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 connecting U.S. banks' sources of influence (e.g., lobbying expenditures, proximity to 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 exertion 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 deteriorating capital ratios and with the aid of former politicians; effectiveness of proximity to representatives of legislative committee increases with the amount of campaign contributions from the financial industry. However, there seems to be a limit to the impact of influence when it comes to closure decisions of the most severely distressed banks. Our findings are instructive for understanding the political influence banks can leverage on shaping regulatory decisions, and propose increased attention to the relations between legislators, regulators, and banks.

JEL classification: D72, G21, G28

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

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 the regulator and the regulated industry is hardly new and need not be unhealthy to the functioning of both. However, on the height of the financial meltdown in 2008/09, when regulators saw themselves confronted with unprecedented decision-making on vital issues such as bank closure or bailout and new regulation, a rather interesting turn in this cooperation occurred. Activities in order to exert influence on 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. (2013).

[Figure 1]

One could tell this as a story of outright regulatory capture, if it were not for a second noteworthy phenomenon that only emerges at a closer look. While the regulatory rules 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, close to 500 banks were closed in the standard intervention procedure by the Federal Deposit Insurance Corporation, while hundreds of other banks received capital injections through the Troubled Asset Relief Program (TARP). The picture looks similar in Europe, were 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 get into difficulties. Do lobbying efforts affect the actual treatment of distressed banks, in particular additional discretionary regulatory measures within the Prompt Corrective Action (PCA) framework when banks become undercapitalized? Can political connections of banks (i.e., proximity to pertinent legislative committee and directors' prior affiliation with regulatory or government institutions) be leveraged to exert influence on regulatory decisions? How does the effect on regulatory treatment interact with deteriorating capital condition of banks? Does the effect on regulatory treatment increase when the banks' lobbying effort is conducted with the involvement of former politicians? Is there any limit to the impact of influence for the most severely distressed banks and banks in a lasting undercapitalized condition? 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 which 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, this paper is explicitly not about the economic efficiency of regulatory treatment influenced by lobbying or political connections, but about the effectiveness of several sources of influence on selected regulatory policies. The rationale for the link between banks' influence exertion and regulatory treatment might be found in the self-interest and private incentives of regulators and legislators, e.g., expecting campaign contributions or attractive exit jobs, inducing them to handle certain banks particularly beneficial.

We analyze the above questions empirically, using 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.. By looking at the de facto regulatory treatment of distressed banks (i.e., banks

that fall below the regulatory thresholds for undercapitalization in the PCA framework), our tests show that lobbying activities and political connections through proximity to prevalent legislative committees and prior regulatory or government affiliation of bank directors lower the probability of obtaining additional discretionary regulatory measures (besides 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 reversed causality concerns. Several conditions even further increase the effectiveness of banks' influence exertion: Besides lowering the probability of obtaining additional discretionary measures, we find that lobbying activity 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 of the most severely distressed banks. When employing a more general measure of preferential treatment regardless of bank distress, expected support to banks (measured by the Fitch support ratings), we find that lobbying activities and proximity to prevalent legislative committees both significantly increase the expectation that the bank will receive a government bail-out.

We focus our analysis on the U.S. because of the availability of data, but our results might 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. Section 2 discusses 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 influence such as lobbying and political connections to de facto regulatory treatment of distressed banks. Section 5 evaluates the effects of sources of influence on potential government support as an extension to our core empirical analysis. Section 6 concludes. An Appendix to this paper evaluates the novel dataset on lobbying in the U.S. banking system in more detail.

2 Sources of influence and the political economy of banking - Motivation, related literature, and contribution

The influence of regulated industries onto their regulation has primarily been studied in theoretical and empirical contributions on 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 the regulated industries and regulation is an empirical phenomenon even in industries not warranting it by their economic structure. Pioneered by Stigler (1971), Posner (1974), and Peltzman (1976), the literature has developed theoretical predictions for the sources of regulatory influence and explanations of how firms can influence policy outcomes (e.g., Helpman and Persson (2001); Besley and Coate (2001)).

Without the claim for completeness, we categorize several sources of influence.

- Outright **financial resources** channeled to regulators and policymakers, e.g., in the form of bribes or campaign contributions

- **Revolving doors**, i.e., a more indirect way of channeling benefits to regulatory 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 times in the election cycle

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

To begin with the sources of influence, there are various theoretical models explaining how firm lobbying or political connections can be effective in influencing policy outcomes (e.g., Helpman and Persson (2001); Besley and Coate (2001)), but only few empirical papers on campaign contributions and lobbying actually test some of these theoretical implications. The majority of studies focuses on campaign contributions and often find that campaign contributions do not matter to a greater extent (Dal Bó, 2006) and that individuals rather than interest groups with special interests are the main source of campaign contributions (Ansolabehere et al., 2003). However, a more recent paper by Mian et al. (2010) contradicts these findings and suggests 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. (2010) find that companies that lobby intensely are more profitable, on average, than those that do not. The work by Kerr et al. (2011) studies the determinants and dynamics of firm lobbying and finds that over the period of 1998-2006 (i) few firms actually lobby, (ii) lobbying status is associated with firm size and (iii) is persistent over time. Igan et al. (2012) use U.S. lobbying data from financial firms and focus on 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.

On the other hand, several contributions address the outcome that we are interested in, i.e., 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 not necessarily be guided by welfare-maximizing goals but instead by self-interest inducing them to pursue reputation building or collude with the banking industry. In line with this, Demirgüç-Kunt et al. (2008) show that generous deposit insurance schemes are adopted in countries where the banking sector is dominated by weak banks which benefit from regulatory forbearance and weak market discipline. Barth et al. (2004) argue that government-led bank regulation and supervision is associated with weak bank sectors and that regulatory agencies are in many countries heavily politically influenced. Brown and Dinç (2005) show that shortly before elections banks are much less likely to receive government intervention than after elections. In a later paper, Brown and Dinç (2011) extend upon this conclusion and state that also macroeconomic factors and bank-sector characteristics play an important role in determining government interventions. However, there is to the best of our knowledge no research effort that provides evidence for the effect of individual bank's influence on regulatory decisions. With regard to regulatory discretion, several contributions have modeled im- or explicitly why, how, and to what extent regulators use their discretion (e.g., Acharya and Yorulmazer (2007); Boot and Thakor (1993); DeYoung et al. (2013); Mailath and Mester (1994)) - however, empirical evidence on the drivers of discretion is scarce.

The two above streams of the literature are connected by contributions that investigate the effects of banks' (as well as other firms') sources of influence on political and regulatory outcomes and particularly on individual regulatory treatment - a field to which our paper is intended to contribute as well. 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 Senate vote on the Glass-Steagall Act of 1933 on universal banking restrictions in the U.S. was significantly influenced by important interest groups (including national banks). Imai (2009) shows in his empirical analysis 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. The work by Behn et al. (2014) examines bailouts of distressed German savings banks. The authors show that distressed banks are less likely to receive public bailouts in the year before elections rather than in years after elections and in highly competitive election campaigns. A relatively new study by Duchin and Sosyura (2012) looks at lobbying and campaign contributions, among other things, to determine to which extent banks are politically connected, and investigates whether politically connected banks are more likely to receive capital injections under the TARP bailout program. Although this paper is related to our study, Duchin and Sosyura (2012) only focus on government bailout decisions, whereas we have a different (and broader) set of regulatory interventions and expected bank support. Igan and Mishra (2011) investigate lobbying and congressional voting behavior and find that banks' influential activities are likely to alter legislators' attitude towards deregulation. This paper, however, only looks at data until 2006, and focuses on legislators that change positions on a given legislation proposal. Our research effort covers a longer time span of data (including the Dodd-Frank Reform), comprises other sources of bank regulatory influence such as proximity to financial legislation representatives and bank directors' employment history at regulators, and applies a broad range of regulatory actions and decisions.

Thus far, most of the literature focuses on particular legislation, macro-level decisions or actual bank bailout decisions during crisis times (e.g., providing TARP funding or not) when measuring support to the financial industry. While the determinants and rationale for bailout (e.g., Gorton and Huang (2004); Acharya et al. (2011); Philippon and Schnabl (2013); Acharya and Yorulmazer (2008); Perotti and Suarez (2002)) and closure decisions (e.g., Cole and White (2012); Kasa and Spiegel (2008); Perotti and Suarez (2002); Wheelock and Wilson (2000)) have been in-depth 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.[1] Literature on PCA has 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., Aggarwal and Jacques (2001); Dahl and Spivey (1995)), but the application of discretionary provisions implied in the PCA regulation has hardly caught any attention. We propose the usage of discretionary additional measures as a proxy for regulator's individual bank treatment to investigate regulatory preferential treatment. In addition, we apply a novel, 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, in 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.

Turning towards the sources of influence, we do not intend to analyze factors that have already been shown to drive regulatory policies on a national scale (such as election cycles or the state of the overall economy), but rather more granular sources of influence that banks can leverage (e.g., lobbying activities, political connections). Especially using bank-specific lobbying data will provide us with new insights, as this has not been extensively employed so far in the empirical literature on banking regulation.

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[1]To the best of our knowledge, Kocherlakota and Shim (2007) is the only paper 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 Dataset and methodology

3.1 Dataset description

We use a unique dataset that is essentially composed of three subsets: (1) regulatory intervention data and expected government support for banks, which are mainly used to construct the regulatory outcome variables, (2) data on banks' lobbying activities, proximity to policymakers, and prior affiliation of directors with regulatory or government institutions, which are used as proxies for various sorts of influence on regulatory decisions, and (3) financial data on banks that chiefly serves as control variables. Each of these subsets is assembled from various data sources and combined into one dataset as described below.

The regulatory intervention data

We tap various sources for data on bank regulatory treatment. As a first source, we identify Prompt Corrective Action directives and bank closures 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. Its fundamental principle is an automatic, rules-based regulatory action framework that takes effect as soon as the outset of bank distress becomes evident to ensure a speedy bank recovery before more drastic and costly regulatory actions such as closure become indispensable. 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 (see Spong (2000) and Benston and Kaufman (1997) for a detailed explanation of PCA). 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".[2] 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 on the bank (e.g., dismiss board, divest subsidiaries) if he determines that it serves the goal of a speedy recovery via the issuance of a PCA directive that is publically announced. Announcements of formal regulatory actions can lead to noticeable market reactions as attested in 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 (incl. initiation and termination dates and required provisions) 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 the second type of regulatory actions, bank closure decisions, we employ the FDIC's publicly available failed bank list to identify which banks have actually been resolved by the regulator and to obtain closure dates. We collect data for both types of regulatory actions for the years 2003 until 2012 and match it manually to our dataset based on bank name and location.

