ratio	5.52	7.05	0.40	42.53	5402
Deposit ratio	58.67	14.68	1.16	89.27	5402
Non-performing loan ratio	3.38	3.63	0	22.13	5402
CPP recipient	14.39	35.10	0	100	5402
GSIFI BHC	9.40	29.19	0	100	5402
Independent bank	11.87	32.34	0	100	5402

Table 2: Regulatory treatment: Baseline model with lobbying activities as the source of influence

This table presents multivariate estimates of the effect of lobbying activities on regulatory treatment (additional discretionary prompt corrective actions). Past lobbying takes the value of 1 if any entity within the respective conglomerate has lobbied in the last four years (0 otherwise). Undercapitalized and significantly undercapitalized are regulatory capital categories at which the supervisory instution has the discretion to issue additional prompt corrective actions. PCA indicator takes the value of 1 if the bank receives a Prompt Corrective Action directive or if an existing PCA directive is not terminated in the next quarter (0 otherwise). Control variables comprise size (natural logarithm of total bank assets), leverage ratio (defined as Tier 1 capital divided by average assets), profitability, non-interest income ratio, liquidity ratio, deposit ratio, non-performing loan ratio, and indicator variables for CPP recipient banks, banks belonging to G-SIFI bank holding companies, and independent banks. All observations are at the bank level, include bank-quarter observations where banks fall into the respective regulatory capital category, and cover the period 2003Q3-2012Q4. Standard errors are robust and reported in parentheses. Significance levels are indicated by *** p < 0.01, ** p < 0.05, * p < 0.05, * p < 0.01.

	(1)	(2)	(3)	(4)
Dep. variable	Prompt Cor	rective Action d	irective	
Past lobbying	-0.0847**	-0.1208***	-0.0950**	-0.0807*
, 0	(0.0351)	(0.0399)	(0.0418)	(0.0415)
Total assets		0.0123**	0.0014	0.0011
		(0.0062)	(0.0060)	(0.0061)
Leverage ratio		-3.0727***	-2.7785***	-2.7773***
<u> </u>		(0.5703)	(0.5614)	(0.5578)
Earnings		0.4069	0.7867	0.9705
9		(0.8561)	(0.8319)	(0.8364)
Non-interest income ratio		-0.0327	-0.0196	-0.0205
		(0.0253)	(0.0246)	(0.0247)
Liquidity ratio		0.3159***	0.3197***	0.3283***
-		(0.1184)	(0.1159)	(0.1159)
Deposit ratio		0.1206	0.1196	0.0901
_		(0.0925)	(0.0942)	(0.0939)
Non-performing loan ratio		0.1255	0.2303**	0.2641**
		(0.1139)	(0.1102)	(0.1099)
CPP recipient		-0.0386	-0.0575*	-0.0499
-		(0.0346)	(0.0307)	(0.0307)
GSIFI BHC		-0.0178	0.0865	0.0726
		(0.0643)	(0.0662)	(0.0659)
Independent bank		0.0695***	0.0232	0.0057
		(0.0172)	(0.0171)	(0.0179)
Year dummies	NO	YES	YES	YES
Regulator dummies	NO	NO	YES	NO
Charter dummies	NO	NO	NO	YES
Observations	2,868	2,849	2,849	2,849
Number of banks	793	782	782	782
R-squared	0.0011	0.0572	0.1376	0.1356

Panel B: Significantly undercapitalized (sub-)sample (incl. critically undercapitalized)

Dep. variable	(1) Prompt Cor	(2) rective Action d	(3) irective	(4)
Past lobbying	-0.1181** (0.0579)	-0.1859*** (0.0635)	-0.1553** (0.0664)	-0.1325** (0.0651)
Bank controls	NO	YES	YES	YES
Year dummies	NO	YES	YES	YES
Regulator dummies	NO	NO	YES	NO
Charter dummies	NO	NO	NO	YES
Observations	1,508	1,496	1,496	1,496
Number of banks	583	576	576	576
R-squared	0.0017	0.0412	0.1597	0.1512

Table 3: Regulatory treatment: Baseline model with proximity to the relevant legislative committee as the source of influence

This table presents multivariate estimates of the effect of proximity to the relevant legislative committee on regulatory treatment (additional discretionary prompt corrective actions). Subcom rep takes the value of 1 if any entity within the respective conglomerate is located in the congressional district of a member of the Subcommittee on Financial Institutions (0 otherwise). Undercapitalized and significantly undercapitalized are regulatory capital categories at which the supervisory instution has the discretion to issue additional prompt corrective actions. PCA indicator takes the value of 1 if the bank receives a Prompt Corrective Action directive or if an existing PCA directive is not terminated in the next quarter (0 otherwise). Control variables comprise size (natural logarithm of total bank assets), leverage ratio (defined as Tier 1 capital divided by average assets), profitability, non-interest income ratio, liquidity ratio, deposit ratio, non-performing loan ratio, and indicator variables for CPP recipient banks, banks belonging to G-SIFI bank holding companies, and independent banks. All observations are at the bank level, include bank-quarter observations where banks fall into the respective regulatory capital category, and cover the period 2003Q3-2012Q4. Standard errors are robust and reported in parentheses. Significance levels are indicated by *** p < 0.01, ** p < 0.05, * p < 0.1.

	(1)	(2)	(3)	(4)
Dep. variable	()	(2) rective Action d	()	(4)
F				
Subcom rep	-0.0549***	-0.0668***	-0.0453**	-0.0476**
	(0.0188)	(0.0195)	(0.0186)	(0.0189)
Total assets		0.0132**	0.0018	0.0022
		(0.0059)	(0.0058)	(0.0059)
Leverage ratio		-2.8618***	-2.5687***	-2.5930***
C		(0.5558)	(0.5386)	(0.5366)
Earnings		0.5086	0.9039	1.0850
_		(0.8413)	(0.8132)	(0.8181)
Non-interest income ratio		-0.0340	-0.0239	-0.0242
		(0.0243)	(0.0235)	(0.0235)
Liquidity ratio		0.3291***	0.3181***	0.3336***
		(0.1146)	(0.1123)	(0.1123)
Deposit ratio		0.1933**	0.2096**	0.1741**
		(0.0879)	(0.0883)	(0.0878)
Non-performing loan ratio		0.1228	0.2132**	0.2375**
		(0.1112)	(0.1073)	(0.1065)
CPP recipient		-0.0433	-0.0608**	-0.0535*
		(0.0346)	(0.0307)	(0.0307)
GSIFI BHC		-0.0563	0.0563	0.0511
		(0.0569)	(0.0550)	(0.0556)
Independent bank		0.0577***	0.0079	-0.0073
		(0.0169)	(0.0163)	(0.0171)
Year dummies	NO	YES	YES	YES
Regulator dummies	NO	NO	YES	NO
Charter dummies	NO	NO	NO	YES
Observations	2,888	2,866	2,866	2,866
Number of banks	805	792	792	792
R-squared	0.0022	0.0560	0.1403	0.1390

