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Ran Duchin

Stephen M. Ross School of Business
University of Michigan

Denis Sosyura

Stephen M. Ross School of Business
University of Michigan

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Ran Duchin

Ross School of Business
University of Michigan
duchin@umich.edu

Denis Sosyura

Ross School of Business
University of Michigan
dsosyura@umich.edu

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Abstract

We investigate the determinants of capital allocation to financial institutions under the Troubled Asset Relief Program (TARP). We find that banks' political ties played a significant role in TARP fund distribution. Connections to Congressmen on finance committees and representation at the Federal Reserve via board members are positively related to banks' likelihood of receiving TARP capital. The TARP investment amounts are positively related to banks' political contributions and lobbying expenditures. The effect of political influence is stronger for underperforming banks, thus shifting capital toward weaker institutions. Overall, we provide evidence about various channels through which political activism affects government spending.

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The Troubled Asset Relief Program (TARP), initiated in October 2008 to combat the financial crisis, authorized the U.S. Department of Treasury to invest federal capital in financial institutions. However, the legislation specified loose guidelines with respect to what assets will be purchased, how they will be valued, and how these funds can be used by financial institutions.¹

According to an independent valuation report by the Congressional Oversight Panel, the Treasury substantially overpaid for its investments under TARP in 2008, effectively subsidizing select banks.² In this paper, we study which institutions were more likely to receive these funds. In particular, we examine whether banks' political activism affected federal funding and whether capital investments were made in stronger or in weaker financial institutions.

Our main goal is to investigate the effect of banks' political ties, campaign contributions, and lobbying activity, if any, on the likelihood and amount of federal investments. One hypothesis is that banks with stronger political connections received favorable treatment in capital allocation. This view would be consistent with theories on the politics of government ownership and investment (for example, Shleifer and Vishny 1994), which suggest that federal capital would be used to accommodate private interests of politicians, such as transferring resources to favored institutions (for example, banks in politicians' voting districts). However, according to an alternative hypothesis, public scrutiny of banks' political actions, as well as the review and audit of TARP investments, would negate and even reverse the attempts to influence government decisions. For example, career concerns of federal officials under close monitoring (Fama 1980) represent one mechanism limiting the efficacy of banks' political activity. In fact, government officials may treat investments in connected institutions with extra caution to defend themselves against future accusations.

Our second goal is to investigate the relation between banks' financial strength and the likelihood of receiving TARP investments. One hypothesis is that capital investments were made in the strongest financial institutions with better earnings, lower risk, and higher capitalization. Retaining the healthiest banks in the financial system would be consistent with the theoretical framework in Atkinson and Stiglitz (1980) and Stiglitz

¹ The U.S. Government Accountability Office (GAO) provides the following summary about the use of TARP capital by largest participants: "With the exception of two institutions, institution officials noted that money is fungible and that they did not intend to track or report CPP capital separately." GAO Report to Congressional Committees, December 2008, p. 25.

² Valuing Treasury's Acquisitions: A Congressional Oversight Panel Report, February 6, 2009, p. 4-5.

(1993), in which government aid improves economic stability and social welfare. This view is also consistent with the program’s objective to invest in banks that are “sound and not in need of government subsidization.”³ On the other hand, anecdotal evidence from the financial media suggests that at least some federal investments were made in weaker banks to prevent their failure and avoid bank runs (Appelbaum 2008). According to these claims, banks with weaker earnings, lower capitalization, and higher risk would be more likely to receive federal funds. Under this scenario, government aid programs would subsidize underperforming institutions, resulting in misallocation of capital, an outcome predicted by Banerjee (1997) and Hart, Shleifer, and Vishny (1997). The government may also choose to subsidize larger (or more systemically important) institutions because their collapse would threaten the overall stability of the economic system.

Our empirical analysis focuses on the Capital Purchase Program (CPP), the largest TARP initiative by the number of participants and the amount of expended capital. This program, initiated in October 2008 and closed in December 2009, invested \$204.9 billion in 714 financial institutions.

To measure political influence, we introduce four variables at the level of bank regulators and the federal government. Our first measure approximates political influence on the Federal Reserve, which was involved in the initial review of applications from the vast majority of qualified banks. We consider a qualified financial institution (QFI) to be connected to the Federal Reserve if an executive from this QFI held a seat on the board of directors at one of the twelve Federal Reserve Banks or their branches during the administration of CPP.

Our second proxy is a bank’s connection with a House member serving on the Congressional Committee on Financial Services and its subcommittees on Financial Institutions and Capital Markets, which played a significant role in the development of TARP and its amendments. We consider a bank connected with a House member if it is headquartered in the representative’s election district. As another measure of political influence, we use a bank’s size-adjusted amount of campaign contributions to congressional candidates. Finally, our fourth proxy for political activism is size-adjusted lobbying expenditures by financial institutions.

³ Valuing Treasury’s Acquisitions: A Congressional Oversight Panel Report, February 6, 2009, p. 5.

We find that political connections are positively related to the likelihood of receiving CPP funds, controlling for other bank characteristics. This evidence appears whether political connections are measured via board seats at the Federal Reserve or ties with House members serving on key finance committees. The estimated magnitudes of political influence are substantial: a board seat at a Federal Reserve Bank is associated with a 35.8 percent increase in the likelihood of receiving CPP funds, while a bank's connection to a House member on key finance committees is associated with a 18.2 percent increase, controlling for other factors.

However, strong political connections might be indicative of banks' size and financial condition (sample selection) or of their systemic importance. We consider these alternatives and find that our results are robust to sample selection and banks' systemic importance. To address sample selection, we repeat our analysis after excluding the largest banks, banks headquartered in New York, and banks with the best or worst financial condition, and obtain similar results. We also identify banks that announced their decision not to participate in CPP. Using propensity scores estimated from these non-participants, we construct a sample of likely applicants, which approximates the officially declared number of CPP applications. Our results remain very similar.

To accommodate the possibility that our political measures proxy for systemic importance, we reestimate our tests in samples matched on bank size and on bank size within the same home state, and obtain similar results. We also estimate systemic importance of financial institutions using ΔCoVaR , a measure proposed in Adrian and Brunnermeier (2009), and find that our conclusions persist.

It is also possible that a bank's representation on the board of the Federal Reserve or on the financial committees in Congress is correlated with some unaccounted for or unobserved characteristics that increase a bank's likelihood of receiving CPP funds but are unrelated to political influence. To address this possibility, we examine capital allocations to banks that were represented on congressional committees and Federal Reserve boards shortly before but not during the administration of CPP. We find that such former representation is not related to receiving CPP capital. This result mitigates the concern that our findings can be explained by unobservable bank attributes, at least to the extent they are persistent in the short term.

Our findings also suggest that QFIs were more likely to receive an investment from CPP if they were bigger, had lower earnings, and had lower capital. This evidence is consistent with an investment strategy

seeking to support systemically important institutions experiencing financial distress. We also find that the likelihood of receiving CPP capital is positively related to asset and management quality and negatively related to the amount of foreclosed real estate and mortgage-backed securities. One interpretation of these results is that these banks had a higher likelihood of surviving the crisis after receiving federal funds.

We also study the determinants of CPP investment amounts and find that the scaled amount of federal investment is positively related to banks' political contributions and lobbying expenditures scaled by bank size. A one standard deviation increase in political contributions to congressional candidates is associated with a \$11.9 million increase in allotted CPP funds. A one standard deviation increase in scaled lobbying amounts is associated with an additional \$13.9 million in raw CPP investment, controlling for other bank characteristics. Other political variables do not significantly explain investment amounts. One possible explanation is that bank regulators, such as the Federal Reserve, while plausibly helpful in supporting QFI applications, had little influence on the amount of funds awarded.

The amount of CPP investments is negatively related to capital adequacy, earnings, and liquidity, and positively related to bank size. This evidence is consistent with a strategy that seeks to strengthen the capital position of approved participants to a common acceptable level while providing an extra buffer for larger institutions that play a greater role in the stability of the financial system.

Interpreted broadly, these results show that political connections play an important role in a firm's access to capital. A natural question that arises is for which types of banks these connections had the most significant effect. Our analysis indicates that the effect of political ties on federal investment is the strongest for companies with weaker fundamentals, lower liquidity, and poorer performance. This suggests that political ties shift capital allocation toward underperforming institutions.