As a second source, we augment our dataset with Fitch support ratings and support rating changes for all banks listed in the Bankscope database by Bureau van Dijk. 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

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[2]In 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.

literature as a proxy for bailout probability (e.g.,Acharya et al. (2013); Gropp et al. (2011, 2006); 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 on regulatory decisions

We assemble data from various sources to construct our indicators for bank lobbying activities and political connections to policymakers and regulators. To start with, we obtain data on lobbying activities from the reports filed in accordance with the Lobbying Disclose Act. The Lobbying Disclosure act requires all firms or individuals conducting lobbying activities involving a member of the Federal legislative or executive 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 six-months period, a report has to be filed to the Senate Office of Public Records (SOPR) containing 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. The SOPR compiles the Lobbying Disclosure Act database containing all semi-annual (until 2007) and quarterly (from 2008 onwards) lobbying disclosure reports filed by lobbying firms and individuals. We collect the actual data from the Centre 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 covering the years 1999 until 2012.[3]

As a following step, we restrict the dataset to all lobbying activities that are related to banks and financial markets, i.e., we select all lobbying activities carried out by or for a firm from the financial industry (according to the classification in the relevant reports) or that deal with an issue related to banking and finance.[4]

In order to conduct our analyses, we need to match the lobbying activities to individual bank financial data and the regulatory outcome data for that bank. 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 datasets (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. It should be noted 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 (also in relation to its peers).

Combining the data on lobbying activities and bank financial data enables us to cast light on the details of bank lobbying. As an example, Figure 2 displays the share of banks in the U.S. that have a lobbying history - defined as reporting lobby spent within their conglomerate at some point over the last four years - over different asset size classes. It is evident that the share is increasing in banks' asset size, with only about 2 percent of small banks and more than 80 percent of banks with total assets above USD 50 billion reporting some lobbying in their conglomerate. The preparation and the use of this data is quite novel to the finance literature and it allows further interesting analyses beyond the use as an indicator for sources of influence in the remainder of this paper. Thus, we provide a more extensive descriptive evaluation of lobbying in the U.S. banking sector in

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[3]Note that we include data on lobbying activities starting at the last quarter of 1999.

[4]The reporting form provides a list of 76 issues from which at least one has to be selected as area of interest of the lobbying activity 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), minting and money (MON).

Appendix C.

[Figure 2]

As a further source of banks' influence, we refer to political connections. Both proxies for political connections that we employ as sources of banks' influence have also been used in Duchin and Sosyura (2012), where political connections prove to have an effect on the grant of TARP funds. We use data on the voting districts of the members of the 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 oversees all financial regulators and matters related to the safety and soundness of the banking 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 representatives' voting districts using zip codes as the matching variable.[5]

Figure 2 evaluates the share of banks in the U.S. that have such political connections through a subcommittee member over different asset size classes. It is noteworthy that this source of influence seems - again - to be more often available to larger banks, of which around 25 percent have such political connections, while only 8 percent 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 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 covers contributions from Political Action Committees (PACs; corporations' main channels for political contributions) to candidates' election campaigns, to political parties and to other PACs. The data is bi-annual, covering federal elections every second year from 1998 until 2012. The CRP moreover makes a distinction between direct and indirect contributions to candidates. Direct contribution amounts are legally restricted. PACs can give annually up to USD 5,000 to a candidate committee per election, USD 5,000 to another PAC and USD 15,000 to any national party committee. Indirect contributions (including independent expenditures and communications costs) on the other hand are not subject to contribution limits and are made completely independent of the candidate. The latter can therefore also be against the candidate.[6] For our analysis we have selected all organizations which are classified in the CRP campaign contributions and lobby data as "Finance, Real estate and Insurance" industry. We then aggregate all direct contributions coming from each individual PAC to each of the candidates running in the corresponding election cycle. In a last step we match the names of the candidates in the PAC data to the subcommittee members described above. This gives us an additional dimension to the political connection between the financial industry and their subcommittee representatives, as we can measure the amounts of campaign contributions from the financial industry.

As an additional proxy for political connections we employ data on 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

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[5] The relationship of zip codes and voting 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 voting district.

[6] Only for 3 observations in the dataset we actually found indirect contributions made against a candidate, so we do not focus on this.

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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 this data from BoardEx, which is a database that contains in-depth profiles on top executives globally covering employment, non-profit, and educational affiliations. The Securities and Exchange Commission requires all publically listed companies to reveal their directors' employment history over the past five years. BoardEx gathers this disclosed information as well as collects information for non-listed companies from other sources. 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 this data manually to top holding company data based on name and location.[7] We focus on all members of the banks' Board of Directors 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. We construct a sample that 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 over the period third quarter of 2003 to 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 directive (and only banks in the "critically undercapitalized" category as foundation for closure decisions). We find 782 (792) banks that have ever fallen below the "undercapitalized" threshold, resulting in 2,849 (2,866) "undercapitalized" bank-quarter observations with non-missing information for lobbying activity (proximity to legislative committee).[8] Note that the "undercapitalized" sample is defined as below the first regulatory threshold for undercapitalization and also includes the "significantly undercapitalized" and "critically undercapitalized" sub-categories. 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 activity (proximity to legislative committee). We point out that these are rather minor sub-samples of the U.S. bank universe consisting of small banks. The prevalence of lobbying activities among smaller banks is low (compare Figure 2), however those small banks that lobby spend rather significant amounts relative to their asset size (see Figure 7 in Appendix C).

Table 1 presents summary statistics on the main variables. Panel A contains the sample of "undercapitalized" bank-quarter observations, in Panel B we give an overview over the sample of bank-quarter observations with

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[7]Note that only bank holding companies rather than banks itself are publically listed in the U.S..

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

Fitch support ratings that we use to estimate expected government support.[9] Table 14 (Appendix A) provides detailed variable descriptions and data sources for each variable.

[Table 1]

Dependent variables

The PCA indicator 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 percent of "undercapitalized" bank-quarter observations in our sample (including significantly and critically undercapitalized capital categories) a PCA directive has been employed. Moving down the capital categories, in 24 percent of "significantly undercapitalized" observations (including critically undercapitalized capital category) a PCA directive was binding; in 50 percent of "critically undercapitalized" observations banks have been actually closed or resolved.

Fitch support ratings are constructed in order to capture the likelihood that a bank will have access to external support (for example 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 ratings 1 and 5 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 states whether there has been any lobbying activity in the last four years on the conglomerate level including all entities belonging to a respective holding company.[10]Lobbying expenditure is not to be conceived as a 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 form of further lobbying activities or revolving doors. Therefore, we define lobbying activity 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 on conglomerate level for 2 percent of the observations. A smaller fraction of these lobbying activities is conducted with the help of a former politician: Around 0.1 percent of all observations on the conglomerate level report lobbying involving a former member of Congress, 1.8 percent lobbying without such involvement. Moreover, we vary the aggregation level (top holding level only), time dimension (pre-crisis lobbying activity), and scale (continuous lobbying spent) of lobbying activities in our robustness tests.

With regard to proximity to legislative committee, we assign a dummy variable equal to 1 to each bank if any entity within the bank's conglomerate is located in the voting district of a member of the relevant legislative

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[9]Note 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.

[10]We believe that a longer retrospect is necessary to account for causality between lobbying efforts and preferential regulatory treatment although admittedly, the time span of four years is somehow arbitrarily chosen. We test different definitions of lobbying activity for robustness reasons.

committee. Following this definition, 10 percent of bank-quarter observations are connected to a Representative who is a member of the Subcommittee on Financial Institutions. For robustness reasons we modify the time horizon of political connections through proximity to legislative committee (past four subsequent years at least).

We define prior regulatory or government affiliations 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 percent of those 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 additional measure to a bank with a sub-par quality of assets. Return on assets controls for efficiency of a bank's operations. Since the probability of receiving a more severe treatment increases with declining capital sufficiency, we include leverage 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 model 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). 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 specification to account for unobserved heterogeneity in PCA decisions 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 decision. 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 mandatory prompt corrective actions. In an extension of this model, we also investigate closure decisions and distinguish whether a bank has been closed conditional 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 model[13] 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 a 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

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[11]Note that we only consider previous jobs and roles with (given) start or end dates before the start of the bank director role.

[12]TARP 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.

[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 alternative estimation method.

otherwise). $c_{i,t} = 1$ constitutes the condition that a bank i falls into the "undercapitalized" or even "significantly undercapitalized" regulatory capital category at which certain mandatory actions and provisions are triggered by the PCA regulation (falls into the "critically undercapitalized" regulatory capital 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 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 legislative committee takes the value 1 if bank i, its top holding company, or any other institution belonging to its holding company is located the voting 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 assist in receiving favorable treatment. If bank lobbying activities and political connections indeed influence its individual regulatory treatment once they get into distress, 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 be in financial problems soon or if representatives opt in the subcommittee because they know that banks in their voting district might need their help soon. While we cannot conclusively rule this out, it does not 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 and cannot cause our findings. If we suspect the case of reversed causality, our estimates would be biased upwards, i.e., we would suspect $Cov(X, \epsilon) > 0$, since regulatory treatment could positively predict lobbying activities.[15] Nevertheless, to account for reverse causality concerns we conduct a series of robustness test varying the time horizon of the lobbying activity and political connection variables and the sample of banks potentially exerting influence.

Results for the baseline model

Table 2 shows the baseline estimation results for the probability of receiving a PCA directive employing lobbying activity as the source of influence. Our main variable of interest, named *past lobbying*, is an indicator variable which takes the value 1 if there has been any lobbying activity on conglomerate level in the past four years and 0 otherwise. In Panel A we conduct all tests on the sample of "undercapitalized" bank-quarter observations (including "significantly undercapitalized" and "critically undercapitalized" sub-categories), in Panel B we only consider the "significantly undercapitalized" sub-sample (including the "critically undercapitalized" sub-category). In columns 1 we calculate simple correlations between the lobbying indicator and the probability

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

[15]The 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., $plim(\hat{\beta}) = \beta + \frac{Cov(X,\epsilon)}{Var(X)}$. If $Cov(X,\epsilon) > 0$ then $plim(\hat{\beta}) > \beta$ and we would thus be overestimating the true effect.

of a PCA directive. 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 (columns 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 percent lower probability of receiving additional discretionary provisions; when falling below the "significantly undercapitalized" threshold they have even a 18 percent lower probability. In the next two model specifications we add sets of dummy variables that might determine the regulatory treatment for robustness reasons. First, time-invariant heterogeneity across regulators that 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 on federal supervisory level might turn out differently if a state regulator is involved (Agarwal et al., 2014). In columns 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]

In Table 3 we conduct the baseline estimations for PCA decisions analyzing proximity to 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 voting district of a member of the Subcommittee on Financial Institutions. The setup of this table is in accordance with the previous table. The results we obtain for the proximity to legislative committee are similar to the results for lobbying activity 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 percent in the case of "undercapitalization" and by 10 percent when falling below the "significantly undercapitalized" threshold.