Panel B: Significantly undercapitalized (sub-)sample (incl. critically undercapitalized)

Dep. variable	(1) Prompt Corr	(2) rective Action d	(3) irective	(4)
Subcom rep	-0.0871***	-0.1145***	-0.0981***	-0.0996***
	(0.0305)	(0.0319)	(0.0293)	(0.0302)
Bank controls Year dummies Regulator dummies Charter dummies	NO NO NO	YES YES NO NO	YES YES YES NO	YES YES NO YES
Observations	1,531	1,516	1,516	1,516
Number of banks	595	586	586	586
R-squared	0.0040	0.0436	0.1679	0.1601

Table 4: Regulatory treatment: Baseline model with prior affiliation as the source of influence

This table presents multivariate estimates of the effect of prior regulatory or government affiliation on regulatory treatment (additional discretionary prompt corrective actions). Prior affiliation takes the value of 1 if any member of the board of directors of the top holding company has been previously employed by a relevant regulatory or government institution (0 otherwise). Undercapitalized and significantly undercapitalized are regulatory capital categories at which the supervisory institution has the discretion to issue additional prompt corrective actions. PCA indicator takes the value of 1 if the bank receives a Prompt Corrective Action directive or if an existing PCA directive is not terminated in the next quarter (0 otherwise). Control variables comprise size (natural logarithm of total bank assets), leverage ratio (defined as Tier 1 capital divided by average assets), profitability, non-interest income ratio, liquidity ratio, deposit ratio, non-performing loan ratio, and indicator variables for CPP recipient banks, banks belonging to G-SIF1 bank holding companies, and independent banks. All observations are at the bank level, include bank-quarter observations where banks fall into the respective regulatory capital category, and cover the period 2003Q3-2012Q4. Standard errors are robust and reported in parentheses. Significance levels are indicated by **** p < 0.01, *** p < 0.05, ** p < 0.1.

Panel A: Undercapitalized sample (incl. significantly and critically undercapitalized)					
5	(1)	(2)	(3)	(4)	
Dep. variable	Prompt Cor	rective Action d	irective		
Prior affiliation	-0.1638***	-0.1332**	-0.1474**	-0.1414**	
	(0.0512)	(0.0660)	(0.0626)	(0.0626)	
Leverage ratio		-6.1955***	-6.7773***	-7.4614***	
S		(2.0192)	(2.0897)	(2.1607)	
Total assets		-0.0288	-0.0112	-0.0064	
		(0.0218)	(0.0225)	(0.0223)	
Earnings		2.0142	3.4283	3.1615	
_		(3.0381)	(2.9219)	(2.9269)	
Non-interest income ratio		0.0512	0.0501	0.0283	
		(0.0861)	(0.0858)	(0.0855)	
Liquidity ratio		0.2289	0.5074	0.5226	
1		(0.3622)	(0.3598)	(0.3647)	
Deposit ratio		-0.4276	-0.1533	-0.0602	
-		(0.3153)	(0.3328)	(0.3218)	
Non-performing loan ratio		0.3406	0.2007	0.2088	
1 0		(0.4546)	(0.4444)	(0.4436)	
CPP recipient		-0.0289	-0.0245	-0.0325	
-		(0.1008)	(0.0937)	(0.0938)	
Independent bank		-0.0428	0.0568	0.2249	
•		(0.0959)	(0.1700)	(0.2157)	
Year dummies	NO	YES	YES	YES	
Regulator dummies	NO	NO	YES	NO	
Charter dummies	NO	NO	NO	YES	
Observations	307	306	306	306	
Number of banks	108	107	107	107	
R-squared	0.0185	0.1869	0.2378	0.2488	

Panel B: Significantly undercapitalized (sub-)sample (incl. critically undercapitalized)

Dep. variable	(1) Prompt Cor	(2) rective Action	(3) directive	(4)
Prior affiliation	-0.2519***	-0.1396	-0.1440	-0.1440
	(0.0793)	(0.1219)	(0.1086)	(0.1086)
Bank controls Year dummies Regulator dummies Charter dummies	NO NO NO	YES YES NO NO	YES YES YES NO	YES YES NO YES
Observations	182	181	181	181
Number of banks	76	75	75	75
R-squared	0.0347	0.1368	0.2298	0.2298

Table 5: Regulatory treatment: Robustness tests for alternative explanations and specifications

This table presents multivariate estimates of the effect of lobbying activities proximity to the relevant legislative committee, and prior affiliation on regulatory treatment (additional discretionary prompt corrective actions), performing several robustness checks with alternative sample, variable, and model specifications. Column (1) reports the results from our model run on a matched subsample. To test for potential systemic differences between banks with and without influence exertion, we match both groups on the control variables and a two-year rolling average leverage ratio using propensity score matching (up to 20 nearest neighbors within 0.0001-caliper). In column (2), we control for bank exits that make regulatory actions redundant. We exclude bank-quarter observations in which banks exited the sample (e.g., bank closure, acquisition). In column (3), we control for all observations where banks received other enforcement actions that might reduce the need for additional PCA actions. Column (4) reports the results of our model run over the period since the onset of the financial crisis (2008Q3-2012Q4) assuming that the regulators' urgency to take regulatory actions increased during that period. Column (5) reports the results from a fixed-effects logit model specification. In column (6), we consider lobbying activities and proximity to the relevant legislative committee at the top holding company level (instead of conglomerate level). Column (7) in Panel A shows the results employing lobbying activities and proximity to the relevant legislative committee simultaneously. Past lobbying takes the value of 1 if any entity within the respective conglomerate has lobbied in the last four years (0 otherwise). Past lobbying top takes the value of 1 if the top holding company has lobbied in the last four years (0 otherwise). Subcom rep takes the value of 1 if any entity within the respective conglomerate is located in the congressional district of a member of the Subcommittee on Financial Institutions (0 otherwise). Prior affiliation takes the value of 1 if any member of the board of directors of the top holding company has been previously employed by a relevant regulatory or government institution (0 otherwise)). PCA indicator takes the value of 1 if the bank receives a Prompt Corrective Action directive or if an existing PCA directive is not terminated in the next quarter (0 otherwise). Control variables comprise size (natural logarithm of total bank assets), leverage ratio (defined as Tier 1 capital divided by average assets), profitability, non-interest income ratio, liquidity ratio, deposit ratio, non-performing loan ratio, and indicator variables for CPP recipient banks, banks belonging to G-SIFI bank holding companies, and independent banks. In column (3) we include a dummy variable equal to 1 for bank-quarter observations where any other enforcement action has been valid (0 otherwise). All observations are at the bank level, include bank-quarter observations where banks fall into the undercapitalized regulatory capital category, and cover the period 2003Q3-2012Q4 except for column (4). Standard errors are robust and reported in parentheses. Significance levels are indicated by *** p<0.01. ** p<0.05. * p<0.1.