Last, we also test whether the change in administration of January 2009 had an effect on the allocation of CPP funds. Our results do not reveal a reliable effect on the choice of CPP recipients. There are several possible explanations for this finding. First, the news about a change in administration preceded the allocation of the vast majority of CPP funds. Second, following the elections, the turnover in Congress was relatively small, and the changes in party affiliation of Congress members were even smaller. Third, the most politically active

banks, as measured by political donations and lobbying expenditures, are typically connected to both Democratic and Republican parties.

The rest of this paper is organized as follows. Section 1 reviews related literature. Section 2 provides detail about the CPP, its investment criteria, and the application process. Section 3 describes our measures of political influence. Section 4 discusses the sample and data. Section 5 presents our main results. Section 6 discusses extensions. The conclusion provides summary and commentary.

1. Related Literature

To our knowledge, this paper is the first empirical investigation of the association between firm fundamentals, political influence, and the choice of TARP investments. At a broader level, it is part of a literature pioneered by Stigler (1971) and Peltzman (1976) that studies how politics influences economic regulation.⁴ More specifically, our research adds to the literature on the role of political factors in capital allocation, a topic that has been examined primarily in foreign markets.

For example, Khwaja and Mian (2005) show that politically connected firms in Pakistan borrow more from government banks (but not from private banks) and default more frequently on these loans. Sapienza (2004) finds that the interest rates charged by government-owned banks in Italy reflect the power of the party that controls the bank, resulting in preferential access to capital for party-affiliated borrowers. Faccio, Masulis, and McConnell (2006) provide evidence that politically connected firms are more likely to receive government funds in case of distress in thirty-five countries. Dinc (2005) finds that government-owned banks outside the United States increase their lending activity in election years to gain voter support. Our paper provides evidence on the relation between political ties and capital allocation in the United States during a financial crisis of historical magnitude. It considers a number of political channels simultaneously and compares their relative importance.

⁴ A related line of empirical investigation is focused on the impact of corruption on aggregate outcomes such as growth and investment rates across countries (see Mauro 1995; Keefer and Knack 1995; Hall and Jones 1999; La Porta et al. 1999; and Glaeser and Saks 2006).

Our research also contributes to the literature on political activism and firm value and helps reconcile prior empirical findings. In previous studies, Roberts (1990), Fisman (2001), Faccio (2006), Cooper, Gulen, and Ovtchinnikov (2010), Faccio and Parsley (2009), and Goldman, Rocholl, and So (2009) find that corporate political ties have a positive effect on firm value. Others, such as Aggarwal, Meschke, and Wang (2009), argue that political activism is indicative of agency problems and show that firms with high political contributions experience significantly lower risk-adjusted returns. Our evidence suggests that political connections and activism serve as an insurance mechanism against extreme events. Thus, for example, the victory of a politician connected to the firm will increase the insurance value. However, this value will gradually decrease absent the occurrence of extreme events, explaining the underperformance of stocks of politically active firms compared to those of nonpolitically active companies.

Previous literature has also shown that politically connected firms have higher leverage ratios than their nonconnected peers (for example, Chiu and Joh 2004; Cull and Xu 2005; and Johnson and Mitton 2003). Our results are consistent with one possible explanation of these findings – namely, that lenders may rely on an implicit government guarantee that politically connected firms will be bailed out in a crisis.

We also add to the literature on the interaction between firms and congressional committees. Kroszner and Stratmann (1998) develop a positive theory of specialized, committee-based congressional organization that fosters ties between interest groups and legislators through reputation building. Our research supports this theory by showing that connections of financial institutions to specific congressional subcommittees affect the allocation of TARP funds.

Last, our research contributes to the growing literature on financial regulation during the credit crisis of 2008. Mian, Sufi, and Trebbi (2009) study politicians' voting behavior on key anti-crisis legislations in 2008 and show that representatives' voting patterns reflect the interests of their constituents and campaign contributors. We show that political influence extended well beyond the legislative process during the financial crisis and had a significant impact on the implementation of TARP. Veronesi and Zingales (2010) study the costs and benefits of TARP by examining the changes in enterprise value of the ten largest program participants around the announcement of first capital infusions. They argue that the first TARP recipients realized substantial

gains from the program and identify the banks that were the biggest winners. Next, several recent studies—Harvey (2008), Bebchuk (2009), and Coates and Scharfstein (2009)—critique the design of TARP and offer alternative ways to address the credit crisis. Although we do not discuss TARP alternatives, our results highlight one source of inefficiencies in the original TARP program. In particular, to the extent that political connections played a role in the distribution of TARP capital, this influence was the strongest for underperforming institutions, diverting funds toward weaker banks and constituting a departure from the program’s declared objectives.

2. Emergency Economic Stabilization Act and the Capital Purchase Program

On October 3, 2008, the Emergency Economic Stabilization Act (EESA) was signed into law. The act authorized TARP – a system of federal initiatives aimed at stabilizing the U.S. financial system. According to the original plan, the Treasury intended to buy insolvent bank loans and mortgage-backed securities, hold these assets, and later sell them to private investors. However, on October 14, 2008, the government announced a revised plan—the Capital Purchase Program (CPP)—which authorized the Treasury to invest up to \$250 billion in financial institutions in exchange for their preferred stock and warrants. CPP was completed in December 2009, but many other TARP initiatives were being implemented at the time of writing.

2.1 Qualifying Institutions and the Application Process

Financial institutions eligible to participate in CPP include domestically controlled banks, bank holding companies, savings associations, and savings and loan holding companies. For all banks and savings associations controlled by a holding company, CPP investments are made at the level of the holding company.

To apply for CPP funds, a qualifying financial institution (QFI) submits a short two-page application to its primary federal banking regulator – the Federal Reserve, the Federal Deposit Insurance Corporation (FDIC), the Office of the Comptroller of the Currency (OCC), or the Office of Thrift Supervision (OTS).⁵ In cases where the QFI is a bank holding company, the application is submitted both to the regulator overseeing the largest

⁵ Details on the four banking regulators and their oversight responsibilities are provided in Appendix I.

bank of the holding company and to the Federal Reserve. This detail is important for our study, since it provides the Federal Reserve an opportunity to review applications from the vast majority of QFIs.

After receiving an application, the banking regulator evaluates the financial strength of the QFI based on a set of standardized ratios and examination ratings – the Camels rating system. The system derives its name from the six factors that are evaluated: *Capital adequacy, Asset quality, Management, Earnings, Liquidity, and Sensitivity to market risk*. The ratings are based on financial statements and on-site examinations by regulatory authorities. A score from 1 (best) to 5 (worst) is assigned for each of the six factors, and these scores are aggregated to derive an overall score of a bank’s financial health. The Camels ratings of financial institutions are kept confidential to protect banks’ interests.

If the initial review by the banking regulator is successful, the application is forwarded to the Treasury’s investment committee, which makes a recommendation to the assistant secretary for financial stability, who makes the final decision.

2.2. Financial Conditions of the Program

In exchange for CPP capital, banks provide the Treasury with cumulative perpetual preferred stock. The preferred shares are issued at par and are equivalent in seniority to the most senior type of the QFI’s preferred stock. The shares pay quarterly dividends at an annual yield of 5 percent for the first five years and 9 percent thereafter. The amount of the investment in preferred shares is determined by the Treasury, although QFIs state the requested amount in the CPP application. In addition to preferred stock, the Treasury obtains warrants for the common stock of publicly traded QFIs. The warrants, valid for ten years, are issued for such number of common shares that the aggregate market value of the covered common shares is equal to 15 percent of the investment in the senior preferred stock.

In cases of private companies, the Treasury receives warrants to purchase additional shares of preferred stock that pay dividends at a higher annual rate of 9 percent. These warrants have an exercise price of \$0.01 and are exercised immediately to entitle the Treasury to dividends on the new shares. Appendix II offers additional

detail on the terms of capital redemption, conditions imposed on participating institutions, and investments in “S” corporations and mutual organizations.

3. Measures of Political Influence

We construct several measures of political influence. At the level of bank regulators, we use board memberships at the Federal Reserve as a proxy for the potential influence on the decisions of a banking regulator. At the level of the federal government, we use three measures. The first is QFIs’ representation on key congressional committees involved in oversight of banking and capital markets. The second is QFIs’ political contributions to congressional candidates in the 2008 election cycle, scaled by bank size. The third is lobbying expenditures in 2008, also adjusted for bank size. This section describes each type of connection.