[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 held office with a regulatory or government institution hitherto. 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 percent 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 adding further dummy controls 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.

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

Robustness tests for alternative explanations and specifications

To account for robustness of these baseline results, we test our PCA decision model for alternative explanations and different specifications. The results for these robustness tests are exhibited in Table 5. Panel A shows the robustness tests for the regressions with lobbying activity on conglomerate level as the source of influence, in Panel B and C we repeat the robustness tests for proximity to legislative committee and prior regulatory or government affiliations as the sources of influence. All robustness tests are conducted on the sample of "undercapitalized" bank-quarter observations (including "significantly undercapitalized" and "critically undercapitalized" sub-categories) and contain banks control variables and year dummies.

[Table 5]

As there might be alternative explanations for our findings, we test our models with 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 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 legislative committee or prior board affiliations) on a 2-year rolling average leverage ratio and 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 (columns 1). 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 (columns 2) are consistent with our baseline results. 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 reducing 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.[17] 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 equal to 1 for all bank-quarter observations where other enforcement actions have been issued respectively were still valid and rerun our estimations (columns 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 (columns 4), we find coefficients similar in economic size and significance as the baseline models with all observations from third quarter of 2003 to 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 crisis period. We do not obtain reasonable results for our baseline model

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[17] For 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.

with lobbying activity as source of influence for the pre-crisis period (2003Q3-2008Q2) due to the low number of overall observations, PCA issues, and past lobbying activity; yet, we find a significant effect when rerunning the model with proximity to legislative committee as source of influence for the pre-crisis period which is in line with the results for the crisis period.[18] 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.[19] Therefore, we assume that banks' influence exertion 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 to estimate our model. 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 on conglomerate level (that might also include other entities not related to the respective bank), we only consider lobbying activity and proximity to legislative committee on top holding company level. Likewise, the results are comparable to the baseline model when using this different aggregation level (column 6). Column 7 in Panel A presents the results of a model specification with a continuous lobbying variable (natural logarithm of lobby amount spent over past four years) rather than the indicator variable. We find consistent results to our baseline model when applying a variable that proxies lobby intensity. With rising lobbying expenditures the probability of receiving additional discretionary provisions decreases.

Finally, we test both sources of influence, lobbying activity and proximity to legislative committee, simultaneously in one model (column 6 in Panel B) 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 activity seems to be larger than the effect of proximity to legislative committee.[20]

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 reversed causality

As previously mentioned, our model might suffer from endogeneity caused by reversed causality, e.g., banks might lobby because they assume to 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 reversed causality concerns. The results are reported in Table 6. We employ lobbying activity as source of influence in Panel A and proximity to legislative committee in Panel B. All tests are conducted on the sample of "undercapitalized" bank-quarter observations (including "significantly undercapitalized" and "critically undercapitalized" sub-categories) and contain banks control variables and year dummies.

[Table 6]

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 activity in the period before the financial crisis (2003-2006) and match it with regulatory treatment after the onset of the financial crisis

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[18]Note that for brevity, we do not report the results of these tests in Table 5.
[19]Compare Table 12 in Section 5.
[20]Note that due to little overlap between both sources of influence constructing a interaction term is not meaningful.

(2008Q3-2012Q4) assuming that banks should 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 representatives might be prone to opt in the Subcommittee on Financial Institutions if they know (or at least anticipate) that banks in their voting district might need their support soon. As such a behavior would typically happen at short notice, we control for subcommittee representation respectively bank location in the voting district of a subcommittee representative for a longer time horizon, i.e., four subsequent years at least. The results are in line with our baseline estimation when employing a more conservative definition for proximity to 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 representatives) 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 representative. Hence, differences in asset quality might amplify the reversed causality problem. Altough 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 three lags 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 (columns 2). 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.

To sum up, we are able to prove to a great extent that our findings are robust to reversed 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 test whether there is any interaction effect with the financial health of banks. The results are shown in Table 7. Panel A shows the tests with lobbying activity on conglomerate level as the source of influence, in Panel B we employ proximity to 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 observations (including "significantly undercapitalized" and "critically undercapitalized" sub-categories) and contain banks control variables and year dummies.

Regarding the financial health, we want to 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 (columns 1), Tier 1 ratio (columns 2) and risk-based capital ratio (columns 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 activity as 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 and 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 activity. Looking at proximity to legislative committee as source of influence we only find a slightly at 10%-level significant coefficient for the interaction term with

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

[Table 7]

Second, other conditions related to the sources of influence might drive their effectiveness. In Table 8 we test two hypotheses: (i) lobbying can be more effective when it is conducted by former politicians, who might have personal connections to decisions makers, and (ii) Subcommittee Representatives can be more prone to preferential regulatory bank treatment when they received larger amounts of campaign contributions from the financial industry during their election period. We analyze the first hypothesis by including two variables that split the lobbying activities into lobbying involving a former member of Congress and 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 suggest that the lobbying activities involving a member of Congress are more effective (although the p-value[21] 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 legislative committee with a continuous variable measuring the amount of campaign contributions from the financial industry (average sum of contributions that subcommittee members from voting districts of all entities within a bank's conglomerate received). We find a negative and significant coefficient for *fin industry PACs to subcom rep*, suggesting that with increasing contributions from financial institutions the effectiveness of proximity to legislators increases.

[Table 8]

Taken together, our results show that several conditions amplify the effectiveness of bank's influence exertion. Lobbying activities not only lower the probability of receiving additional actions when entering the state of financial difficulties, they also decelerate the propensity for additional actions with deteriorating financial health. Moreover, lobbying can be more effective when conducted involving a former Congress member. Proximity to legislative committee is more effective the more campaign contributions the Representatives 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 certain 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' influence exertion on these closure decisions. The results are exhibited in Table 9. Panel A shows the results of regressions with lobbying activity as source of influence, in Panel B proximity to legislative committee is employed. 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 exertion has no significant impact on closure decisions of "critically undercapitalized" banks, although a negative coefficient in most specifications points to a decreasing effect on closure probabilities.

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[21] The p-value is the result of a test whether the difference between the two variables of interest, namely with and without former congressman, is significant.

To rule out that this "non-finding" is driven by the structure of the data, we draw random samples from the sub-sample 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 sub-sample specifications, we do not find a significant negative effect on closure decisions, i.e., decreasing the probability of bank closure.[22] 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 Weilbull Model for the hazard function as we assume that the hazard of closure increases with distress duration. Table 10 shows the results of this estimation with lobbying activity as source of influence in Panel A and proximity to legislative committee 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.

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

The following step in our empirical analysis is to explore the effect of lobbying and proximity to legislative committee on expected government support. For this purpose, we estimate variations of the following model:

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

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, a rating of 5 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 representative in the respective voting 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 from the literature and theory presented above - we expect the coefficient β to be negative and significant.

Results for the baseline model

Table 11 contains the estimation results for the model explaining the effect of sources of influence on the Fitch support ratings. In Panel A the source of influence is past lobbying activities and in Panel B we focus on the

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[22]We do not report the results of these robustness tests for brevity reasons.

subcommittee member in the voting district. To make sure that we are not measuring any "too-big-to-fail" effect in our sample, these regressions explicitly 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. In column 1 we start with 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.

[Table 11]

In Panel A our main variable of interest is *past lobbying,* an indicator variable which takes the value 1 if any entity belonging to the bank's top holding company has lobbied in the past four years. The results suggest 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 Fitch support rating, which implies an increase in likelihood of expected government support. Throughout the different model setups, we find that past lobbying activities lead to a reduction of about 1.6 point in the current rating compared to banks that do not engage in any lobbying. Economically speaking, this effect is significant, as for example Ueda and di Mauro (2013) show that banks with better support ratings enjoy an "implicit subsidy" in the form of cheaper funding costs. A reduction in Fitch support ratings should therefore result in lower funding costs. However, it is important to understand that our sample consists of mostly banks with rating 1 or 5. 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.[23]

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

Robustness tests

In order to test the robustness of our baseline results, we explore the effect of alternative measures of lobbying activities as well as an alternative estimation procedure and a sub-sample of the post-crisis time period. Table 12 presents the corresponding results. Panel A shows the robustness tests for the regressions with lobbying activity on conglomerate level as the source of influence, in Panel B we repeat the robustness tests accounting for alternative explanations for proximity to 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 activity and subcommittee member proximity on the Fitch support ratings. 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 intervene in troubled banks (column 2 and 3 in Panel A and B). We compare a sample from before the financial crisis and the collapse of Lehman Brothers in the third quarter of 2008 to a sample after that event. Again, we find that the effect does not change for the lobbying variable, nor for the subcommittee variable in Panel B.

Additionally, we are interested in testing 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 versus top holding level) and scale (continuous versus dichotomous) as we did in the regulatory

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[23]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.

treatment robustness tests. 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. In the following section we explore conditions for effectiveness similar to those executed for the Prompt Corrective Actions.

[Table 12]

Conditions for effectiveness

In Table 13 we extend upon our baseline results and explore again whether lobbying with the aid of a former politician (Congress member) becomes more effective (column 1) and whether campaign contributions increase the benefit of having close proximity to decision makers (column 2). In column (1) the coefficient for lobbying with a former Congress member seems larger than lobbying without a former Congress member, the size of the coefficients indicates that lobbying with a former Congress member becomes almost twice as effective. Our test result suggests that this difference is significant (p-value < 0.000). This is in line with our earlier findings. In column (2) we repeat the exercise of adding campaign contributions data to our subcommittee variable and only present the interaction term in the table. The interaction term suggests that if candidates received relatively large amounts of campaign contributions from the financial industry, the beneficial effect of proximity to decision makers becomes stronger.

[Table 13]

6   Conclusion

This paper 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 reversed causality concerns. We find evidence on conditions that determine the effectiveness of these sources of influence. Besides lowering the probability of receiving less beneficial treatment, we find that lobbying activity decelerate the propensity for additional sanctions with deteriorating capital ratios. Lobbying becomes more effective by involving former politicians as lobbyists. The effectiveness of proximity to legislative committee is increases with the amount of campaign contributions from the financial industry that the Representatives receive in the election period. However, there seems to be a limit to the efficacy of influence exertion when it comes to 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 as well as expected regulatory treatment in case of bank's distress as 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 low prevalence of lobbying activities and political connections. However, since we find proof for the effect of smaller banks' influence exertion, we can assume that there also exists an effect on regulatory treatment for larger banks that are more frequently engaged in lobbying activities and politically better connected. 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 - it might well be that many more activities take place unofficially, i.e., without being reported. All these caveats suggest that our analysis can only show a lower bound for the actual effect of banks' influence exertion on regulation. Future research efforts exploring the magnitude of influence exertion on other modes of regulatory treatment, for the group of large banks, by means of different sources of influence, and in other parts of the world 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 macroeconomic 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, it could very well be that the impact of lobbying activities is even larger. Future research efforts exploring the magnitude of influence exertion in other parts of the world would therefore add enormous value. 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.