Panel A:	Lobbying	activities	as the	source o	of influence
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Model Dep. variable	(1) Matched sample PCA	(2) Excl. exits and closures PCA	(3) Contr. other enf. actions PCA	(4) After mid 2008 PCA	(5) Logit model PCA	(6) Top holding level PCA	(7) Both sources simultaneously PCA
Past lobbying	-0.1047** (0.0448)	-0.0864** (0.0368)	-0.1427*** (0.0407)	-0.1228*** (0.0418)	-1.4839** (0.0856)		-0.1074*** (0.0411)
Past lobbying top	()	(=====)	(/	((= = = = ,	-0.1679*** (0.0601)	()
Subcom rep						,	-0.0651*** (0.0201)
Bank controls	YES	YES	YES	YES	YES	YES	YES
Year dummies	YES	YES	YES	YES	YES	YES	YES
Observations	654	2,429	2,109	2,672	2,792	2,849	2,799
Number of banks	363	720	617	702	754	782	773
R-squared	0.0960	0.0540	0.0770	0.0538		0.0572	0.058
Pseudo R-squared					0.0516		

Continued on next page

Model Dep. variable	(1) Matched sample PCA	(2) Excl. exits and closures PCA	(3) Contr. other enf. actions PCA	(4) After mid 2008 PCA	(5) Logit model PCA	(6) Top holding level PCA
Subcom rep	-0.0688*** (0.0196)	-0.0587*** (0.0201)	-0.0677*** (0.0211)	-0.0613*** (0.0219)	-0.6415*** (0.2104)	
Subcom rep top	(0.0200)	(***=**-)	(***===)	(***==*)	(**==*=)	-0.0479** (0.0234)
Bank controls Year dummies	YES YES	YES YES	YES YES	YES YES	YES YES	YES YES
Observations Number of banks	2,392 781	2,436 731	2,135 626	2,686 712	2,810 765	2,834 568
R-squared Pseudo R-squared	0.0625	0.0493	0.0711	0.0529	0.0514	0.0549

Panel C: Prior affiliation as the source of influence

Model Dep. variable	(1) Matched sample PCA	(2) Excl. exits and closures PCA	(3) Contr. other enf. actions PCA	(4) After mid 2008 PCA	$\begin{array}{c} (5) \\ \textbf{Logit} \\ \textbf{model} \\ \textbf{PCA} \end{array}$
Prior affiliation	-0.1204	-0.1273*	-0.1107	-0.1364**	-1.0951*
	(0.0772)	(0.0664)	(0.0717)	(0.0665)	(0.6467)
Bank controls	YES	YES	YES	YES	YES
Year dummies	YES	YES	YES	YES	YES
Observations Number of banks R-squared Pseudo R-squared	195	260	247	289	269
	82	96	84	96	90
	0.2806	0.1832	0.2190	0.1757	0.0944

Table 6: Regulatory treatment: Robustness tests accounting for reverse causality

This table presents multivariate estimates of the effect of lobbying activities and proximity to the relevant legislative committee on regulatory treatment (additional discretionary prompt corrective actions) testing for reverse causality concerns. In column (1) in Panel A, we employ lobbying activities in the pre-crisis period (2003-2006) to estimate the impact on prompt corrective actions since the onset of the financial crisis (2008Q3-2012Q4). In column (1) in Panel B, we control for a longer time horizon of political connections through proximity to the relevant legislative committee (past four subsequent years at least). Column (2) reports the results from our model run on a matched subsample. To rule out potential systemic differences in asset quality between banks with and without influence exertion, we match both groups on the current and the 2-year rolling average non-performing loan ratio (up to 20 nearest neighbors within 0.0001-caliper). In column (3) in Panel A, we combine the approaches in columns (1) and (2). Past lobbying takes the value of 1 if any entity within the respective conglomerate has lobbied in the last four years (0 otherwise). Pre-crisis lobbying takes the value of 1 if any entity within the respective conglomerate has lobbied in 2003-2006 (0 otherwise). Subcom rep takes the value of 1 if any entity within the respective conglomerate is located in the congressional district of a member of the Subcommittee on Financial Institutions (0 otherwise). Subcom rep for 4 years takes the value of 1 if any entity within the respective conglomerate has been located in the congressional district of a member of the Subcommittee on Financial Institutions for the past four subsequent years (0 otherwise). PCA indicator takes the value of 1 if the bank receives a Prompt Corrective Action directive or if an existing PCA directive is not terminated in the next quarter (0 otherwise). Control variables comprise size (natural logarithm of total bank assets), leverage ratio (defined as Tier 1 capital divided by average assets), profitability, non-interest income ratio, liquidity ratio, deposit ratio, non-performing loan ratio, and indicator variables for CPP recipient banks, banks belonging to G-SIFI bank holding companies, and independent banks. All observations are at the bank level, include bank-quarter observations where banks fall into the undercapitalized regulatory capital category, and cover the period 2003Q3-2012Q4. Standard errors are robust and reported in parentheses. Significance levels are indicated by *** p < 0.01, ** p < 0.05, * p < 0.1.