Federal Reserve Boards of Directors

Among the four banking regulators that conduct the initial review of CPP applications, we focus on the Federal Reserve for two reasons. First, this regulator is responsible for the oversight of bank holding companies and state-chartered member banks, which comprise over 85 percent of QFIs that received CPP investments. Second, unlike other regulators, boards of directors at Federal Reserve Banks include QFI executives, providing them with significant influence and authority. For example, board members at a Federal Reserve Bank appoint presidents and vice presidents of their bank, as well as all its officers, and oversee the bank’s internal audit program.

QFI executives serving on the boards of the main offices of Federal Reserve Banks are elected by member banks in each district for three-year terms. In the election, banks are divided into three categories by the amount of capital—large, medium, and small—and each category elects one director from member institutions. This detail is important because it implies that our measure of connections to the Federal Reserve board members is not biased toward larger banks. Appendix III provides additional detail on Federal Reserve directors, their tenure, and affiliation.

We consider a QFI connected to the Federal Reserve if an executive or an officer of this QFI served on the board of directors of a Federal Reserve Bank or its branch in 2008 or 2009. In our sample, 83 financial institutions (1.1 percent of our sample) have such a connection. The data on board composition are collected from annual reports of Federal Reserve Banks and the Board of Governors.

Bank Representation on the House Financial Services Committee

At the level of Congress, we investigate the ties between QFIs and the members of the House Financial Services Committee and its two subcommittees: the Subcommittee on Financial Institutions and the Subcommittee on Capital Markets.⁶ The Committee on Financial Services reviews and develops legislation in all areas of the financial system. This committee played a key role in the development of the EESA and continues to exert strong influence on amendments related to expanding and modifying TARP, which require the approval of Congress. This continued involvement of the Committee in monitoring TARP programs and making recommendations to Congress regarding TARP modifications fosters repeated interaction between the Treasury and committee members.

Within the Financial Services Committee, we focus on two subcommittees, which oversee banking and financial markets. The Subcommittee on Financial Institutions supervises all primary banking regulators and matters related to the soundness of the banking system. The Subcommittee on Capital Markets reviews laws regulating investment banks and capital markets, among other issues. The House Financial Services Committee comprises four more subcommittees, whose jurisdiction covers other finance issues, such as monetary policy, international trade, and technology.

We focus on the committees in the House of Representatives rather than on those in the Senate for several reasons. First, election districts for the House are substantially smaller, resulting in a tighter link between a politician and QFIs headquartered in his or her district.⁷ Second, districts of all representatives are approximately equal by the number of voters (about 700,000 voters per district), providing an equitable

⁶ The full names of the two subcommittees are: Subcommittee on Financial Institutions and Consumer Credit, and Subcommittee on Capital Markets, Insurance, and Government Sponsored Enterprises.

⁷ Unlike senators, who are elected in a statewide election, House representatives are elected in smaller districts within each state, with an average of nine election districts per state.

comparison base in the cross-section. Last, our focus on the House of Representatives enables us to cover all eligible QFIs, including those located in Washington, DC, Puerto Rico, and U.S. territories, which elect delegates to the House but have no representation in the Senate.

To identify House members representing the district of each QFI, we use the zip code of the institution's headquarters. We collect data on congressional representatives who held office in 2008 (110th Congress) and in 2009 (111th Congress). Overall, approximately 87 percent of House representatives from the 110th Congress were reelected in 2008 for the next term. Our main sample for 2008 and 2009 includes 499 members. For robustness tests, we also collect the information on the members of the 109th Congress (2005 to 2007), which preceded the CPP administration.

Using congressional records, we identify the members of the House Financial Services Committee and its subcommittees on Financial Institutions and Capital Markets. Next, for each QFI we calculate a measure of representation on key committees. This proxy is computed as the average of six indicators, each equal to one if the representative from the QFI's district served on the Financial Services Committee, the Subcommittee on Financial Institutions, or the Subcommittee on Capital Markets, respectively, in either 2008 or 2009. Thus, we have three indicators for each of the two years. For example, if a representative served on the Financial Services Committee and the Financial Institutions Subcommittee but not the Capital Markets Subcommittee in both 2008 and 2009, a QFI from this representative's district will be assigned a score of 0.67.⁸ In the empirical section, we also disentangle the effects of each committee.

The Financial Services Committee includes 71 members, and its subcommittees on Financial Institutions and Capital Markets comprise 45 and 50 members, respectively. A total of 1,265 QFIs (17.5 percent of our sample) have a representative who was a member of at least one of the three groups in 2008-2009.

To illustrate the power of the Committee on Financial Services, consider the following example, published in the *Wall Street Journal* on January 22, 2009 (Paletta and Enrich 2009). In late September 2008, Boston-based OneUnited Bank found its capital depleted and its management compromised with a cease-and-

⁸ $0.67 = (1+1+1+1+0+0)/6$

desist order from the FDIC for poor lending practices and the abuse of management pay. Yet in mid-December 2008, the bank received \$12,063,000 from CPP.

The bank is based in the home state of Rep. Barney Frank, head of the Financial Services Committee, who acknowledges that he had included into TARP a provision aimed at helping this particular bank and recommended to regulators that OneUnited be considered for capital investment under TARP. The bank's lawyer admitted that he had discussed the bank's financial situation over the phone not only with Frank but also with Rep. Maxine Waters (a member of the Financial Services Committee and Financial Institutions Subcommittee), whose husband used to be a OneUnited director.

Political Campaign Contributions

In addition to electoral ties that exist between politicians and banks headquartered in their election districts, companies can establish connections with politicians by financing their election campaigns. The financial sector is one of the most active contributors to federal political campaigns. To study the influence of political donations, we collect data on contributions made by financial institutions to Political Action Committees (PACs), as well as individual donations initiated by banks' executives, employees, and their spouses in the 2008 election—the most recent election cycle preceding TARP.

Political Action Committees are private groups organized to support political candidates. Corporations are prohibited from making direct campaign contributions but can sponsor PACs by providing them with financial resources. PACs, in turn, invest these resources by making donations to political candidates and committees, consistent with the interests of the PAC's constituents. For example, in the 2008 election cycle, the Wells Fargo Employee PAC received \$1.3 million in contributions, primarily from Wells Fargo executives and managers. From these funds, the PAC donated \$767,000 to support federal political candidates.

Individual donations to political campaigns come directly from corporate employees and their spouses. These contributions are currently limited to \$115,000 over a two-year cycle, of which a maximum of \$45,600 can be contributed to all federal candidates, and a total of \$69,900—to all PACs and parties. Also, the Federal

Election Commission (FEC) establishes a cap of \$2,400 on contributions to any one candidate in a given election and a maximum of \$5,000 per calendar year to any one PAC.

We include individual donations of banks' employees and their spouses as part of total political contributions made by the financial institution. We establish this connection based on the reported company affiliation of the contributing individual.

All types of political donations exceeding \$200 must be reported to the FEC, which collects these data and makes them available to the public. Our data come from the Center for Responsive Politics (CRP), a nonprofit organization that aggregates FEC filings and provides a searchable database of contributions by company and politician.

Our sample of political contributions includes 1,668 qualified financial institutions. As shown in Table 1, an average (median) QFI donated a total of \$36,228 (\$2,000) to congressional candidates in the 2008 election cycle. In our empirical analysis, we scale raw amounts of contributions by bank assets to adjust for cross-sectional differences in size.

Lobbying Expenditures

Lobbying refers to the practice of petitioning government agencies. As a form of political influence, lobbying has several distinct features. First, it is usually focused on government legislation or specific issues rather than on particular politicians. Second, most companies lobby their interests by hiring an external lobbying firm, which works with government officials on behalf of its clients.

We collect lobbying data from the CRP, which maintains a database of lobbying reports, which must be filed the Senate's Office of Public Records. Each report provides information on the issues lobbied, the government agencies petitioned, and the amount spent.⁹ The issue and agency classifications include 78 and 311 categories, respectively.

In our base specification, we use the amount of bank's lobbying expenditures in 2008 through the first quarter of 2009, scaled by bank assets. Our sample includes 2,204 reports submitted on behalf of 76 QFIs. As

⁹ Lobbyists are obligated to disclose the category of the issues lobbied if the amount of lobbying expenditures exceeds \$5,000.

shown in Panel A of Table 1, the average (median) amount of total lobbying expenditures in our sample in 2008–2009 is \$5.08 million (\$1.09 million) per QFI. In more detailed analysis, we use additional filters, which cover only the reports in which the category of issues lobbied includes banking, finance, bankruptcy, and the agencies lobbied include the Treasury or one of the four primary banking regulators.