Concluding, our data 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 to avoid regulatory capture dominating regulatory discretion.

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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).
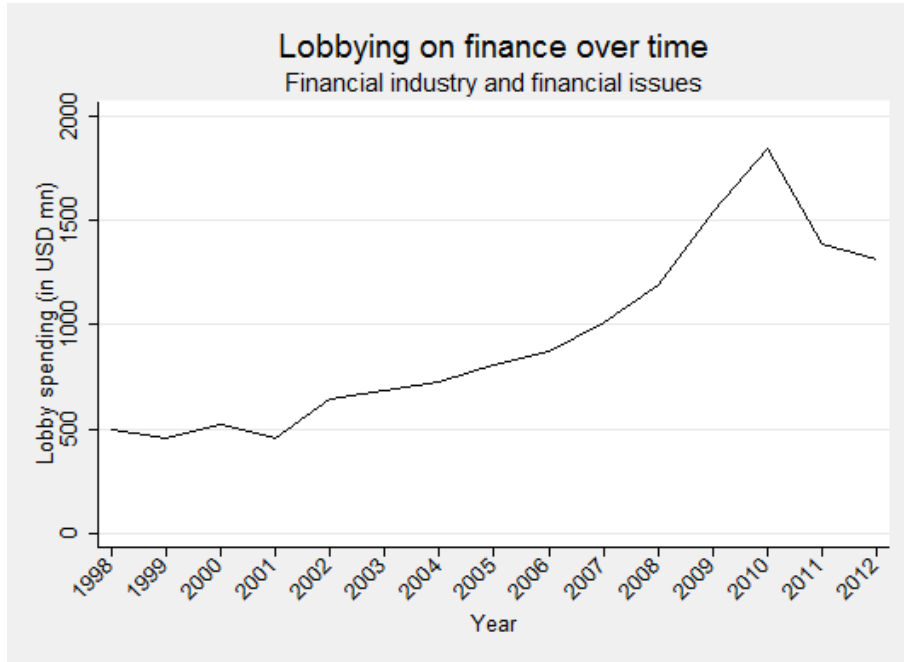
Figure 2: **Lobbying history by bank size**
This figure presents the share of banks in the U.S. that have a lobbying history over different asset size classes. Lobbying history is defined as reporting lobby spending within the bank conglomerate at some point over the last four years.
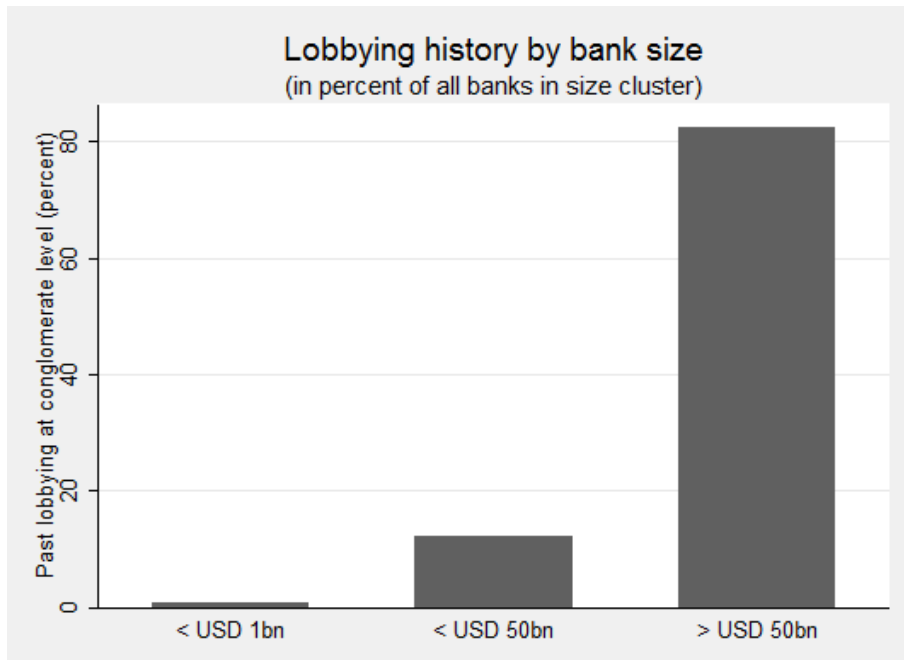
Figure 3: **Proximity to legislative committee by bank size**
This figure presents the share of banks in the U.S. with proximity to pertinent legislative committee over different asset size classes. Proximity to legislative committee is defined as the Representative from the voting district where the bank is incorporated being a member of the Subcommittee on Financial Institutions and Consumer Credit.
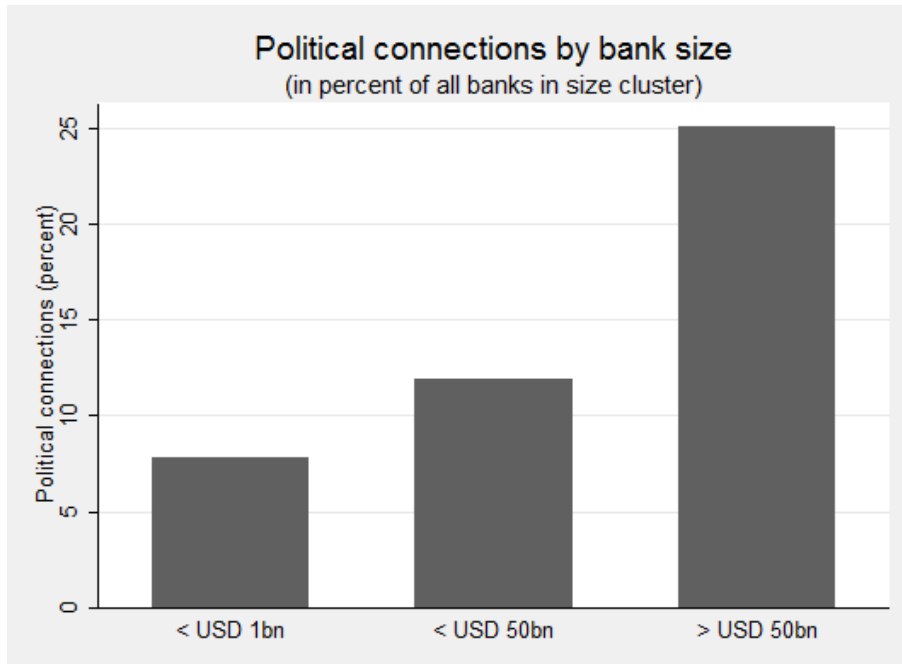
Figure 4: **Lobbying of the financial industry**
This figure presents the development of total lobbying expenditures by financial firms over time. The financial industry is classified into (1) banks and lending firms, (2) securities and investment firms, (3) insurance companies, and (4) real estate firms and other financial services such as financial consulting.

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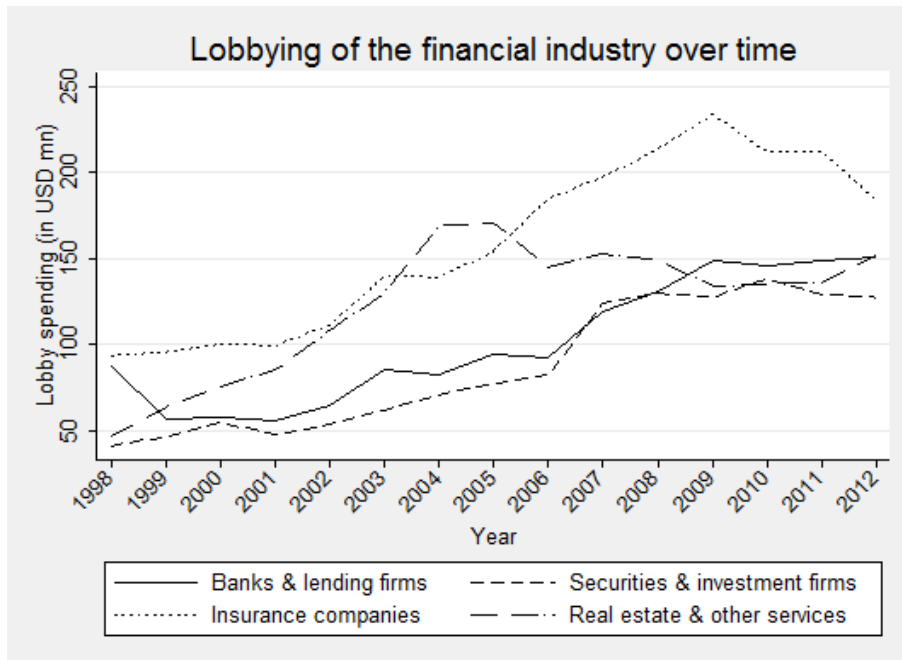
Figure 5: **Lobbying targets**
This figure presents the number of lobby activities, i.e., individual bank lobbying with at least one contact with a given government agency in a semiannual/quarterly period, by target agencies. Target agencies include bank regulators (the Federal Deposit Insurance Corporation (FDIC), the National Credit Union Administration (NCUA), the Office of the Comptroller of the Currency (OCC), and the Office of Thrift Supervision (OTS)), the Federal Reserve (Fed), financial regulators (the Securities and Exchange Commission (SEC), the Commodity Futures Trading Commission (CFTC), the Farm Credit Administration (FCA), and the Federal Housing Finance Board (FHFB)), and the Department of the Treasury.
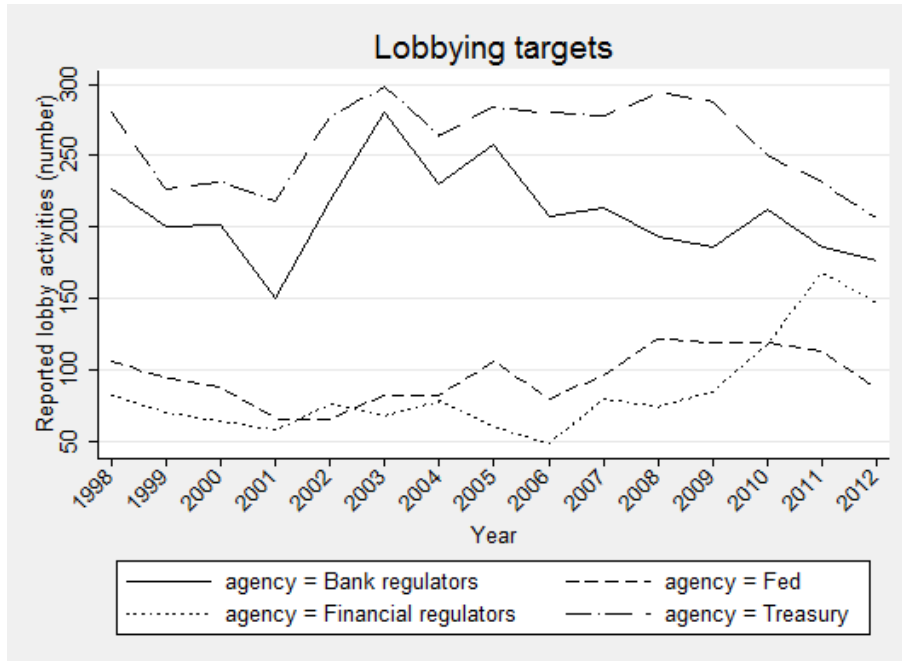
Figure 6: **Lobbying channels**
This figure presents the total lobbying expenditures (in USD) through the different channels of lobbying, i.e., the bank itself, the top holding company, and other related banks, over bank size classes. Only banks for which lobbying expenditures through any of the above channels is reported are included.