Model Dep. variable	(1) Pre-crisis lobbying activities PCA	(2) Sample matched on asset quality PCA	(3) Sample matched & pre-crisis PCA
Pre-crisis lobbying	-0.1075*** (0.0372)		-0.1290*** (0.0404)
Past lobbying	(**************************************	-0.1189*** (0.0410)	(0.000)
Bank controls Year dummies	YES YES	YES YES	YES YES
Observations	2,686		758
Number of banks	710	1,420 515	430
R-squared	0.0524	0.0601	0.0611

Panel B: Proximity to the relevant legislative committee as the source of influence

	(1)	(2)
Model	Longer time horizon	Sample matched on asset quality
Dep. variable	PCA	PCA
Subcom rep for 4 years	-0.0815** (0.0322)	
Subcom rep		-0.0642*** (0.0198)
Bank controls	YES	YES
Year dummies	YES	YES
Observations	2,849	2,464
Number of banks	782	765
R-squared	0.0572	0.0547

Table 7: Regulatory treatment: Lobbying expenditures

This table presents multivariate estimates of the effect of lobby amounts spent on regulatory treatment (additional discretionary prompt corrective actions). Columns (1) and (2) show the results employing a continuous variable for lobbying activities (lobbying expenditures). In columns (3) and (4), we split the sample of lobbying observations into lobbying amounts below and above 100,000 USD (over last four years) and rerun the model separately for lobbying activities with small total amounts and large total amounts. Past lobbying takes the value of 1 if any entity within the respective conglomerate has lobbied in the last four years (0 otherwise). Lobbying expenditures is the natural logarithm of the total lobbying amount spent aggregated over all entities within respective conglomerate over the last four years. Lobbying expenditures (scaled) is the total lobbying amount spent aggregated over all entities within respective conglomerate over the last four years divided by total bank assets. PCA indicator takes the value of 1 if the bank receives a Prompt Corrective Action directive or if an existing PCA directive is not terminated in the next quarter (0 otherwise). Control variables comprise size (natural logarithm of total bank assets), leverage ratio (defined as Tier 1 capital divided by average assets), profitability, non-interest income ratio, liquidity ratio, deposit ratio, non-performing loan ratio, and indicator variables for CPP recipient banks, banks belonging to G-SIFI bank holding companies, and independent banks. All observations are at the bank level, include bank-quarter observations where banks fall into the undercapitalized regulatory capital category, and cover the period 2003Q3-2012Q4. Standard errors are robust and reported in parentheses. Significance levels are indicated by *** p < 0.01, ** p < 0.05, * p < 0.05, * p < 0.01.

Model Dep. variable	(1) Lobby amount spent PCA	(2) Scaled by total assets PCA	(3) Small lobby amounts PCA	(4) Large lobby amounts PCA
Lobbying expenditures	-0.0288*** (0.0083)			
Lobbying expenditures (scaled)	(-0.1792*** (0.0465)		
Past lobbying		(* * * * *)	-0.1177** (0.0467)	-0.1511** (0.0695)
Bank controls	YES	YES	YES	YES
Year dummies	YES	YES	YES	YES
Observations	2,849	2,849	2,836	2,808
Number of banks	782	782	776	772
R-squared	0.0573	0.0563	0.0565	0.0612

Table 8: Regulatory treatment: Bank financial condition and effectiveness of sources of influence

This table presents multivariate estimates of the effect of lobbying activities and proximity to the relevant legislative committee on regulatory treatment (additional discretionary prompt corrective actions) interacted with bank financial condition. Past lobbying takes the value of 1 if any entity within the respective conglomerate has lobbied in the last four years (0 otherwise). Subcom rep takes the value of 1 if any entity within the respective conglomerate is located in the congressional district of a member of the Subcommittee on Financial Institutions (0 otherwise). Leverage ratio is defined as Tier 1 capital divided by average assets, Tier 1 ratio as Tier 1 capital divided by risk-weighted assets, and RB capital ratio as total risk-based capital divided by risk-weighted assets. PCA indicator takes the value of 1 if the bank receives a Prompt Corrective Action directive or if an existing PCA directive is not terminated in the next quarter (0 otherwise). Control variables comprise size (natural logarithm of total bank assets), leverage ratio (defined as Tier 1 capital divided by average assets), profitability, non-interest income ratio, liquidity ratio, deposit ratio, non-performing loan ratio, and indicator variables for CPP recipient banks, banks belonging to G-SIFI bank holding companies, and independent banks. All observations are at the bank level, include bank-quarter observations where banks fall into the undercapitalized regulatory capital category, and cover the period 2003Q3-2012Q4. Standard errors are robust and reported in parentheses. Significance levels are indicated by *** p < 0.01, ** p < 0.05, * p < 0.1.

Panel A: Lobbying activities	as the source of influ	ience	
Dec. and the	(1)	(2)	(3)
Dep. variable	Prompt Corrective	Action directive	
Past lobbying	-0.1882***	-0.1915***	-0.2059***
	(0.0475)	(0.0456)	(0.0485)
Leverage ratio (PCA)	-3.6720***		
	(0.5098)		
Past lobbying x leverage ratio	3.3535***		
	(0.7029)		
Tier 1 ratio (PCA)		-2.8783***	
		(0.3812)	
Past lobbying x Tier 1 ratio		2.7152***	
		(0.4644)	
RB capital ratio (PCA)			-2.5225***
			(0.3399)
Past lobbying x RB capital ratio			2.3323***
			(0.4401)
Bank controls	YES	YES	YES
Year dummies	YES	YES	YES
Observations	2,849	2,849	2,849
Number of banks	782	782	782
R-squared	0.0613	0.0664	0.0640

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Panel B: Proximity to the relevant legislative committee as the source of influence

	(1)	(2)	(3)
Dep. variable		ctive Action directiv	
Subcom rep	-0.1202***	-0.1033**	-0.1120**
Subcom Tep	(0.0424)	(0.0443)	(0.0490)
Leverage ratio (PCA)	-3.0549***	(0.0440)	(0.0400)
	(0.6109)		
Subcom rep x leverage ratio	1.7998		
	(1.1160)		
Tier 1 ratio (PCA)	,	-2.1557***	
		(0.5473)	
Subcom rep x Tier 1 ratio		0.9112	
		(0.8641)	
RB capital ratio (PCA)			-1.9695***
			(0.4697)
Subcom rep x RB capital ratio			0.8576
			(0.7695)
Bank controls	YES	YES	YES
Year dummies	YES	YES	YES
Observations	2,866	2,866	2,866
Number of banks	792	792	792
R-squared	0.0570	0.0592	0.0584

Table 9: Regulatory treatment: Other conditions for effectiveness of sources of inuence

This table presents multivariate estimates of the effect of lobbying activities and proximity to the relevant legislative committee on regulatory treatment (additional discretionary prompt corrective actions) testing for different conditions that might increase its effectiveness. In column (1), we differentiate whether a former member of congress is involved in the lobbying activities. In column (2), we employ the amount of campaign contributions that the financial subcommittee member received from the financial industry. Past lobbying (former congressman) takes the value of 1 if any lobbying activities at the conglomerate level in the last four years were conducted involving a former member of congress (0 otherwise), past lobbying (no former congressman) indicates that all lobbying activities at the conglomerate level in the last four years were conducted without the engagement of a former member of congress (0 otherwise). Financial industry PACs to subcom rep is the natural logarithm of the average sum of campaign contributions from the financial industry that subcommittee members from the congressional districts of all conglomerate's entities received. PCA indicator takes the value of 1 if the bank receives a Prompt Corrective Action directive or if an existing PCA directive is not terminated in the next quarter (0 otherwise). Control variables comprise size (natural logarithm of total bank assets), leverage ratio (defined as Tier 1 capital divided by average assets), profitability, non-interest income ratio, liquidity ratio, deposit ratio, non-performing loan ratio, and indicator variables for CPP recipient banks, banks belonging to G-SIFI bank holding companies, and independent banks. All observations are at the bank level, include bank-quarter observations where banks fall into the undercapitalized regulatory capital category, and cover the period 2003Q3-2012Q4. Standard errors are robust and reported in parentheses. Significance levels are indicated by *** p<0.01, ** p<0.05, * p<0.1.