4. Sample and Data

4.1 Qualifying Financial Institutions

To construct a sample of QFIs, we begin with a list of all FDIC-insured financial institutions that were active as of September 30, 2008. This group includes 8,391 institutions. Because CPP capital is invested at the level of holding companies, we treat institutions held by the same holding company as one QFI and aggregate their financials.¹⁰ The vast majority of holding companies (91 percent) own only one institution. Independent institutions, which are not held by higher holders, are treated as individual QFIs. Overall, there are 7,420 holding companies and independent institutions in our sample.

Following the CPP eligibility criteria, we exclude 49 banks or holding companies with foreign control.¹¹ We also eliminate institutions that made a public announcement that they would not apply to CPP. To identify these institutions, we conduct a comprehensive search of eligible banks' press releases, proxy statements, financial reports (8K and 10Q), and news announcements in the Factiva database for any mentionings of CPP. We identify 224 institutions that announced their decision not to participate in CPP, of which 81 applied to CPP and were approved but decided to decline the investment. For the purposes of our tests, we treat the 81 approved institutions as CPP recipients; we also eliminate the remaining 143 of the 224 non-participants from the pool of eligible QFIs. As a result of the filters, our initial sample includes 7,228 QFIs, whose summary statistics are provided in Panel A of Table 1.

The data on CPP participants are collected from the Office of Financial Stability, which provides the amount of funds invested, the date of investment, and the consideration received by the Treasury in exchange

¹⁰ We ascertain the correctness of matching between institutions and holding companies by cross-referencing the FDIC records with the data from the Federal Reserve, both of which provide the ultimate parent for banking institutions.

¹¹ For the purposes of CPP, control is defined as direct or indirect ownership of at least 25 percent of a bank's shares.

for capital. The distribution of CPP investment amounts is heavily right-skewed, and the average (median) CPP investment (including QFIs that were approved and later declined CPP funds) is \$261.0 (\$11.3) million, as shown in Panel A of Table 1.

One challenge in our sample construction is that we cannot reliably identify every institution that applied to CPP, since these data are kept confidential. According to the Special Inspector General for the Troubled Asset Relief Program (SIGTARP), as of July 30, 2009, over 2,700 applications had been submitted, of which 1,300 were sent to the Treasury, and 660 were approved for CPP funds.¹² These data indicate that the program was fairly selective, with fewer than 25% of the applicants approved for CPP funds. To our knowledge, the final data on CPP applications have not yet been released. However, based on the final number of 714 CPP recipients and assuming the same selectivity, the total number of submitted applications is likely to be approximately 3,000. This estimate provides some comfort that our sample, although larger, is of similar order of magnitude to the pool of CPP applicants. In the robustness section, we conduct additional tests to control for sample selection. For example, we estimate the propensity of banks not to apply to CPP based on the sample of banks that publicly announced their decision not to participate. We then use a propensity score matching method to construct a sample of 3,000 likely applicants, and find very similar results.

The concern about sample selection is somewhat mitigated by the attractive conditions of CPP, the below-market cost of capital, and the ease of the application process (i.e. electronic submission of a very brief form). These factors likely provided a strong incentive even for well-capitalized institutions to apply for CPP, especially since successful applicants had an option either to accept the money or to decline participation after they received Treasury's approval. Veronesi and Zingales (2010) show that CPP funds increased enterprise value of the ten largest recipients by \$131 billion, effectively providing a value transfer from taxpayers to these banks. A qualitatively similar conclusion was reached by a valuation report of the Congressional Oversight Panel, which determined that the Treasury paid a premium of 34 percent on its largest CPP investments.¹³

Consistent with the attractiveness of CPP participation, Panel B of Table 1 shows positive announcement returns for publicly traded bank holding companies around the dates of their approval for CPP

¹² SIGTARP Quarterly Report to Congress, October 21, 2009, p.15.

¹³ Valuing Treasury's Acquisitions: A Congressional Oversight Panel Report, February 6, 2009, p. 4-5.

capital. Across all specifications and announcement windows, stock price reaction to this news is virtually always reliably positive.¹⁴ Return magnitudes are also nontrivial: around 1 percent for a one-day window [-1; 0] and between 1.4 percent and 2.5 percent for a three-day window [-1; 1].

4.2 Financial and Demographic Variables

Financial Variables

Our financial data are collected from the reports of condition and income filed by all active FDIC-insured institutions every quarter. In constructing financial variables, we seek to follow the Camels assessment criteria used by bank regulators. Since the data on the actual ratings assigned by bank regulators are never made public, we introduce proxy variables for each of the six categories in the Camels system. Our choice of proxies is generally guided by the financial indicators employed by the FDIC in Uniform Bank Performance Reports that evaluate banks on similar dimensions. Condition ratios are computed as of September 30, 2008, the latest quarterly report before the CPP application deadlines for public and private institutions. Detailed descriptions of the financial variables are summarized in Appendix IV.

Financial Strength Index

In addition to analyzing each dimension of the Camels system, we compute a bank's aggregate strength index. For each bank, we calculate its ranking in our sample on each Camels proxy and find the mean of these rankings to derive an aggregate index score, normalized to lie between 0 and 1. This index is intended to follow the practice of banking regulators to aggregate Camels ratings in order to derive an institution's overall score of financial health. For example, a strength index of 0.90 indicates that a bank's average ranking on the Camels proxies places it in the ninetieth percentile of our sample—that is, the top 10 percent of QFIs.

¹⁴ To test whether the value creation from CPP capital infusion can be generalized to healthier banks, we also estimated market returns around the announcement of banks' approval for CPP funds for a subsample of well-capitalized banks, as per bank regulators' definition based on the capital adequacy ratio. Our results (unreported) indicate that announcement of CPP approval is associated with positive returns even for well-capitalized institutions. We also repeated this analysis for other measures of financial condition, such as profitability, and obtained similar results. Overall, the above evidence suggests that the below-market cost of CPP capital made it attractive even for healthy institutions, thus somewhat alleviating the concern about a potential bias in our sample.

Demographics

Our demographic variables include bank size and age. Size is measured by the natural logarithm of assets. As Panel A of Table 1 shows, the average (median) QFI in our sample holds assets worth \$1.7 billion (\$144 million) and is 71 (81) years old. We expect that larger banks are more likely to receive CPP investments due to their greater role in the financial system. Bank age is included to test the hypothesis that more established banks are more likely to be saved.

Last, Panel C of Table 1 provides the correlation matrix for our independent variables. The vast majority of correlations are low, indicating that our measures capture distinct political, financial, and demographic characteristics. In the next section, we study the relation between these variables and the likelihood of approval for CPP funds.

5. Main Results

This section presents our main empirical findings. We begin with nonparametric evidence and continue with regression analysis of the effect of political, financial, and demographic factors on the likelihood of CPP investment. The section concludes with a discussion of alternative hypotheses and tests of robustness.

5.1 Univariate Evidence

Table 2 provides nonparametric comparison of the likelihood of receiving CPP capital between QFIs evaluated on three sets of indicators: political connections, financials, and demographics. For each measure of political connections, we distinguish between connected and nonconnected QFIs. For each financial and demographic variable, we compare banks above and below the median value.

Table 2 shows that institutions with political connections were more likely to receive CPP capital. This finding holds across all four measures of political ties, and the differences between connected and nonconnected QFIs are significant at the 1 percent level.

Institutions with weaker financial indicators were also more likely to receive CPP investments. This finding holds for all Camels proxies, and the differences between “strong” and “weak” companies are statistically significant at the 1 percent level, except for sensitivity to market risk. The evidence on the strength index also indicates that QFIs with lower index values were more likely to receive CPP funds. Finally, bigger banks were also more likely to receive CPP investments.

5.2 Multivariate Analysis

We estimate cross-sectional logit regressions to determine the influence of bank characteristics on the likelihood of receiving CPP capital. The dependent variable is an indicator equal to 1 if a financial institution was approved for CPP funds and 0 otherwise. The independent variables include four measures of political connections, and institutions’ financial and demographic indicators, as described above. To control for the possibility of systematic differences in decision criteria across bank regulators, we include regulator fixed effects.

The results of estimating the likelihood of CPP investment are summarized in Table 3. The first four columns consider each of the political variables individually, while controlling for company-level financials and demographics. Column (5) presents the results of the joint effect of all political variables. Column (6) shows the effects of including all political, financial, and demographic variables simultaneously.