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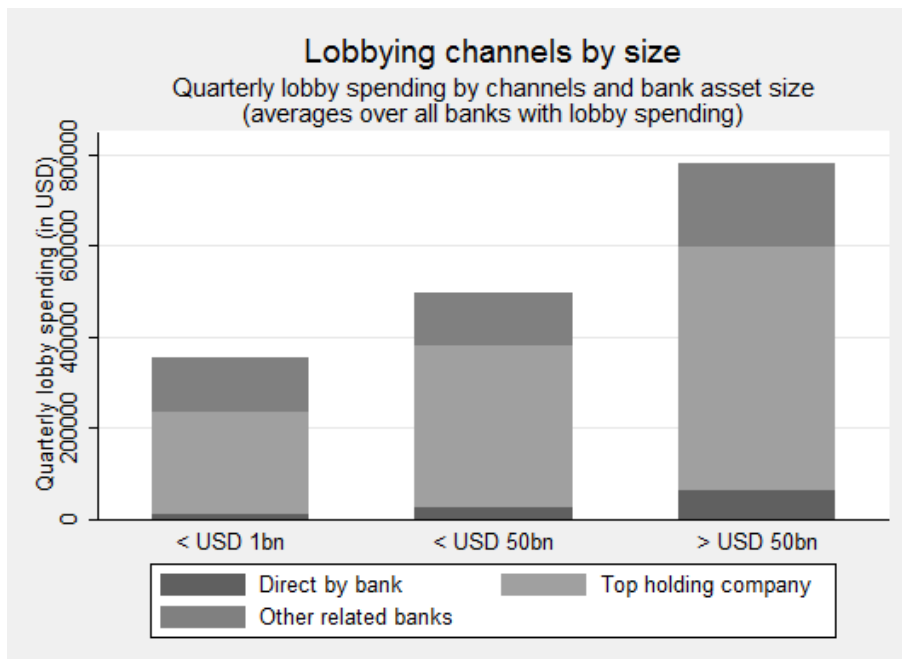
Figure 7: **Lobbying by asset size**
This figure presents the direct lobbying expenditures in relation to total assets over bank size classes. Only banks for which lobbying expenditures is reported are included.

Lobbying by asset size
Quarterly direct lobby spending to total assets by bank asset size
(averages over all banks with lobby spending)
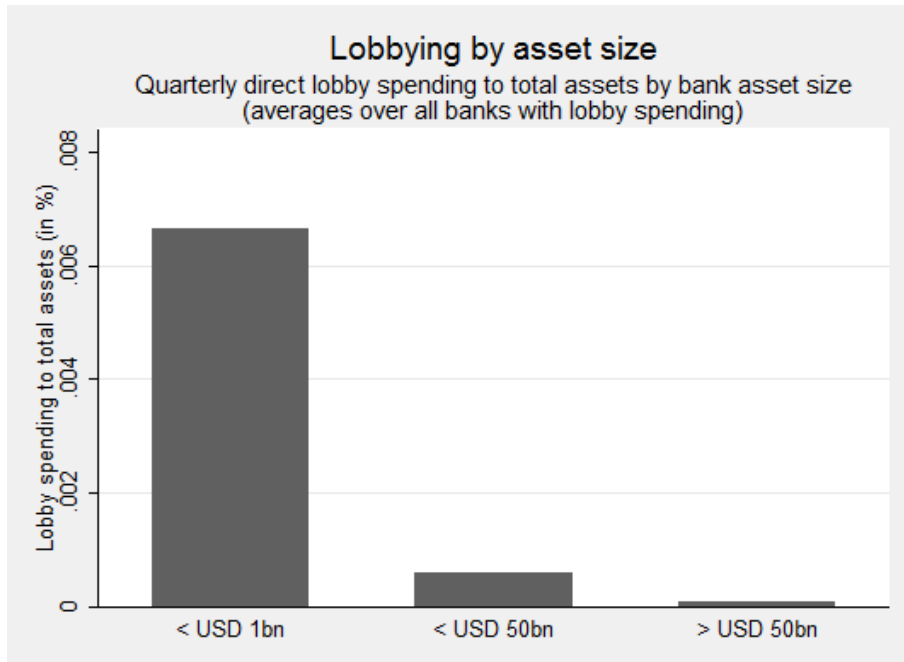
Figure 8: **Lobbying and support ratings**
This figure presents the total lobbying expenditures (in USD) through the different channels of lobbying, i.e., the bank itself, the top holding company, and other related banks, over Fitch support rating classes. A Fitch support rating of 1 indicates extremely high probability of external support, 5 indicates a probability of support, which can, however, not be relied upon. Only banks for which both Fitch support ratings and lobbying expenditures through any of the above channels is reported are included.

Lobbying and support ratings
Quarterly lobby spending by Fitch support rating
(averages over all banks with lobby spending)

28
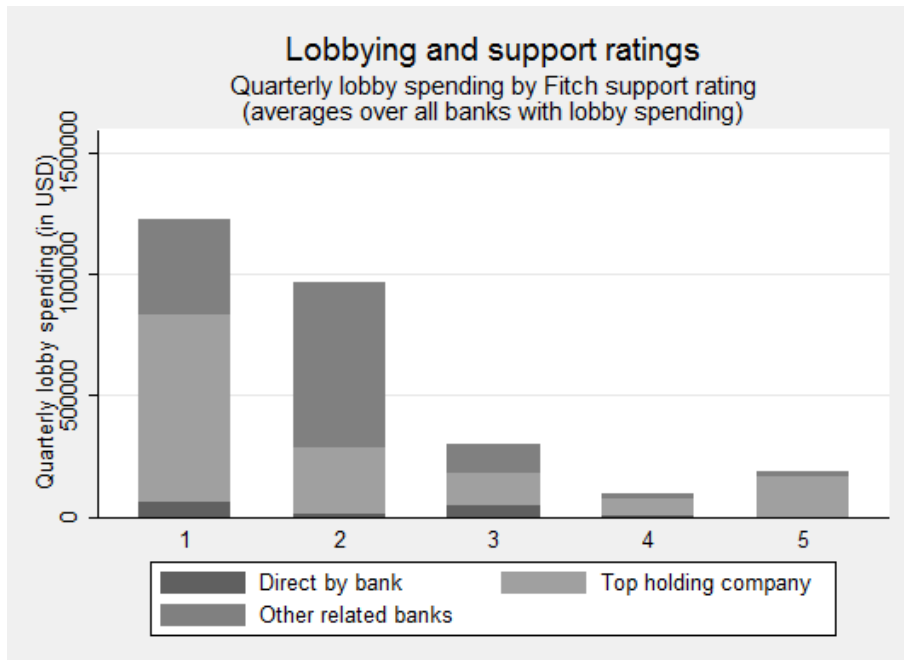
Figure 9: **Lobbying and support ratings**
This figure presents the direct lobbying expenditures in relation to total assets over Fitch support rating classes. A Fitch support rating of 1 indicates extremely high probability of external support, 5 indicates a probability of support, which can, however, not be relied upon. Only banks for which both Fitch support ratings and lobbying expenditures through any of the above channels is reported are included.
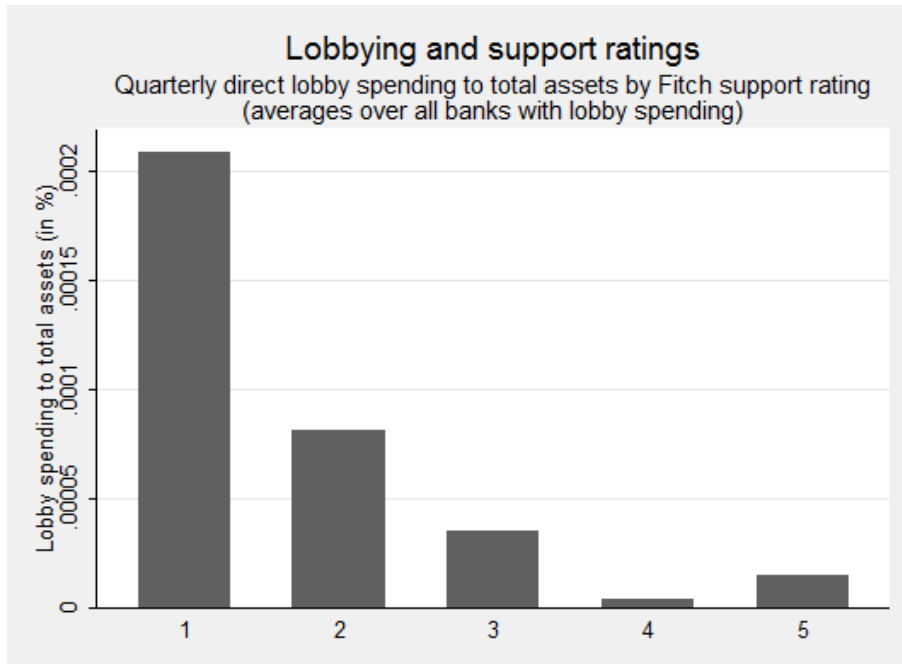
Figure 10: **Lobbying and TARP support**
This figure presents the total lobbying expenditures (in USD) through the different channels of lobbying, i.e., the bank itself, the top holding company, and other related banks, for banks that received and that did not receive support in the TARP CPP program. Only banks for which lobbying expenditures through any of the above channels is reported are included.
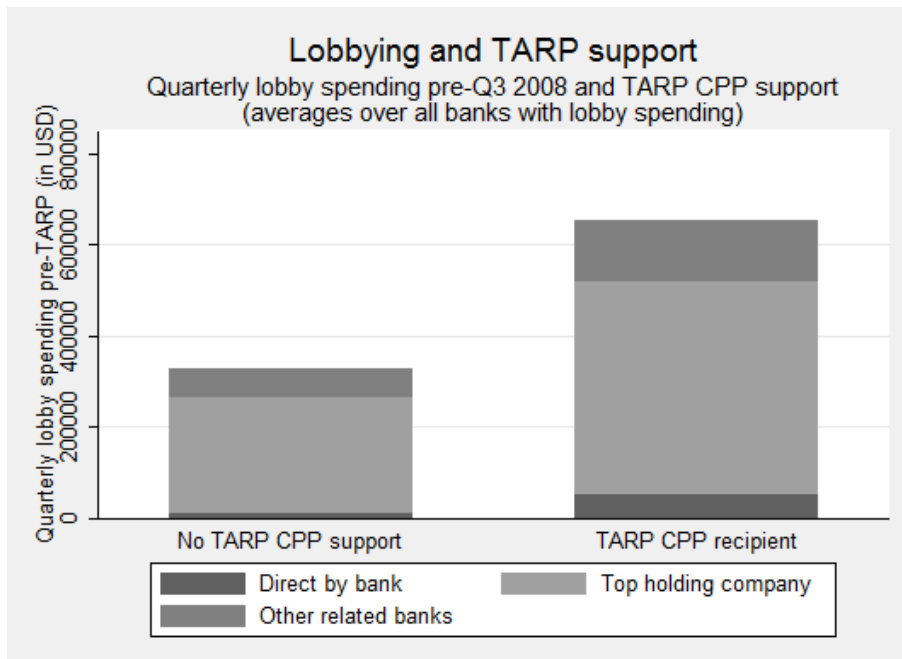
Figure 11: **Lobbying and TARP support**
This figure presents the direct lobbying expenditures in relation to total assets for banks that received and that did not receive support in the TARP CPP program. Only banks for which lobbying expenditures through any of the above channels is reported are included.
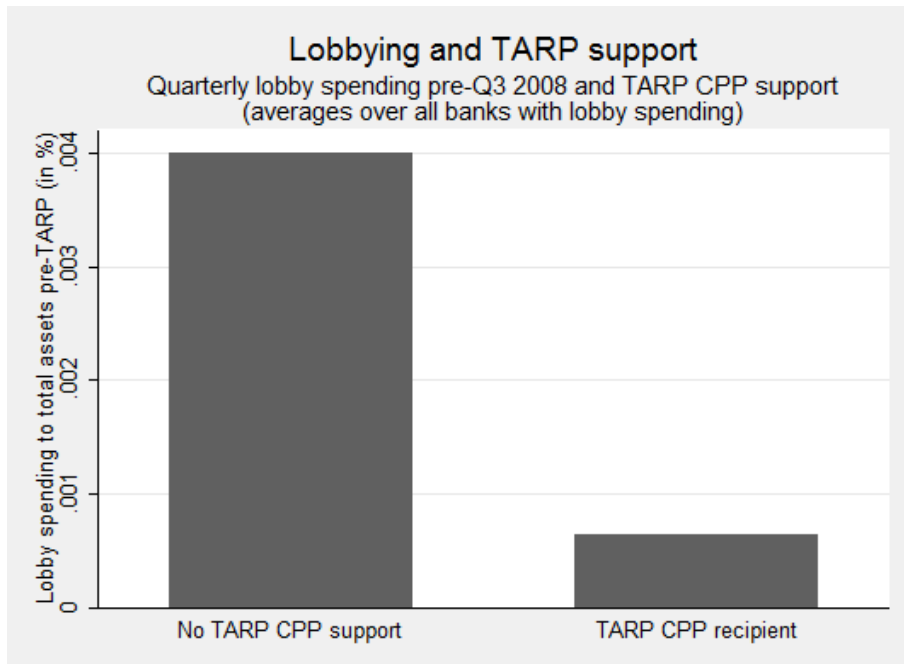
Table 1: **Summary statistics**
This table presents summary statistics, reporting variable names, means, standard deviations, minimum and maximum values, and the number of observations for which data is available in our sample. Unless otherwise stated, the data is reported in percentages. For the sake of readers' convenience all indicator variables are scaled by 100. All observations are on 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, U.S. Department of the Treasury.