Model	(1)	(2)
Model	Former Congress member as lobbyist	Campaign contributions to representative
Dep. variable	PCA PCA	PCA
Past lobbying		
(former congressman)	-0.2456*** (0.0606)	
Past lobbying	,	
(no former congressman)	-0.1131***	
	(0.0416)	
Financial industry PACs		
to subcom rep		-0.0066***
		(0.0018)
p-value		
$test\ (former\ congressman) =$		
$(no\ former\ congressman)$	0.0641	
Bank controls	YES	YES
Year dummies	YES	YES
Observations	2,849	2,295
Number of banks	782	623
R-squared	0.0574	0.0661

Table 10: Regulatory treatment: Closure decisions

This table presents multivariate estimates of the effect of lobbying activities and proximity to the relevant legislative committee on closure decisions. Past lobbying takes the value of 1 if any entity within the respective conglomerate has lobbied in the last four years (0 otherwise). Subcom rep takes the value of 1 if any entity within respective conglomerate is located in the congressional district of a member of the Subcommittee on Financial Institutions (0 otherwise). Critically undercapitalized is a regulatory capital category at which the supervisory institution should consider closing the bank. Control variables comprise size (natural logarithm of total bank assets), leverage ratio (defined as Tier 1 capital divided by average assets), profitability, non-interest income ratio, liquidity ratio, deposit ratio, non-performing loan ratio, and indicator variables for CPP recipient banks, banks belonging to G-SIFI bank holding companies, and independent banks. All observations are at the bank level, include bank-quarter observations where banks fall into the critically undercapitalized regulatory capital category, and cover the period 2003Q3-2012Q4. Standard errors are robust and reported in parentheses. Significance levels are indicated by *** p < 0.01, ** p < 0.05, * p < 0.1.

Sample Dep. variable	(1) Critically und Closure	(2) lercapitalized	(3)
Past lobbying	0.0411	-0.0196	-0.0318
	(0.1132)	(0.1290)	(0.1345)
Bank controls	NO	YES	YES
Year dummies	NO	NO	YES
Observations	641	629	629
Number of banks	398	392	392
R-squared	0.0002	0.1266	0.1649
Panel B: Proximity to	the relevant legislativ	ve committee as the source	of influence
Sample Dep. variable	(1) Critically und Closure	(2) dercapitalized	(3)

Sample Dep. variable	(1) Critically und Closure	(2) dercapitalized	(3)
Subcom rep	-0.0845	-0.0680	-0.0769
	(0.0654)	(0.0645)	(0.0657)
Bank controls	NO	YES	YES
Year dummies	NO	NO	YES
Observations	654	641	641
Number of banks	408	402	402
R-squared	0.0025	0.1248	0.1633

Table 11: Regulatory treatment: Duration and hazard of closure

This table presents multivariate estimates of the effect of lobbying activities and proximity to the relevant legislative committee on the risk of closure decisions with increasing duration being critically undercapitalized. The model is estimated using a hazard model with Weibull distribution. The dependent variable is time to closure, which measures the maximum number of quarters being critically undercapitalized (potentially until closure). Past lobbying takes the value of 1 if any entity within the respective conglomerate has lobbied in the last four years (0 otherwise). Subcom rep takes the value of 1 if any entity within respective conglomerate is located in the congressional district of a member of the Subcommittee on Financial Institutions (0 otherwise). Critically undercapitalized is a regulatory capital category at which the supervisory institution should consider closing the bank. Control variables comprise size (natural logarithm of total bank assets), leverage ratio (defined as Tier 1 capital divided by average assets), profitability, non-interest income ratio, liquidity ratio, deposit ratio, non-performing loan ratio, and indicator variables for CPP recipient banks, banks belonging to G-SIFI bank holding companies, and independent banks. All observations are at the bank level, represent the final bank-quarter being in the critically undercapitalized regulatory capital category, and cover the period 2003Q3-2012Q4. Standard errors are robust and reported in parentheses. Baseline hazard estimates are reported in italics. Significance levels are indicated by *** p < 0.01, ** p < 0.05, * p < 0.1.

	(1)	(2)	(3)
Sample	Critically und	lercapitalized	
Dep. variable	Time to closu	re	
Past lobbying	-0.1224	0.2319	0.0036
	(0.3156)	(0.2459)	(0.2785)
	0.8848	1.2610	1.0036
	(0.2792)	(0.3100)	(0.2795)
Bank controls	NO	YES	YES
Year dummies	NO	NO	YES

Panel B: Proximity to the relevant legislative committee as the source of influence

Sample Dep. variable	(1) Critically und Time to closu	*	(3)
Subcom rep	-0.0797	-0.2243	-0.3605
	(0.2375)	(0.2500)	(0.2650)
	0.9234 (0.2193)	0.7991 (0.1997)	$0.6973 \ (0.1848)$
Bank controls	NO	YES	YES
Year dummies	NO	NO	YES
Number of banks	408	397	397
Wald chi2	0.11	264.06	1414.35

Table 12: Expected government support: Lobbying activities and proximity to the relevant legislative committee. The table below presents estimates of lobbying activities and proximity to the relevant legislative committee on expected government support (proxied by Fitch support ratings). Fitch support rating measures the probability that a bank in distress will receive public support; the ratings range from 1 (extremely high probability of external support) to 5 (probability of support that cannot be relied upon). Past lobbying takes the value of 1 if any entity within the respective conglomerate has lobbied in the last four years (0 otherwise). Subcom rep takes the value of 1 if any entity within the respective conglomerate is located in the congressional district of a member of the Subcommittee on Financial Institutions (0 otherwise). Control variables comprise size (natural logarithm of total bank assets), leverage ratio (defined as Tier 1 capital divided by average assets), profitability, non-interest income ratio, liquidity ratio, deposit ratio, non-performing loan ratio, and indicator variables for CPP recipient banks, banks belonging to G-SIFI bank holding companies, and independent banks. All observations are at the bank level and cover the period 2003Q3-2012Q4. Standard errors are clustered at the bank level and are reported in parentheses. Significance levels are indicated by *** p < 0.01, ** p < 0.05, * p < 0.1.