Across all the specifications, representation on congressional finance committees and board membership at Federal Reserve Banks are strongly positively related to the likelihood of receiving CPP funds, and these relations are significant at the 5 percent level or better. The effect of campaign contributions, though positive, is noticeably weaker. It is possible that the scrutiny of contribution records available to the public motivates financial institutions to rely more heavily on other channels of political influence. The effect of lobbying, though also positive, is statistically insignificant after controlling for bank fundamentals. This result may be explained by the fact that we cannot identify the cases of lobbying specifically for TARP funds. It is also possible that we are unable to reliably detect the effect of lobbying due to the small fraction of lobbying firms in our sample.

The influence of political variables is also economically significant. Based on the estimates in column (6), a board seat held by a QFI executive at a Federal Reserve Bank increases the probability of CPP investment

by 35.8 percent for a bank with mean fundamentals. A mean bank headquartered in the district of a representative serving on key finance committees in Congress was 18.2 percent more likely to receive CPP funds, controlling for fundamentals.

The evidence from financial variables indicates that QFIs were more likely to receive CPP capital if they were bigger, had lower earnings, and had lower capital. These findings are consistent with an investment strategy seeking to support systemically important institutions experiencing financial distress.

We also find that the likelihood of approval in CPP is positively related to asset quality and negatively related to the proportion of foreclosed real estate. A combination of lower trailing earnings and weaker capital position, along with higher asset quality, could be a result of writing off or selling troubled assets. Under this interpretation, CPP investments were made in the banks that had reduced their forward-looking exposure to the crisis and were likely to survive after receiving federal capital. QFIs with better management were also more likely to receive federal funding. This is consistent with investing in institutions that are likely to make better use of the money in order to withstand the crisis.

Column (7) of Table 3 evaluates the overall effect of a bank's financial strength on the likelihood of CPP investment. In this specification, the financial condition is captured by the financial strength index, measured as the bank's average rank on the six Camels proxies. This analysis seeks to distinguish between two hypotheses regarding CPP investment objectives: (1) the declared objective to invest in the healthiest institutions; and (2) the implicit incentive to bail out distressed banks to avoid bank runs.

As shown in column (7) of Table 3, the coefficient on the strength index is negative and strongly significant with a t-statistic of 7.2. This evidence is more consistent with the latter hypothesis, although it should be interpreted with caution, given the nonuniform direction for individual measures of financial condition. The results on the strength index are also consistent with the industry evidence from banks participating in CPP.¹⁵

¹⁵ For example, according to Joseph DePaolo, the CEO of Signature Bank, which received \$120 million from CPP in December 2008: "It's Congress' fault for allowing it to go from a program for healthy institutions to a program that they're giving money to weak institutions." Interview with National Public Radio, April 1, 2009, available at <http://www.npr.org/templates/story/story.php?storyId=102618967>

5.3 Robustness

In this section, we test the robustness of our findings to alternative explanations. We start by considering different measures of bank fundamentals and then address the issues of sample selection, systemic importance, and unobservable or unspecified variables correlated with connections to Congress and the Federal Reserve.

The first issue we consider is related to alternative measures of bank fundamentals. So far our choice of financial variables has been guided by the Camels system. Yet each dimension of the Camels ratings can be measured by several proxies, and we would like to test the robustness of our results to a different choice of condition and performance indicators. These alternative measures are discussed in Appendix IV. Columns (1) and (2) in Table 4 present the estimation results with new sets of financial variables. The qualitative conclusions for all political variables and the majority of financial variables remain unchanged, suggesting that our main results are consistent across different measures of fundamentals.

The next alternative explanation we consider is sample selection. Our sample comprises all banks eligible for CPP investments, not just banks that applied for CPP funds. It is possible that the institutions that applied to the program were in distress and had the greatest need for capital. Under this scenario, the true sample of CPP applicants represents a subsample of QFIs with substantially weaker fundamentals. This alternative hypothesis would explain the negative relation between the likelihood of CPP investment and capital adequacy, earnings, and the overall indicator of banks' financial health.

To test this hypothesis, we eliminate the top 25 percent of institutions based on capital adequacy (tier-1 capital ratio), which arguably had the lowest need for CPP capital. We estimate logit regressions with all political, financial, and demographic variables using the remaining QFIs and present our results in column (3) of in Table 4. The signs, magnitudes, and significance of all coefficients remain similar to the main specification.

As another check, we eliminate the top 25 percent of QFIs based on the financial strength index and repeat the estimation. The results, presented in column (4) of Table 4 are also qualitatively similar to our main specification (column [6] in Table 3). Altogether, this evidence suggests that our findings continue to hold after excluding the least likely CPP applicants.

As another approach to address sample selection, we use matching on propensity scores to construct a sample of likely CPP applicants. First, we estimate banks' propensity not to apply to CPP based on the sample of 143 financial institutions that publicly announced their decisions not to participate in the program. Specifically, we model the decision not to apply to CPP as a function of banks' observable characteristics, namely the financial and demographic variables used throughout this study. To this end, we estimate logit regressions explaining the decision not to apply to CPP. The dependent variable is an indicator equal to 1 for the 143 institutions that declined to apply to CPP and 0 otherwise. We use the predicted values from these regressions as propensity scores representing the likelihood that the financial institution did not apply to CPP.

In a final step, we construct a sample comprising the TARP recipients, as well as the institutions most likely to apply based on their propensity scores (i.e., institutions with the lowest likelihood not to apply to CPP), such that we end up with exactly 3,000 institutions. This way, we extrapolate the sample of non-applicants to arrive at the remaining sample of 3,000 likely applicants – i.e. sample size approximating the official number of CPP applications. We repeat our tests in this subsample of likely applicants, and our results, shown in column (5) of Table 4, remain qualitatively unchanged.

Although our results appear robust to sample selection, our methods can only approximate rather than ascertain the unobservable list of CPP applicants. Given the program's relatively high selectivity, it can be argued that banks applied to the program only if they had a reasonable chance of receiving the money. For example, according to the Treasury, banks were encouraged to consult their regulator before submitting an application. To the extent that the banks unlikely to receive CPP funds chose not to apply to avoid being rejected (or were discouraged from applying by their regulator), these banks can be viewed as unsuccessful applicants, an approach consistent with our empirical specification. Under this interpretation, if well-connected banks were more likely to apply to CPP because of the greater likelihood of success, the effect of political ties may have manifested itself even earlier – by increasing applications from connected institutions or by deterring non-connected firms. This effect represents one other plausible channel through which political ties affected the distribution of CPP funds and would be consistent with our evidence.

So far, we have viewed connections to the Federal Reserve and Congress as evidence of political ties. However, it is possible that these variables proxy for some other firm characteristics, which are important in CPP investment decisions but are unrelated to political influence and are uncontrolled for in our regressions. For example, directors of the Federal Reserve banks may represent institutions with better governance, among other factors, which may be more likely to receive CPP funds.

To address this alternative explanation, we conduct placebo tests that examine banks that were represented on congressional committees and Federal Reserve boards shortly before but not during the administration of CPP. If our measures of connections to Congress and the Federal Reserve proxy for other variables correlated with CPP investment, then banks with recent but noncurrent connections should be more likely to receive CPP funds. On the other hand, if the representation on the Federal Reserve and congressional committees measures political influence, there should be a weaker relation or no relation between past connections and receiving CPP funds.

To minimize the effect of temporal variation in firm-specific variables, our placebo tests use bank connections immediately preceding the administration of CPP. Note that while the use of the *most recent* (but defunct) connections provides a cleaner control for firm fundamentals correlated with these measures, it may weaken the tests if former ties can still play a role. For connections to the Federal Reserve, we select banks that had a representative on the board of a Federal Reserve bank or its branch in 2006-2007, but not in 2008-2009. For connections to Congress, we select banks headquartered in the districts of House members who served on the House Financial Services Committee in the Congress immediately preceding the administration of TARP – the 109th Congress (2005-2007), but not during the administration of CPP.¹⁶

Column (6) in Table 4 shows the results of our base specification with placebo variables based on former connections. For both connection types, the effect of former ties on CPP investment is not significant or barely significant at conventional levels. This evidence suggests that our results are unlikely to be explained by firm fundamentals correlated with connections to Congress and the Federal Reserve, at least to the extent that these fundamentals are persistent in the short term.