Panel A: Regulatory treatment sample

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
Past lobby spent (congl.) (in USD th)	5.78	175	0	8528	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
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
Liquidity ratio	9.71	6.59	0.40	42.53	2849
Deposit ratio	79.42	8.27	4.19	89.27	2849
Non-performing loan ratio	14.50	6.29	0	22.13	2849
CPP recipient bank-quarter	3.37	18.05	0	100	2849

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 lobby spent (congl.) (in USD th)	2386	6782	0	39165	5402
Past lobbying (congl., fcong)	9.72	29.62	0	100	5402
Past lobbying (congl., no fcong)	28.03	44.92	0	100	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 bank-quarter	14.39	35.10	0	100	5402

Table 2: **Regulatory treatment: Baseline model with lobbying activities as 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 leverage (defined as Tier 1 capital divided by average assets), size (natural logarithm of total bank assets), profitability, NII ratio, liquidity ratio, deposit ratio, NPL ratio, and an indicator variable that takes the value of 1 if the bank was a recipient of the TARP CPP program in the respective quarter (0 otherwise). All observations are on 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)

Dep. variable	(1) Prompt Corrective Action directive	(2)	(3)	(4)
Past lobbying	-0.0847**	-0.1192***	-0.0945**	-0.0794*
	(0.0351)	(0.0396)	(0.0411)	(0.0409)
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	2,868	2,849	2,849	2,849
Number of banks	793	782	782	782
R-squared	0.0011	0.0507	0.1370	0.1356

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

Dep. variable	(1) Prompt Corrective Action directive	(2)	(3)	(4)
Past lobbying	-0.1181**	-0.1804***	-0.1526**	-0.1297**
	(0.0579)	(0.0634)	(0.0652)	(0.0641)
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	0.0335	0.1585	0.1508

Table 3: **Regulatory treatment: Baseline model with proximity to legislative committee as source of influence**
This table presents multivariate estimates of the effect of proximity to 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 voting 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 leverage ratio (defined as Tier 1 capital divided by average assets), size (natural logarithm of total bank assets), profitability, NII ratio, liquidity ratio, deposit ratio, NPL ratio, and an indicator variable that takes the value of 1 if the bank was a recipient of the TARP CPP program in the respective quarter (0 otherwise). All observations are on 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)

Dep. variable	(1) Prompt Corrective Action directive	(2)	(3)	(4)
Subcom rep	-0.0549***	-0.0594***	-0.0442**	-0.0483**
	(0.0188)	(0.0195)	(0.0184)	(0.0188)
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	2,888	2,866	2,866	2,866
Number of banks	805	792	792	792
R-squared	0.0022	0.0516	0.1403	0.1390

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

Dep. variable	(1) Prompt Corrective Action directive	(2)	(3)	(4)
Subcom rep	-0.0871***	-0.1058***	-0.0965***	-0.0999***
	(0.0305)	(0.0319)	(0.0290)	(0.0299)
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	1,531	1,516	1,516	1,516
Number of banks	595	586	586	586
R-squared	0.0040	0.0393	0.1678	0.1601

Table 4: **Regulatory treatment: Baseline model with prior affiliation as 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 leverage ratio (defined as Tier 1 capital divided by average assets), size (natural logarithm of total bank assets), profitability, NII ratio, liquidity ratio, deposit ratio, NPL ratio, and an indicator variable that takes the value of 1 if the bank was a recipient of the TARP CPP program in the respective quarter (0 otherwise). All observations are on 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)

Dep. variable	(1) Prompt Corrective Action directive	(2)	(3)	(4)
Prior affiliation	-0.1638***	-0.1379**	-0.1462**	-0.1394**
	(0.0512)	(0.0640)	(0.0622)	(0.0624)
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	307	306	306	306
Number of banks	108	107	107	107
R-squared	0.0185	0.1865	0.2375	0.2464

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

Dep. variable	(1) Prompt Corrective Action directive	(2)	(3)	(4)
Prior affiliation	-0.2519***	-0.1477	-0.1390	-0.1390
	(0.0793)	(0.1208)	(0.1076)	(0.1076)
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	182	181	181	181
Number of banks	76	75	75	75
R-squared	0.0347	0.1265	0.2207	0.2207

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

This table presents multivariate estimates of the effect of lobbying activities proximity to 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 2-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 activity and proximity to legislative committee on top holding company level (instead of conglomerate level). Column (7) in Panel A shows the results employing a continuous variable for lobbying activity (lobby amount spent). In column (7) in Panel B we include lobbying activity and proximity to 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). *Past lobbying spent* is the natural logarithm of the total lobbying amount spent aggregated over all entities within 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 voting 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)). *Prior affiliation top* 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 (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 leverage ratio (defined as Tier 1 capital divided by average assets), size (natural logarithm of total bank assets), profitability, NII ratio, liquidity ratio, deposit ratio, NPL ratio, and an indicator variable that takes the value of 1 if the bank was a recipient of the TARP CPP program in the respective quarter (0 otherwise). 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 on 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 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	(5) Logit model PCA	(6) Top holding level PCA	(7) Lobby amount spent PCA
Past lobbying	-0.1219*** (0.0425)	-0.0893** (0.0353)	-0.1428*** (0.0393)	-0.1215*** (0.0413)	-1.4104** (0.6335)		
Past lobbying top						-0.1489** (0.0586)	
Past lobbying spent							-0.0277*** (0.0079)
Bank controls	YES	YES	YES	YES	YES	YES	YES
Year dummies	YES	YES	YES	YES	YES	YES	YES
Observations	587	2,429	2,109	2,672	2,792	2,849	2,849
Number of banks	345	720	617	702	754	782	782
R-squared	0.0748	0.0465	0.0687	0.0496		0.0504	0.0508
Pseudo R-squared					0.0438		

Table 5 – *Continued from previous page*

Panel B: Proximity to legislative committee as 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	(5) Logit model PCA	(6) Top holding level PCA	(7) Both sources simultaneously PCA
Subcom rep	-0.0643*** (0.0196)	-0.0511** (0.0202)	-0.0646*** (0.0212)	-0.0535** (0.0219)	-0.1065*** (0.0407)		-0.0570*** (0.0201)
Subcom rep top						-0.0411* (0.0236)	
Past lobbying							-0.1065*** (0.0407)
Bank controls	YES	YES	YES	YES	YES	YES	YES
Year dummies	YES	YES	YES	YES	YES	YES	YES
Observations	2,448	2,436	2,135	2,686	2,810	1,894	2,799
Number of banks	765	731	626	712	765	568	773
R-squared	0.0560	0.0441	0.0664	0.0502		0.0514	0.0537
Pseudo R-squared					0.0460		