	(1)	(2)	(3)	(4)
Dep. variable	Fitch suppor	rt rating		
Past lobbying	-1.6143***	-0.7234***	-0.7446***	-0.7418***
,0	(0.2069)	(0.1938)	(0.1858)	(0.1850)
Leverage ratio	,	-3.3062***	-2.9862**	-3.0681***
Ü		(1.2031)	(1.1733)	(1.1720)
Total assets		-0.2005***	-0.2112***	-0.2145***
		(0.0428)	(0.0452)	(0.0453)
Earnings		-1.6495	-0.5065	-0.7645
		(8.9742)	(8.7478)	(8.9316)
Non-interest income		0.2328	0.1531	0.1633
		(0.3126)	(0.3040)	(0.3149)
Liquidity ratio		-1.0374	-0.6287	-0.6017
		(0.8192)	(0.8317)	(0.8285)
Deposit ratio		0.0220	0.1741	0.1580
		(0.5516)	(0.5490)	(0.5449)
Non-performing loan ratio		1.0485	1.4559	1.2624
		(1.3852)	(1.3478)	(1.5627)
CPP recipient		0.6607***	0.6910***	0.7051***
		(0.1655)	(0.1651)	(0.1703)
GSIFI BHC		-2.3848***	-2.4345***	-2.4199***
		(0.1995)	(0.2023)	(0.2039)
Independent bank		-0.3839	-0.5561*	-0.6189**
		(0.2620)	(0.2901)	(0.3129)
Year dummies	NO	YES	YES	YES
Regulator dummies	NO	NO	YES	NO
Charter dummies	NO	NO	NO	YES
Observations	5,402	5,253	5,253	5,253
Number of banks	234	228	228	228
R-squared	0.2488	0.5071	0.5178	0.5193

 $Continued\ on\ next\ page$

Panel B: Proximity to the relevant legislative committee as the source of influence

Dep. variable	(1) Fitch suppor	(2)	(3)	(4)	
Subcom rep	-1.6095***	-0.5629**	-0.5145**	-0.5238*	
	(0.3100)	(0.2362)	(0.2568)	(0.2706)	
Leverage ratio		-3.5807***	-3.4401***	-3.5301***	
		(1.3419)	(1.1825)	(1.1746)	
Total assets		-0.3159***	-0.3324***	-0.3332***	
		(0.0581)	(0.0620)	(0.0610)	
Earnings		7.1146	6.3681	7.6831	
		(10.3073)	(10.5528)	(10.7660)	
Non-interest income		0.5082	0.4366	0.4563	
		(0.4212)	(0.3994)	(0.4076)	
Liquidity ratio		-2.3595*	-2.1532*	-2.1434*	
		(1.2878)	(1.2992)	(1.2835)	
Deposit ratio		-0.5052	-0.2209	-0.2238	
		(0.4782)	(0.5302)	(0.5261)	
Non-performing loan ratio		4.4939**	4.0841**	3.8967*	
		(2.0783)	(1.9930)	(2.0516)	
CPP recipient		0.4114**	0.4372**	0.4424**	
		(0.1931)	(0.1956)	(0.1939)	
GSIFI BHC		-2.4953***	-2.4640***	-2.4497***	
		(0.2619)	(0.2617)	(0.2692)	
Independent bank		-0.0627	-0.2776	-0.3796	
		(0.2914)	(0.3591)	(0.3822)	
Bank controls	NO	YES	YES	YES	
Year dummies	NO	YES	YES	YES	
Regulator dummies	NO	NO	YES	NO	
Charter dummies	NO	NO	NO	YES	
Observations	3,107	3,020	3,020	3,020	
Number of banks	150	146	146	146	
R-squared	0.1790	0.5737	0.5850	0.5867	

Table 13: Expected government support: Robustness tests for alternative explanations and variable definitions

This table presents multivariate estimates of the effect of lobbying activities and proximity to the relevant legislative committee on expected government support, performing several robustness checks with alternative sample and variable definitions. Column (1) reports the results from our model run on a matched subsample. To test for potential systemic differences between lobbying and non-lobbying banks, we match both groups on the control variables using propensity score matching (up to 20 nearest neighbors within 0.0001-caliper). Columns (2) and (3) report the results of our model run over the period before (2003Q3-2008Q2) and after (2008Q3-2012Q4) the onset of the financial crisis. In column (4), we consider lobbying activities at the top holding company level (instead of conglomerate level). Column (5) shows the results employing a continuous variable for lobbying activities (lobbying expenditures). Past lobbying takes the value of 1 if any entity within the respective conglomerate has lobbied in the last four years (0 otherwise). Past lobbying spent is the natural logarithm of the total lobbying amount spent aggregated over all entities within the respective conglomerate over the last four years (in USD th). Subcom rep takes the value of 1 if any entity within the respective conglomerate is located in the congressional district of a member of the Subcommittee on Financial Institutions (0 otherwise). FSR measure the probability that a bank in distress will receive public support; Fitch support ratings range from 1 (extremely high probability of external support) to 5 (probability of support that cannot be relied upon). Control variables comprise size (natural logarithm of total bank assets), leverage ratio (defined as Tier 1 capital divided by average assets), profitability, non-interest income ratio, liquidity ratio, deposit ratio, non-performing loan ratio, and indicator variables for CPP recipient banks, banks belonging to G-SIFI bank holding companies, and independent banks. All observations are at the

Panel A: Lobbying					
Model	$egin{array}{c} (1) \ \mathbf{Matched} \ \mathbf{sample} \end{array}$	(2) Before mid 2008	$\begin{array}{c} (3) \\ \textbf{After mid} \\ \textbf{2008} \end{array}$	(4) Top holding level	(5) Lobby amount spent
Dep. variable	FSR	FSR	FSR	FSR	FSR
Past lobbying	-1.1500*** (0.1002)	-1.5829*** (0.2150)	-1.6800*** (0.2274)		
Past lobbying top	()	()	()	-1.3701*** (0.2291)	
Past lobbying spent				(0.2202)	-0.2592*** (0.0226)
Bank controls	YES	YES	YES	YES	YES
Year dummies	YES	YES	YES	YES	YES
Observations	2,943	2,554	2,671	5,402	5,402
Number of banks	173	214	189	234	234
R-squared	0.0268	0.2440	0.2543	0.1660	0.3745