¹⁶ Following our main specification, we use connections to the subcommittees on Capital Markets and Financial institutions within the House Financial Services Committee.

Next, we consider the critical issue of systemic importance. Since the primary declared objective of TARP was achieving financial stability, it is possible that our results are explained by banks' systemic importance. In particular, the first potential concern is that our results may be driven by the well-connected largest QFIs, which can be deemed too big to fail, even if they have weaker fundamentals, lower capital ratios, and poor financial performance. To test whether our results are driven by the largest institutions, we exclude the top 1 percent of banks (73 QFIs), which account for 78.3 percent of all QFI assets. Among the largest banks, 68.5 percent received CPP funds, consistent with the "too big to fail" argument. Column (7) in Table 4 shows the results of estimating our logit model after excluding the largest banks. All qualitative conclusions hold, and the quantitative results are also similar.

As an additional robustness test, we also exclude all 170 QFIs headquartered in New York City. As America's financial center, New York might be more likely to elect representatives with prior finance experience, who, arguably, are also more likely to serve on the House Financial Services Committee because of this experience. Thus, even if New York banks receive capital because they are more critical to the stability of the financial system, our tests might imply that they are more likely to receive CPP funds because of greater representation on the finance committees in Congress.

To test this alternative explanation, we repeat our estimation after excluding all QFIs headquartered in New York City. This exclusion has little effect on our results, as shown in column (8) in Table 4. The variables capturing Congress finance committee representation, which are determined by location, remain strongly positively related to the likelihood of CPP investment. The signs and significance of financial variables also remain largely unchanged.

It is also possible that the effect of systemic importance extends well beyond the largest, centrally located banks and plays a significant role for midsize financial institutions. To distill the effect of political connections from that of systemic importance, we construct sized-matched subsamples of politically connected and unconnected banks. For each measure of political activism, and for each connected bank based on that measure, we identify an unconnected bank closest in size (total assets). To ensure equitable size within each pair, we use only observations for which the difference in size between a connected firm and its unconnected

match does not exceed 10 percent. This procedure generates four subsamples of connected and unconnected firms, with each sample corresponding to one measure of connections. We also generate a combined size-matched subsample for firms that are connected based on at least one measure of connections. The bottom row in Panel A of Table 5 provides t-statistics for the difference in mean size between connected and unconnected firms. As expected, the t-statistics are close to zero across all matched groups.

Next, we reestimate our base logit specification in each of the five size-matched subsamples of connected and unconnected firms. The effect of political measures remains statistically significant and qualitatively similar despite the noticeable reduction in sample size as a result of the relatively restrictive size matching. In particular, board representation at the Federal Reserve and connections to Congress representatives on finance committees are positively related to the likelihood of CPP investment, and this relation is significant at the 5 percent level or better. The two other measures of connections—lobbying and political contributions—remain positive but insignificant at conventional levels, as reported in the main analysis. Finally, consistent with our main findings, possession of at least one type of political connection has a positive effect on the likelihood of CPP investment, a result significant at the 1 percent level (column [5] of Panel A in Table 5). Overall, to the extent that asset size captures systemic importance of a financial institution, our results hold after controlling for systemic importance via both parametric and nonparametric methods.

It is also possible that asset size alone is an insufficient statistic to capture systemic importance. For example, as a result of variation in the number of banks across different states, a smaller financial institution may be more important for its regional financial system than a bank of similar size located in a state with a high concentration of banks. If regionally important banks are more likely to have board representation at the Federal Reserve in their district, this scenario could explain the positive relation between Federal Reserve board membership and CPP investment.

To test this alternative hypothesis, we construct a sample of connected and unconnected banks of similar size headquartered in the same state. Specifically, for each type of connections and each connected institution, we choose an unconnected bank closest in size and domiciled in the same state. As before, we require that the difference in size between two institutions within each pair not exceed 10 percent. We then repeat the estimation

of our main logit specification in each matched subsample. The estimation results, shown in Panel B of Table 5, are qualitatively similar to the findings in the main analysis. Connections to congressional representatives on finance committees and representation at the Federal Reserve via board members are positively and significantly related to the likelihood of receiving CPP capital.

It is possible that bank size, even when measured within the respective geographic region, does not fully reflect the bank's role in the financial system. In particular, a bank of a given size may be more systemically important if it is interconnected with a greater number of financial institutions. The failure of such a bank, even if relatively small in the context of the entire system, may cause systemic distress as a result of the ripple effect on the stability of connected institutions.

To estimate systemic importance of individual institutions, we use ΔCoVaR – a measure of systemic risk proposed by Adrian and Brunnermeier (2009) in the Federal Reserve Bank of New York Report at the time of the credit crisis. Intuitively, this measure estimates a bank's marginal contribution to systemic risk of the financial sector. In contrast to the traditional risk measures, which focus on the individual risk of financial institutions, such as value-at-risk (VaR), expected shortfall, and the volatility of losses, ΔCoVaR captures the risk spillover across the financial network (such as the distortion in the supply of credit and capital) resulting from distress of a given financial institution.

More specifically, we define CoVaR of a particular bank as VaR of the financial sector conditional on this bank being in distress. Next, we find the difference between the computed CoVaR of an individual bank and the unconditional VaR of the financial system. This difference, ΔCoVaR , which captures the marginal addition of a particular bank to the overall systemic risk, serves as an alternative control for systemic importance in our robustness tests.

To estimate ΔCoVaR , we follow the methodology in Adrian and Brunnermeier (2009) and compute VaR and ΔCoVaR based on financial institutions' growth rates in market valued total financial assets. Formally, denote by ME_t^i the market value of an intermediary i 's total equity, and by LEV_t^i the ratio of total assets to book equity. We define the normalized change in market value of total financial assets, Xt_i^t , by:

$$Xt_t^i = \frac{ME_t^i \cdot LEV_t^i - ME_{t-1}^i \cdot LEV_{t-1}^i}{ME_{t-1}^i \cdot LEV_{t-1}^i}$$

Analogously, the growth rate of market valued total assets for the financial system as a whole is given by the total market value weighted sum of the Xt_t^i across all institutions. Since the estimation of VaR and ΔCoVaR requires market data, we limit our sample to publicly traded QFIs with at least ten years of available historical data. After applying this filter, we end up with a sample of 528 QFIs, of which 282 (53.4%) were awarded CPP capital.¹⁷

We start our estimation period in January 1986 and end in December 2008, using daily market data from CRSP and quarterly balance sheet data from COMPUSTAT. We calculate the total market value weighted sum of the Xt_t^i across all institutions in our sample and define the combined VaR of the financial system as the bottom 5 percent of the growth rate between 1986 and 2008. In a final step, for each QFI, we compute the measure of systemic risk, ΔCoVaR , as the difference between VaR of the whole system conditional on institution i having a growth rate equal to its own VaR and the system's unconditional VaR.

Panel C of Table 5 presents the results of reestimating our base logit model – the influence of political and economic factors on CPP investment – in which we use ΔCoVaR as a proxy for banks' systemic importance. In each specification, ΔCoVaR is positively and significantly related to the likelihood of receiving CPP capital, confirming our prior evidence about the role of systemic importance in CPP decisions. The positive effect of the political variables associated with the likelihood of CPP investment – connections to the Federal Reserve and House finance committees – remains significant even in a dramatically reduced sample of publicly traded QFIs and after controlling for institutions' systemic risk. In column (7) of Panel C, we simultaneously control for systemic importance using both size and ΔCoVaR . The results indicate that both dimensions of systemic importance are positively related to the likelihood of CPP investment, and that even after controlling for both, connections to the Federal Reserve and House finance committees remain positive and significant.

¹⁷ In an alternative specification, we also estimate VaR and ΔCoVaR based on a broader universe of financial institutions, which also includes publicly traded broker-dealers, insurance companies, and real-estate firms (SIC codes 62, 63-64, and 65-66, respectively). Although the vast majority of these firms are ineligible for CPP participation, their inclusion in the sample enables us to estimate the interconnectedness of QFIs with firms in other sectors of financial services. Our results (unreported) are qualitatively similar.

Collectively, the evidence in this section suggests that our results are unlikely to be driven by sample selection, systemic importance, or unobserved variables correlated with political ties.

6. Extensions

This section presents extensions of our main results. We start by providing evidence on the determinants of CPP investment *amounts*. Next, we analyze how the impact of political connections varies depending on the financial strength of qualifying institutions. The section concludes with a detailed analysis of each of our political variables to identify the main drivers of their influence.