Panel C: Prior affiliation as 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	(5) Logit model PCA
Prior affiliation	-0.1886** (0.0747)	-0.1384** (0.0628)	-0.1483** (0.0673)	-0.1412** (0.0639)	-39.3406*** (11.2682)
Bank controls	YES	YES	YES	YES	YES
Year dummies	YES	YES	YES	YES	YES
Observations	196	260	247	289	269
Number of banks	82	96	84	96	90
R-squared	0.1936	0.1819	0.2107	0.1754	
Pseudo R-squared					0.0943

Table 6: **Regulatory treatment: Robustness tests accounting for reversed causality**
This table presents multivariate estimates of the effect of lobbying activities and proximity to legislative committee on regulatory treatment (additional discretionary prompt corrective actions) testing for reversed causality concerns. In column (1) in Panel A we employ lobbying activity 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 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 non-performing loan ratio and its three lags using propensity score matching (up to 20 nearest neighbors within 0.0001-caliper). *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 voting 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 voting 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), profitability, NII ratio, liquidity ratio, deposit ratio, NPL ratio, and an indicator variable that takes the value of 1 if the bank was a recipient of the TARP CPP program in the respective quarter (0 otherwise). All observations are on 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 source of influence

Model Dep. variable	(1) Pre-crisis lobbying activity PCA	(2) Sample matched on asset quality PCA
Pre-crisis lobbying	-0.1122*** (0.0381)	
Past lobbying		-0.1498*** (0.0429)
Bank controls	YES	YES
Year dummies	YES	YES
Observations	2,686	960
Number of banks	710	515
R-squared	0.0483	0.0697

Panel B: Proximity to legislative committee as source of influence

Model Dep. variable	(1) Longer time horizon PCA	(2) Sample matched on asset quality PCA
Subcom rep for 4 years	-0.0589* (0.0320)	
Subcom rep		-0.0497** (0.0198)
Bank controls	YES	YES
Year dummies	YES	YES
Observations	2,849	2,387
Number of banks	782	742
R-squared	0.0499	0.0483

Table 7: **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 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 voting 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), profitability, NII ratio, liquidity ratio, deposit ratio, NPL ratio, and an indicator variable that takes the value of 1 if the bank was a recipient of the TARP CPP program in the respective quarter (0 otherwise). All observations are on 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 source of influence

Dep. variable	(1)	(2)	(3)
	Prompt Corrective Action directive		
Past lobbying	-0.1829***	-0.1843***	-0.1977***
	(0.0480)	(0.0462)	(0.0493)
Leverage ratio (PCA)	-3.7548***		
	(0.5166)		
Past lobbying x leverage ratio	3.1567***		
	(0.7278)		
Tier 1 ratio (PCA)		-2.8800***	
		(0.3826)	
Past lobbying x Tier 1 ratio		2.5492***	
		(0.4732)	
RB capital ratio (PCA)			-2.5350***
			(0.3420)
Past lobbying x RB capital ratio			2.1855***
			(0.4498)
Bank controls	NO	YES	YES
Year dummies	NO	YES	YES
Observations	2,849	2,849	2,849
Number of banks	782	782	782
R-squared	0.0544	0.0582	0.0560

Continued on next page

Table 7 – *Continued from previous page*

Panel B: Proximity to legislative committee as source of influence

Dep. variable	(1)	(2)	(3)
	Prompt Corrective Action directive		
Subcom rep	-0.1159***	-0.0988**	-0.1084**
	(0.0432)	(0.0450)	(0.0499)
Leverage ratio (PCA)	-3.1643***		
	(0.6055)		
Subcom rep x leverage ratio	1.9002*		
	(1.1434)		
Tier 1 ratio (PCA)		-2.2075***	
		(0.5386)	
Subcom rep x Tier 1 ratio		0.9990	
		(0.8747)	
RB capital ratio (PCA)			-2.0237***
			(0.4633)
Subcom rep x RB capital ratio			0.9395
			(0.7812)
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	0.0526	0.0543	0.0536

Table 8: **Regulatory treatment: Other conditions for effectiveness of sources of inuence**
This table presents multivariate estimates of the effect of lobbying activities and proximity to 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 activity on conglomerate level in the last four years was conducted involving a former member of congress (0 otherwise), *past lobbying (no former congressman)* indicates that all lobbying activity on conglomerate level in the last four years was 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 voting 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), profitability, NII ratio, liquidity ratio, deposit ratio, NPL ratio, and an indicator variable that takes the value of 1 if the bank was a recipient of the TARP CPP program in the respective quarter (0 otherwise). All observations are on 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) Former Congress member as lobbyist PCA	(2) Campaign contributions to representative PCA
Past lobbying (former congressman)	-0.2176*** (0.0430)	
Past lobbying (no former congressman)	-0.1132*** (0.0414)	
Financial industry PACs to subcom rep		-0.0090** (0.0039)
p-value *test (former congressman)=* *(no former congressman)*	0.0657	
Bank controls	YES	YES
Year dummies	YES	YES
Observations	2,849	2,295
Number of banks	782	623
R-squared	0.0508	0.0641

Table 9: **Regulatory treatment: Closure decisions**

This table presents multivariate estimates of the effect of lobbying activities and proximity to 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 voting 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 leverage ratio (defined as Tier 1 capital divided by average assets), size (natural logarithm of total bank assets), profitability, NII ratio, liquidity ratio, deposit ratio, NPL ratio, and an indicator variable that takes the value of 1 if the bank was a recipient of the TARP CPP program in the respective quarter (0 otherwise). All observations are on 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 *** $p<0.01$, ** $p<0.05$, * $p<0.1$.

Panel A: Lobbying activity as source of influence

	(1)	(2)	(3)
Sample	**Critically undercapitalized**		
Dep. variable	**Closure**		
Past lobbying	0.0411	-0.0283	-0.0349
	(0.1132)	(0.1234)	(0.1290)
Bank controls	NO	YES	YES
Year dummies	NO	NO	YES
Observations	641	629	629
Number of banks	398	392	392
R-squared	0.0002	0.1244	0.1640

Panel B: Proximity to legislative committee as source of influence

	(1)	(2)	(3)
Sample	**Critically undercapitalized**		
Dep. variable	**Closure**		
Subcom rep	-0.0845	-0.0700	-0.0776
	(0.0654)	(0.0632)	(0.0647)
Bank controls	NO	YES	YES
Year dummies	NO	NO	YES
Observations	654	641	641
Number of banks	408	402	402
R-squared	0.0025	0.1235	0.1629

Table 10: **Regulatory treatment: Duration and hazard of closure**
This table presents multivariate estimates of the effect of lobbying activities and proximity to 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 voting 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 leverage ratio (defined as Tier 1 capital divided by average assets), size (natural logarithm of total bank assets), profitability, NII ratio, liquidity ratio, deposit ratio, NPL ratio, and an indicator variable that takes the value of 1 if the bank was a recipient of the TARP CPP program in the respective quarter (0 otherwise). All observations are on 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 *** $p<0.01$, ** $p<0.05$, * $p<0.1$.

Panel A: Lobbying activity as source of influence

Sample Dep. variable	(1) Critically undercapitalized Time to closure	(2)	(3)
Past lobbying	-0.1224	0.2197	-0.0077
	(0.3156)	(0.2433)	(0.2772)
	0.8848	*1.2457*	*0.9923*
	(0.2792)	*(0.3031)*	*(0.2751)*
Bank controls	NO	YES	YES
Year dummies	NO	NO	YES
Number of banks	398	388	388
Wald chi2	0.15	110.81	907.71

Panel B: Proximity to legislative committee as source of influence

Sample Dep. variable	(1) Critically undercapitalized Time to closure	(2)	(3)
Subcom rep	-0.0797	-0.2329	-0.3646
	(0.2375)	(0.2512)	(0.2618)
	0.9234	*0.7922*	*0.6945*
	(0.2193)	*(0.1990)*	*(0.1818)*
Bank controls	NO	YES	YES
Year dummies	NO	NO	YES
Number of banks	408	397	397
Wald chi2	0.11	118.39	1160.11

Table 11: **Expected government support: Lobbying activities and proximity to legislative committee**
The table below presents estimates of lobbying activities and proximity to 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 voting district of a member of the Subcommittee on Financial Institutions (0 otherwise). Control variables comprise leverage ratio (defined as Tier 1 capital divided by average assets), size (natural logarithm of total bank assets), profitability, NII ratio, liquidity ratio, deposit ratio, NPL ratio, and an indicator variable that takes the value of 1 if the bank was a recipient of the TARP CPP program in the respective quarter (0 otherwise). All observations are on 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 *** $p<0.01$, ** $p<0.05$, * $p<0.1$.

Panel A: Lobbying activity as source of influence

Dep. variable	(1) Fitch support rating	(2)	(3)	(4)
Past lobbying	-1.614***	-1.639***	-1.654***	-1.658***
	(0.207)	(0.205)	(0.203)	(0.203)
Year dummies	NO	YES	YES	YES
Regulator dummies	NO	NO	YES	NO
Charter dummies	NO	NO	NO	YES
Observations	5,402	5,402	5,402	5,402
Number of banks	234	234	234	234
R-squared	0.2488	0.2515	0.2529	0.2533

Panel B: Proximity to legislative committee as source of influence

Dep. variable	(1) Fitch support rating	(2)	(3)	(4)
Subcom rep	-1.610***	-1.610***	-1.608***	-1.636***
	(0.310)	(0.309)	(0.307)	(0.311)
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	3,107	3,107	3,107
Number of banks	150	150	150	150
R-squared	0.1790	0.1838	0.1883	0.1897

Table 12: **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 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 activity on top holding company level (instead of conglomerate level). Column (5) shows the results employing a continuous variable for lobbying activity (lobby amount spent). *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). *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 voting 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 leverage ratio (defined as Tier 1 capital divided by average assets), size (natural logarithm of total bank assets), profitability, NII ratio, liquidity ratio, deposit ratio, NPL ratio, and an indicator variable that takes the value of 1 if the bank was a recipient of the TARP CPP program in the respective quarter (0 otherwise). All observations are on bank level and cover the period 2003Q3-2012Q4 except for columns (2) and (3), where we explore different time samples for robustness purposes. Standard errors are clustered at the bank level and are reported in parentheses. Significance levels are indicated by *** $p<0.01$, ** $p<0.05$, * $p<0.1$.