Continued on next page

Table 13 – Continued from previous page

Model Dep. variable	(1) Matched sample FSR	(2) Before mid 2008 FSR	(3) After mid 2008 FSR	(4) Top holding level FSR
Subcom rep	-1.3969***	-1.5486***	-1.6575***	-0.6032
	(0.1067)	(0.3121)	(0.3932)	(0.5926)
Bank controls	YES	YES	YES	YES
Year dummies	YES	YES	YES	YES
Observations Number of banks R-squared	1,115	1,448	1,553	1,343
	63	138	115	102
	0.0994	0.1860	0.1793	0.0211

Table 14: Expected government support: Other conditions for effectiveness of sources of influence

This table presents multivariate estimates of the effect of lobbying activities and proximity to the relevant legislative committee on expected government support testing for different conditions that might increase its effectiveness. In column (1), we differentiate whether a former member of congress is involved in the lobbying activities. In column (2), we employ the amount of campaign contributions that the financial subcommittee member received from the financial industry. Past lobbying (fcong) takes the value of 1 if any lobbying activities at the conglomerate level in the last four years was conducted involving a former member of congress (0 otherwise), past lobbying (no fcong) indicates that all lobbying activities at the conglomerate level in the last four years was conducted without the engagement of a former member of congress (0 otherwise). Fin industry PACs to subcom rep is the natural logarithm of the average sum of campaign contributions from the financial industry that subcommittee members from the congressional districts of all conglomerate's entities received. Fitch support rating measures the probability that a bank in distress will receive public support; Fitch support ratings range from 1 (extremely high probability of external support) to 5 (probability of support that cannot be relied upon). Control variables comprise size (natural logarithm of total bank assets), leverage ratio (defined as Tier 1 capital divided by average assets), profitability, non-interest income ratio, liquidity ratio, deposit ratio, non-performing loan ratio, and indicator variables for CPP recipient banks, banks belonging to G-SIFI bank holding companies, and independent banks. All observations are at the bank level and cover the period 2003Q3-2012Q4. Standard errors are clustered at the bank level and reported in parentheses. Significance levels are indicated by *** p < 0.01, ** p < 0.05, * p < 0.1.

Model Dep. variable	(1) Former Congress member Fitch support rating	(2) Campaign contributions Fitch support rating
Past lobbying (fcong)	-2.4824***	
Past lobbying (no fcong)	(0.2706) -1.3366*** (0.2121)	
Fin industry PACs to subcom	(-)	
rep		-0.1098*** (0.0199)
p-value		
$test\ (fcong) = (no\ fcong)$	< 0.000	
Bank controls	YES	YES
Year dummies	YES	YES
Observations	5,402	5,047
Number of banks	234	218
R-squared	0.2895	0.1484

Appendix A - Variable definitions and correlation matrix

Table 15: Variable sources and definitions

This table reports variable definitions and data sources. The sources are: Bankscope from Bureau van Dijk, BoardEx, Federal Deposit Insurance Corporation (FDIC), Federal Reserve Board (FED), Office of the Comptroller of the Currency (OCC), Office of Thrift Supervision (OTS), U.S. Senate Office of Public Records (SEN), U.S. Center for Responsive Politics (CPR), U.S. Library of Congress (LOC), U.S. Census Bureau (CB), FED Chicago BHC database (BHC), FDIC SDI database and call reports (SDI), and the U.S. Department of the Treasury (TR).

Variable	Source	Definition
Dependent variables		
PCA indicator	FDIC, FED, OCC, OTS	Dummy variable, takes the value of 1 if the bank receives Prompt Corrective Action directive or if an existing PCA directive is still valid in the next quarter and 0 otherwise.
Closure indicator	FDIC	Dummy variable, takes the value of 1 if the bank is resolved/closed in the next quarter and 0 otherwise.
Fitch Support rating	Bankscope	Proxy for the probability that a bank in distress will receive external support; range from 1 (high probability of external support) to 5 (probability of support that cannot be relied upon).
Explanatory variables Past lobbying (congl.)	SEN, CPR, BHC	Dummy variable, takes the value of 1 if any entity within the respective
Past lobbying (top hold.)	SEN, CPR, BHC	conglomerate has lobbied in the last four years and 0 otherwise. Dummy variable, takes the value of 1 if the top holding company has
Lobbying expenditures (congl.)	SEN, CPR, BHC	lobbied in the last four years and 0 otherwise. Total lobbying amount spent aggregated over all entities within the
Pre-crisis lobbying (congl.)	SEN, CPR, BHC	respective conglomerate over the last four years. Dummy variable, takes the value of 1 if any entity within the respective conglomerate has lobbied in 2003-2006 and 0 otherwise.
Past lobbying (congl., fcong)	SEN, CPR, BHC	Dummy variable, takes the value of 1 if any entity within the respective conglomerate has lobbied involving a former congressman in the last four years and 0 otherwise.
Past lobbying (congl., no fcong)	SEN, CPR, BHC	Dummy variable, takes the value of 1 if any entity within the respective conglomerate has lobbied not involving a former congressman in the last four years and 0 otherwise.
Subcom rep (congl.)	LOC, CB	Dummy variable, takes the value of 1 if any entity within the respective conglomerate is located in the congressional district of a member of the Subcommittee on Financial Institutions and 0 otherwise.
Subcom rep (top hold.)	LOC, CB	Dummy variable, takes the value of 1 if the top holding company is located in the congressional district of a member of the Subcommittee on Financial Institutions and 0 otherwise.
Subcom rep for 4 years (congl.)	LOC, CB	Dummy variable, takes the value of 1 if any entity within the respective conglomerate has been located in the congressional district of a member of the Subcommittee on Financial Institutions for the past four years and 0 otherwise.
Fin industry PACs to subcom rep (congl.)	SEN, CPR, LOC, CB	Average sum of campaign contributions from financial industry that subcommittee members from congressional districts of all entities within the respective conglomerate received.
Prior affiliation (top hold.)	BoardEx	Dummy variable, takes the value of 1 if a member of the board of directors of the top holding company has been previously employed by a relevant regulatory or government institution and 0 otherwise.
$Control\ variables$		
Total assets	SDI	Total assets.
Leverage ratio (PCA)	SDI	Tier 1 capital divided by average assets.
Tier 1 ratio (PCA)	SDI SDI	Tier 1 capital divided by risk-weighted assets.
Risk-based capital ratio (PCA) Earnings (RoA)	SDI	Total risk-based capital divided by risk-weighted assets. Return on assets (i.e., net income divided by average assets).
Non-interest income ratio	SDI	Non-interest income divided by total income.
Liquidity ratio	SDI	Cash and balances at other depository institutions divided by total assets.
Deposit ratio	SDI	Deposits divided by total assets.
Non-performing loan ratio CPP recipient	SDI TR	Past due and nonaccrual loans divided by total loans. Indicator variable, takes the value of 1 if the bank receives Capital
GSIFI BHC	SDI	Purchase Program funds in the respective quarter and 0 otherwise. Indicator variable, takes the value of 1 if the bank belongs to a G-SIFI
Independent bank	SDI	bank holding company in the respective quarter and 0 otherwise. Indicator variable, takes the value of 1 if the bank does not belong to any bank holding company in the respective quarter and 0 otherwise.