6.1 Investment Amounts

Our analysis so far has concentrated on the likelihood of investment. In this section, we analyze the *amounts* of CPP investments, which are allocated to institutions as tier-1 capital. To evaluate the relative magnitude of each investment, we follow the above classification and scale the absolute investment amount by the QFI's tier-1 capital as of September 30, 2008, the date of the latest quarterly report of condition and income before the CPP application deadline for public and private QFIs.

To analyze the determinants of investment amounts, we estimate cross-sectional OLS regressions in which the dependent variable is the scaled CPP investment. Our sample for these tests comprises the 714 QFIs that received CPP funds. In these tests we did not include the 81 banks that declined the CPP investment, since we do not have reliable data on all the approved investment amounts. The independent variables are defined as in the logit regressions and include measures of political influence, a vector of Camels proxies, banks' foreclosures, and demographic variables. As in the previous models, we include regulator fixed effects.

The results are summarized in Table 6. Columns (1)–(4) present evidence for each type of political influence estimated with bank fundamentals. Column (5) shows the joint effect of all political variables, and column (6) presents the model that includes all political, financial, and demographic variables simultaneously.

The results of estimation indicate that the drivers of investment amounts differ from those of the likelihood of CPP investment. Among the political variables, the scaled investment amount is strongly positively related to a bank's amount of political contributions and lobbying expenditures (both measured relative to asset size). This relation is significant at least at the 5 percent level and in the vast majority of specifications at the 1 percent level. The effect of these variables is also economically large. A one standard deviation increase in lobbying expenditures is associated with an additional \$13.9 million in raw CPP investment, controlling for other factors. A one standard deviation increase in political contributions to congressional candidates is associated with a \$11.9 million increase in allotted CPP funds.

The evidence so far helps explain the initially surprising finding that lobbying expenditures are not strongly associated with a higher likelihood of receiving CPP funds. It is possible that most lobbying efforts were aimed at increasing the size of CPP investments. This interpretation is supported by the fact that lobbying QFIs in our sample represent large institutions, which would likely be saved with or without lobbying. The focus of lobbying on additional funds by TARP recipients is also supported by the evidence in the financial media (Mullins and Williamson 2009). Finally, this finding is also consistent with the recent introduction of congressional legislation to impose restrictions on the lobbying activity of TARP recipients.

Federal Reserve board membership and representation on congressional finance committees do not significantly explain investment amounts. This result is not entirely surprising, since bank regulators make recommendations only on the approval or denial of applications but do not determine investment amounts. Similarly, congressional finance committees, while plausibly helpful in supporting QFI applications, are unlikely to influence the amount of funds awarded.

The analysis of financial variables highlights capital adequacy as one of the fundamental drivers of investment amounts. The relation is strongly negative in all specifications. A one standard deviation decrease in capital adequacy is associated with an additional \$39.7 million in capital, controlling for other factors. The amount of investment is also negatively related to earnings and liquidity. Collectively, these findings are consistent with an investment strategy seeking to increase the capitalization and liquidity of participating banks to an adequate level, thus providing more capital to undercapitalized, less profitable, and less liquid institutions.

The allocation of greater capital amounts to weaker banks is also confirmed by the strong negative relation between banks' financial strength index and CPP investment amounts, presented in column (7) of Table 6.

Among other variables, bank size is strongly positively related to scaled investment amounts. A one standard deviation increase in size is associated with an increase of \$34.2 million in CPP capital, controlling for other factors. The significant positive effect of size is consistent with an investment policy aimed to provide an extra margin of safety for more systemically significant institutions.

In summary, the determinants of CPP investment amounts appear consistent with strengthening the capital position and liquidity of approved participants to an acceptable level, while providing an extra capital buffer for larger institutions. Controlling for these and other fundamental factors, banks' lobbying efforts and political donations have a significant positive effect on the amount of capital received by financial institutions.

6.2 Political Influence and Financial Strength

Our main results suggest that political connections are positively related to the likelihood of receiving CPP investments. In this section, we seek to understand for which types of banks these connections play the greatest role. For this analysis, we divide QFIs into terciles according to the financial strength index and investigate the influence of political variables in each tercile by interacting tercile dummies with variables of political connections. In addition to the financial strength index, which aggregates measures of condition and performance, we also control for bank size and demographics. The dependent variable in these logit regressions is an indicator equal to 1 if a bank was approved for CPP investment. As in other specifications, we include regulator-fixed effects.

The results are presented in Table 7. The base category represents the tercile of banks with the strongest financial condition, according to the financial strength index. The interaction terms show the effects of political connections in the other two terciles. The effect of each of the four political variables is presented in the corresponding column. Across variables of political influence, the relation between political variables and the likelihood of CPP investment is the most pronounced for the institutions with weaker financials, which had stronger incentives to use other channels of influence.

Interpreted broadly, the evidence in this section suggests that if political ties indeed played a role in the choice of CPP investments, their effect shifted at least some capital toward less efficient, underperforming financial institutions.

6.3 Details on Congressional Committees and Federal Reserve Boards

In this section we provide additional analysis of congressional committees and board memberships at the Federal Reserve to investigate the main drivers of their influence. For congressional committees, we disentangle the effects of subcommittees to understand which groups play a more important role. For board memberships at Federal Reserve Banks, we analyze how the impact of political connections varies depending on the tenure and authority level of the board seat (main office versus a branch).

To disentangle the influence of subcommittees within the House Financial Services Committee, we assign three indicators, each denoting membership on the House Financial Services Committee, the Subcommittee on Financial Institutions, and the Subcommittee on Capital Markets, respectively. We then estimate the logit model for the likelihood of CPP investment, using indicators for subcommittees and controlling for bank fundamentals. The results of estimation are presented in Panel A of Table 8.

The likelihood of CPP investment is positively and significantly related to representation on the Subcommittee on Capital Markets and the Subcommittee on Financial Institutions. The coefficients on both subcommittees are comparable in magnitude, suggesting roughly similar effects. This finding can be explained by the fact that both committees have oversight jurisdiction over QFIs.

The effect of membership on the House Financial Services Committee is positive but not statistically significant. This result could be attributed to the fact that the committee has six subcommittees, and only two of them are directly involved in the regulation of the financial services industry. The other subcommittees are tasked with issues not directly related to banking, such as international trade and financial technology.

Next, we analyze the effect of board seats held by QFI executives at Federal Reserve Banks. We introduce indicator variables to distinguish board seats at the main twelve banks from board seats at their branch offices and repeat the estimation of logit regressions, controlling for financial and demographic bank

characteristics. The results, summarized in Panel B of Table 8, show that board seats at the main banks have somewhat larger effects on the likelihood of receiving CPP capital, compared to the board seats at branch offices. This result is consistent with the greater authority of directors at the main banks.

In column (2) of Panel B in Table 8, we consider an alternative specification of board memberships, which accounts for tenure of QFI directors. The independent variable of interest is the total number of terms served by QFI executives who were board members at Federal Reserve Banks in 2008 and 2009. The results indicate that the number of terms served by QFI executives at the Federal Reserve is strongly positively related to the likelihood of CPP investment, consistent with the hypothesis that QFIs with more directors or with directors serving consecutive terms were more likely to be approved for CPP capital.

6.4 Details on Campaign Contributions and Lobbying Expenditures

This section offers additional analysis of political contributions and lobbying expenditures to provide detail on their role in the allocation of CPP capital. For political contributions, we disentangle the effect of private donations from donations via PACs. We also study the differences between contributions to members of the House and Senate, and evaluate how the impact of donations varies with politician's tenure and seniority. For lobbying expenditures, we evaluate the power of agencies lobbied and study the variation across issues involved in the lobbying process.

Panel A of Table 9 presents a detailed analysis of campaign contributions. Columns (1) and (2) present evidence by type of contributions (individual donations versus PAC contributions). The results indicate that the influence of donations is primarily driven by bank contributions to PACs. Private donations made by banks' employees have a weaker positive effect. This result, which holds for both House and Senate contributions, can be explained by the smaller size of individual donations and the stringent caps imposed on individual sponsorship of any particular politician (\$2,400 per election cycle). As a result, individual contributions likely yield smaller influence, given their trivial magnitude and a lack of coordination at the bank level. In contrast, bank-sponsored PACs usually have a well-coordinated plan of expenditures to support particular politicians.