Panel A: Lobbying activities as source of influence

Model	(1) Matched sample	(2) Before mid 2008	(3) After mid 2008	(4) Top holding level	(5) Lobby amount spent
Dep. variable	FSR	FSR	FSR	FSR	FSR
Past lobbying	-1.150***	-1.583***	-1.680***		
	(0.100)	(0.215)	(0.227)		
Past lobbying top				-1.370***	
				(0.229)	
Past lobbying spent					-0.259***
					(0.023)
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	0.027	0.244	0.254	0.166	0.375

Table 12 – *Continued from previous page*

Panel B: Proximity to legislative committee as source of influence

Model Dep. variable	(1) Matched sample FSR	(2) Before mid 2008 FSR	(3) After mid 2008 FSR	(4) Top holding level FSR
Subcom rep	-1.397*** (0.107)	-1.549*** (0.312)	-1.658*** (0.393)	-0.603 (0.593)
Bank controls	YES	YES	YES	YES
Year dummies	YES	YES	YES	YES
Observations	1,115	1,448	1,553	1,343
Number of banks	63	138	115	102
R-squared	0.099	0.186	0.179	0.021

Table 13: **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 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 activity on 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 activity on 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 voting 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), profitability, NII ratio, liquidity ratio, deposit ratio, NPL ratio, and an indicator variable that takes the value of 1 if the bank was a recipient of the TARP CPP program in the respective quarter (0 otherwise). All observations are on 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)	-2.458***	
	(0.275)	
Past lobbying (no fcong)	-1.322***	
	(0.212)	
Fin industry PACs to subcom rep		-0.110***
		(0.020)
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	0.287	0.148

Appendix A - Variable definitions

Table 14: **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), 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 conglomerate has lobbied in the last four years and 0 otherwise
Past lobbying (top hold.)	SEN, CPR, BHC	Dummy variable, takes the value of 1 if the top holding company has lobbied in the last four years and 0 otherwise
Past lobby spent (congl.)	SEN, CPR, BHC	Total lobbying amount spent aggregated over all entities within the respective conglomerate over the last four years
Pre-crisis lobbying (congl.)	SEN, CPR, BHC	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 voting 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 voting 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 voting district of a member of the Subcommittee on Financial Institutions for the past four subsequent 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 voting 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	Tier 1 capital divided by risk-weighted assets
Risk-based capital ratio (PCA)	SDI	Total risk-based capital divided by risk-weighted assets
Earnings (RoA)	SDI	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	SDI	Past due and nonaccrual loans divided by total loans
CPP recipient bank-quarter	TR	Capital Purchase Program indicator variable, takes the value of 1 if the bank is a recipient of CPP funds in the respective quarter and 0 otherwise

Appendix B - Fitch Support Ratings

Table 15: **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.

Appendix C - Lobbying in the U.S. banking sector

Combining the data on lobbying activities reported to the Senate Office of Public Records and bank financial and regulatory data enables us to cast light on lobbying of the U.S. financial industry in general and on the details of bank lobbying in particular. In this appendix, we analyze the structure and development of lobbying in the U.S. banking sector and try to answer questions such as how lobbying developed over time, which agencies are lobbied, and which banks lobby. We also present some initial indications on how lobbying activity affects banks' regulatory treatment.

Is lobbying a significant phenomenon for the U.S. financial industry?

To begin with, we analyze the development of total lobbying expenditure of the financial industry and on financial issues. Financial industry includes all firms classified as financial firms in the lobbying activity reports while financial issues cover all lobbying activities that have been filed as being concerned with accounting (ACC), banking (BAN), bankruptcy (BNK), financial institutions, investments, and securities (FIN), housing and mortgages (HOU), minting and money (MON). Figure 1 presents the development of total lobbying expenditures over time. While the total spending was relatively stable in the end of the 1990s and early 2000s, we can observe a steady increase, particularly during the financial crisis after 2007. The total lobbying expenditures almost quadrupled, reaching a record high of more than USD 1.8 billion in 2010. Thereafter, spending fell by about 30 percent within two years. Most importantly, however, this figures underline that lobbying is a significant phenomenon in the financial industry. The synchronized development with the financial crisis seems to be no coincidence - and is in line with the phenomena observed in the literature, e.g., by Duchin and Sosyura (2012) and Igan et al. (2012).

[Figure 1]

To better understand the composition and development of lobbying by the different branches within the financial sector, we classify the financial industry into (1) banks and lending firms, (2) securities and investment firms, (3) insurance companies, and (4) real estate firms and other financial services (such as financial consulting). The lobbying expenditures of each of the branches over time is displayed in Figure 4. It is noteworthy that most branches of the industry follow the previously observed trend. However, lobbying expenditures were not reduced after the financial crisis for banks and securities firms as well as real estate firms. In particular, real estate firms follow a slightly different trend, with lobbying expenditures peaking already in the years before the financial crisis. In the following figures as well as in the analyses in the next sections, we focus only on the lobbying expenditures by banks and lending institutions as this is the particular branch of the financial industry for which we want to analyze the implications of lobbying on expected government support and troubled bank treatment.

[Figure 4]

Which agencies are targeted by bank lobbying?

Lobbying might be a significant phenomenon for banks, but which agencies are targeted by bank lobbying? In general, we find that nearly all lobbying activity reports filed as one of the targets the U.S. legislative, i.e., the Senate or the House of Representatives. Beyond this, however, many reports contain details about the specific financial sector agencies that were targeted by the respective lobbying efforts. Therefore, we present the number of lobby activities by target agencies in Figure 5. Each lobbying activity represents an individual bank's lobbying effort consisting of at least one contact with a given government agency in a semiannual/quarterly

period. Those target agencies include bank regulators (i.e., the Federal Deposit Insurance Corporation (FDIC), the National Credit Union Administration (NCUA), the Office of the Comptroller of the Currency (OCC), and the Office of Thrift Supervision (OTS)), the Federal Reserve (Fed), financial regulators (i.e., the Securities and Exchange Commission (SEC), the Commodity Futures Trading Commission (CFTC), the Farm Credit Administration (FCA), and the Federal Housing Finance Board (FHFB)), and the Department of the Treasury. It is interesting to observe that the Treasury and the bank regulators receive most of the lobbying activities, while particularly the other financial regulators are increasingly targeted after the financial crisis. One reason for this observation could be the increasingly important role that these regulators play in bank regulation after the Dodd-Frank Act, for example in the implementation of the Volcker Rule.

[Figure 5]

Which banks lobby?

In the next step, we want to better understand the structure and channels of bank lobbying. By tracing the holding structures of the banking system from the regulatory data described above, we are able to disentangle and re-combine the different sources of lobbying expenditures within a financial conglomerate. Figure 6 presents the total lobbying expenditures (in USD) through the different channels or sources of lobbying, i.e., either through the bank itself, through the top holding company of the bank, or through other related banks (belonging to the same conglomerate). Only banks for which lobbying expenditures through any of these channels is reported are included and quarterly averages are formed over the period of the full dataset. Figure 6 displays this split for three classes of banks that are categorized along the total asset size. It is noteworthy that only a small part of bank lobbying emerges from a bank directly, the major part of lobbying seems to be done on the top holding level and some parts by other related banks in the same conglomerate. One should be cautious with the interpretation of these numbers: There are some banks that have indeed large direct lobbying expenditures, but there is a multitude of banks that do not report any direct lobbying expenditures at all - only their holding company does. This explains the low share of direct lobbying on average. Taken together, however, lobbying through other parts of the conglomerate, particularly through the top holding company, seems important for most of the banks.

[Figure 6]

As a second observation, we find that total lobbying expenditures are growing in bank size. This is not surprising as a larger bank size supposedly enables banks to spend larger amounts on lobbying activities. However, this is not necessarily a linear relationship. To analyze this in more detail, we put the direct lobbying expenditures of a bank in relation to its total assets and display this share over the same bank size classes in Figure 7. The result is quite unambiguous: Larger banks spend a smaller proportion (in relation to their assets) on lobbying. Thus, while small banks have lower lobbying expenditures in absolute terms, lobbying seems to be a more significant phenomenon for them in relative terms.

[Figure 7]

Does lobbying affect expected government support to banks?

In this paragraph, we provide some initial indications about the relation between lobbying and expected government support that motivate our analyses in the next sections. We begin with the relation of lobbying expenditures and support ratings. Support ratings are frequently used as a proxy for bailout probability, because they indicate a rating agency's opinion on the likelihood of external support (e.g., by the government or

regulator) to a bank should this become necessary. Figure 8 displays the total lobbying expenditures (in USD) through the different channels of lobbying (i.e., direct bank level, top holding company level, and conglomerate level) over Fitch support rating classes. A Fitch support rating of 1 indicates extremely high probability of external support, a support rating of 5 indicates an unreliable probability of support. We only include banks for which both Fitch support ratings and lobbying expenditures through any of the above channels is reported. The results show a clear positive relationship between lobbying expenditures and support rating classes. The trend only slightly reverses between classes 4 and 5. Banks that receive a higher support rating seem to spend more on lobbying.

[Figure 8]

However, as we saw above that large banks tend to have higher lobbying expenditures, it could be that larger banks also receive higher support ratings. To analyze this, we relate the direct lobbying expenditures to total assets. Figure 9 presents this relative number over Fitch support rating classes. It is interesting to see that the lobbying expenditures relative to assets is also increasing in rating classes. Thus, the previous finding does not seem to be driven by bank size. Rather, these results confirm the finding that there is a positive relation between lobbying expenditures and support ratings.

[Figure 9]

Finally, we present a brief indication of the relation between lobbying expenditures and actual government support. Actual support is proxied by an indicator variable that takes the value of 1 if a bank has received support through the Capital Purchase Program (CPP) that was part of the Troubled Asset Relief Program (TARP) by the U.S. government. Since the TARP program started in October 2008, we are interested in the question whether lobbying previously to that date is related to the actual support a bank receives. Therefore, Figure 10 displays the total lobbying expenditures (in USD) through the different channels of lobbying (i.e., direct bank level, top holding company level, and conglomerate level) for banks that received support from the TARP CPP program and for banks that did not receive support. Again, we only include banks for which lobbying expenditures through any of the above channels is reported. Banks that received support through the TARP CPP program have average combined lobbying expenditures in the years before Q3 2008 that is around twice as high as the lobbying expenditures of banks that were not supported.

[Figure 10]

Again, this might be largely driven by bank size if TARP CPP support was mainly provided for larger banks. Thus, we again relate the direct lobbying expenditures to total assets and present the results in Figure 11. Unlike th<fe previous result, TARP CPP recipients spent less on lobbying (prior to the introduction of TARP) in relation to their asset size than banks that did not receive support.

[Figure 11]

These findings do not conclusively preclude or rule out a relationship between lobbying and expected government support. And they do not say anything about the relation between lobbying and the treatment of a bank conditional on being in a stress situation. Rather, they underline the need for additional analysis that is able to take into account additional covariates and to tackle potential causes for endogeneity of the relationship. Thus, the results presented in this Appendix should only be interpreted as a first indication and be read in conjunction with the results of the core paper.