Table 16: Correlation matrix

This table reports correlations between variables for all observations included in the samples. In Panel A we include bank-quarter observations where banks fall into the undercapitalized regulatory capital category. Panel B consists of all quarterly observations of banks with Fitch support ratings.

Panel A: Regulatory treatme	ent sample	e													
Variable	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
(1) PCA indicator	1.0000	(-)	(-)	(-)	(0)	(0)	(.)	(0)	(*)	()	()	()	()	()	()
(2) Closure indicator	0.1878	1.0000													
(3) Past lobbying	-0.0310	0.0681	1.0000												
(4) Subcom rep	-0.0446	-0.0144	0.0498	1.0000											
(5) Prior affiliation	-0.1244	-0.0695	-0.0615	0.3894	1.0000										
(6) Total assets	0.0141	0.0672	0.2304	0.0336	-0.0651	1.0000									
(7) Leverage ratio	-0.1796	-0.4649	-0.1016	-0.0029	-0.0352	0.0038	1.0000								
(8) Earnings	-0.0321	-0.1223	-0.0596	-0.0708	-0.0715	0.2536	-0.0651	1.0000							
(9) Non-interest income ratio	-0.0084	0.0704	-0.0083	-0.0066	-0.1080	-0.1187	0.0261	-0.0607	1.0000						
(10) Liquidity ratio	0.0836	0.0086	0.0102	0.0186	0.1931	-0.1438	-0.1181	0.0562	0.0078	1.0000					
(11) Deposit ratio	0.0663	0.0955	-0.1564	-0.0204	-0.0068	-0.1085	-0.1418	0.0291	-0.0306	-0.0323	1.0000				
(12) Non-performing loan ratio	0.0825	0.2393	0.0070	-0.0082	-0.0078	-0.2559	0.1118	-0.2130	0.0382	0.0238	0.2115	1.0000			
(13) CPP recipient	-0.0208	-0.0436	0.0026	-0.0628	-0.0909	0.0044	0.1430	-0.0083	-0.0032	0.0236	-0.0208	-0.0085	1.0000		
(14) GSIFI BHC	-0.0080	-0.0073	0.1348	0.0567	na	-0.0121	0.0571	-0.0003	0.0452	0.0473	-0.0920	-0.0420	-0.0035	1.0000	
(15) Independent bank	0.0913	0.0000	-0.0130	0.0975	0.1313	-0.0698	-0.1061	-0.0122	0.0230	0.0048	0.0643	-0.0592	-0.1061	-0.0106	1.0000

Panel B: Expected governmen	ıt support	sample											
Variable	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
(1) Fitch support rating	1.00	. ,	. ,	. ,	. ,	. ,	. ,	. ,		, ,	. ,	. ,	. ,
(2) Past lobbying	-0.62	1.00											
(3) Subcom rep	-0.43	0.32	1.00										
(4) Leverage ratio	-0.30	0.21	0.19	1.00									
(5) Total assets	-0.49	0.49	0.20	0.16	1.00								
(6) Earnings	-0.10	0.10	0.08	0.10	0.07	1.00							
(7) Non-interest income	-0.26	0.29	0.28	0.21	0.32	0.15	1.00						
(8) Liquidity ratio	-0.19	0.23	0.17	0.17	0.09	-0.09	0.39	1.00					
(9) Deposit ratio	0.31	-0.41	-0.22	-0.34	-0.34	-0.16	-0.16	-0.06	1.00				
(10) Non-performing loan ratio	-0.03	0.04	0.14	-0.00	0.06	-0.44	0.04	0.15	0.05	1.00			
(11) CPP recipient	0.00	0.14	-0.00	0.02	0.08	-0.20	-0.07	0.05	-0.08	0.29	1.00		
(12) GSIFI BHC	-0.63	0.46	0.46	0.20	0.24	0.09	0.20	0.13	-0.34	0.15	0.13	1.00	
(13) Independent bank	0.00	-0.11	-0.05	0.20	0.07	-0.05	0.11	0.03	0.04	0.06	-0.14	-0.12	1.00

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Appendix B - Fitch Support Ratings

Table 17: Fitch Support Ratings

This table provides an overview of the different support rating categories. Following the definition given by Fitch ratings, the support ratings are explicitly not a measure for the intrinsic credit quality of a bank. Rather, the support ratings capture the rating agency's assessment on whether a bank would receive external support in case it experiences financial difficulties. The core assumption is that any necessary support will be sufficiently sustained so that the supported bank is able to continue meeting its financial obligations until the difficulties are over. In that regard, the support ratings capture both the agency's judgment about potential supporter's propensity and ability to support a bank. The former is a pure judgment. The latter is set by the potential supporter's own credit ratings. Where the support rating is based on sovereign support, Fitch also derives a support rating floor. This floor is expressed on the usual AAA long-term scale and indicates the level below which it would not expect to lower the issuer default rating (Fitch Ratings, 2013).

Support rating	Definition by Fitch
1	A bank for which there is an extremely high probability of external support. The potential provider of support is very highly rated in its own right and has a very high propensity to support the bank in question. This probability of support indicates a minimum Long-Term Rating floor of A
2	A bank for which there is a high probability of external support. The potential provider of support is highly rated in its own right and has a high propensity to provide support to the bank in question. This probability of support indicates a minimum Long-Term Rating floor of BBB
3	A bank for which there is a moderate probability of support because of uncertainties about the ability or propensity of the potential provider of support to do so. This probability of support indicates a minimum Long-Term Rating floor of BB
4	A bank for which there is a limited probability of support because of significant uncertainties about the ability or propensity of any possible provider of support to do so. This probability of support indicates a minimum Long-Term Rating floor of B.
5	A bank for which there is a probability of external support, but it cannot be relied upon. This may be due to a lack of propensity to provide support or to very weak financial ability to do so. This probability of support indicates a Long-Term Rating floor no higher than B- and in many cases, no floor at all.

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The Fellowship programme is named after Baron Alexandre Lamfalussy, the first President of the European Monetary Institute. Mr Lamfalussy was one of the leading central bankers of his time and one of the main supporters of a single capital market within the European Union.

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