Columns (3) and (4) show the interaction between contributions and politician's seniority dummy (equal to one for politicians with above-median number of terms served). For both the House and Senate specifications, the effect of contributions declines with the politician's seniority, as shown by the negative coefficient on the interaction term. This result, though somewhat surprising, may be attributed to the fact that senior politicians have greater reputation concerns and undergo higher scrutiny, which can restrain their attempts to influence the allocation of federal capital. This interpretation would be consistent with career concerns of federal officials under close monitoring (Fama 1980). Empirically, this result is also in line with the evidence that high-level politicians in the United States are often restrained by monitoring bodies and career concerns from benefiting their connected firms (for example, Fisman et al. 2006). As an alternative explanation, more senior politicians may be connected to a greater number of firms outside of their election district, thereby reducing the relative effect of ties to the banks in their home state.

Panel B of Table 9 presents additional details on lobbying expenditures, which are broken down by government agencies lobbied and issues involved. Column (1) provides evidence on total lobbying expenditures in 2008 scaled by bank size. In column (2), we use only lobbying activities in the areas of Finance, Banking, and Bankruptcy—the official classification categories most likely to include bank petitions related to TARP capital. This filter increases both the magnitude and the significance of the lobbying coefficient, as well as the R-square of the regression, supporting our interpretation of the main results.

Column (3) of Panel B in Table 9 uses lobbying expenditures targeted only at the Treasury and the four banking regulators—the organizations directly involved in CPP investment decisions. This filter also increases the magnitude of the lobbying coefficient, suggesting that lobbying the primary decision makers increases the positive effect on allocated capital amounts. Collectively, the results in Panel B indicate that lobbying expenditures that are most likely to involve petitions for TARP capital have the strongest positive impact on CPP investments. This result indicates that the relation between lobbying amounts and CPP investment is unlikely to be merely coincidental.

6.5 Effect of Presidential and Congressional Elections

TARP was initiated several weeks before the congressional and presidential elections of 2008. The elections resulted in a change in presidential administration and a slight increase in the Democratic majority in Congress. In this section, we explore to what extent, if any, the changes in presidency and political composition of Congress had an effect on the allocation of CPP funds.

For the purposes of this analysis, we study political donations made by employees of financial institutions and their political action committees in 2008. Using political contributions data, we categorize banks into three groups: (1) banks with a strong preference toward Democrats (over 75 percent of banks' donations went to Democratic candidates); (2) banks with a strong preference toward Republicans (over 75 percent of banks' donations went to Republican candidates); and (3) banks with balanced political preference (remaining institutions). Next, we introduce dummy variables for each group and study whether the banks' political affiliation had an impact on the likelihood of receiving CPP funds or the amount received. We also study the effect of the change in presidency and in the composition of Congress that became effective in January 2009.

We are unable to reliably establish the effect of party affiliation on the allocation of CPP funds either before or after the change of administration in January 2009. For brevity, these results are not reported but are available from the authors. There are several possible explanations for this finding. First, all but the first ten transactions in CPP occurred after the results of both the presidential and congressional elections were publicly announced. Therefore, the main event of interest—the news about a change in administration—preceded the allocation of the vast majority of CPP funds, thus making it difficult to detect its effect.

In the 2008 elections, the vast majority of seats (86 percent) were won by incumbents, and therefore, the turnover in Congress was relatively small. The changes in the party affiliation of Congress members were even smaller. Both before and after the 2008 election, Democratic candidates held the majority of seats, which increased slightly from 54 percent in the previous Congress to 59 percent in January 2009. Given the small magnitude of the effect, it is possible that our tests lack power to distill the impact of party affiliation. Finally, it is also feasible that the overall level of political connections of a financial institution dominates the affiliation with a particular party. This argument is supported by evidence that the most politically active banks, as

measured by political donations, lobbying expenditures, and connections to Congress representatives, are typically connected to both Democratic and Republican parties.

Conclusion

This paper provides empirical evidence on the determinants of capital allocation under the CPP. We consider a range of political, financial, and demographic indicators of qualifying financial institutions and examine how they are related to the likelihood of receiving CPP funds. Our results highlight the importance of political connections in the choice of federal investments. Ties to the Federal Reserve and connections with House members on finance committees are strongly positively related to the likelihood of CPP investment.

Analysis also indicates that conditional on receiving CPP funds, an institution's investment in lobbying activities and political contributions is positively related to the amount of awarded capital. Our results also suggest that political ties play a stronger role for weaker, underperforming institutions.

Our findings suggest that political ties, at least in some cases, affected federal investment decisions under TARP, resulting in a deviation from the declared focus on healthy institutions and shifting at least some of the federal capital toward ailing banks. This interpretation justifies the additional requirements for accountability, disclosure, and transparency in TARP investment decisions that are advocated by the GAO and other oversight bodies of the program.

Our research complements earlier studies on the relation between political connections and firm value (Roberts 1990; Fisman 2001; Faccio 2006) by studying an important channel for this effect: preferential access to federal capital. Yet in this paper, we do not attempt to provide direct evidence on the deployment or repayment of federal capital, given the short time horizon for making reliable conclusions. This is an interesting question for future research.

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Appendix I

Primary Banking Regulators of Qualifying Financial Institutions

The Federal Reserve is the primary regulator for bank holding companies and state-chartered banks that are members of the Federal Reserve System.¹⁸ Together, these institutions account for more than 85 percent of QFIs in our sample and represent over 95 percent of assets.

The FDIC has supervisory authority over state-chartered banks that are not members of the Federal Reserve System. These banks comprise the majority of institutions in the banking system, but most of them are held by bank holding companies, and their applications must be also submitted to the Federal Reserve.

The OCC regulates and supervises all national banks. In contrast to state banks, which are chartered by state banking departments and regulated by state banking laws, national banks are chartered by the OCC and regulated by federal banking laws. Further, unlike state banks, national banks are required to be investing members of the Federal Reserve System. National banks are typically larger than state banks but do not need to have nationwide operations. The decision of a bank to seek federal or state charter often depends on its preference for regulatory authorities and regulating laws, since laws in some states give state banks more authority than national banks to engage in selected nonbank activities, such as real estate investments, among others.

OTS supervises savings associations (thrifts) and savings and loan holding companies. In the past, the primary operations of savings associations were limited to accepting deposits and making residential mortgage loans. However, the differences between banks and savings associations have diminished over time, and under the current law thrifts are authorized to offer largely all banking services. Savings and loan holding companies are companies that own savings associations.

¹⁸ In cases where the applying institution is a bank holding company, the application is submitted both to the regulator overseeing the largest bank of the holding company and to the Federal Reserve.

Appendix II

Financial Conditions of the Capital Purchase Program

Redemption of Capital

Preferred shares acquired by the Treasury can be redeemed by the QFI at the issue price. During the first three years of investment life, preferred stock may be redeemed by the QFI by issuing common or preferred stock for cash in the amount of not less than 25 percent of the issue price of preferred shares acquired by the Treasury.

After the first three years of investment, preferred shares may be redeemed in whole or in part at QFIs' discretion. As of March 30, 2010, 74 banks redeemed their preferred shares from the Treasury for a total amount of \$135.8 billion.

Participation Terms for "S" Corporations and Mutual Organizations

The terms of program participation for "S" corporations and mutual organizations are similar in spirit to those described in this section, with some modifications that accommodate the structure of these institutions.¹⁹ For example, in cases of "S" corporations, the Treasury invests in senior debentures rather than in preferred stock. These debentures pay an annual coupon of 7.7 percent for the first five years and 13.8 percent thereafter, and thus have an after-tax cost of 5 percent and 9 percent, respectively, under the assumption of a 35 percent tax rate. The Treasury also receives warrants to purchase additional debentures, which are also exercised immediately.

Restrictions on Participating Institutions

During the first three years of the Treasury's ownership of preferred stock or warrants, participating banks are prohibited either from increasing dividends on their common shares or from repurchasing common stock or preferred shares junior to the Treasury's investment. Participating institutions must also impose certain restrictions on their executive compensation.²⁰

¹⁹ Additional details on the financial terms of the program for "S" corporations and mutual organizations can be obtained from the program term sheets for these institutions at <http://www.financialstability.gov/roadtostability/CPAppdocs.html>

²⁰ In short, participating banks are prohibited from making golden parachute payments, deducting for tax purposes compensation exceeding \$500,000 per executive, and employing compensation schemes that encourage "unnecessary and excessive risks" to the value of the institution. Banks are also required to claw back any incentive compensation paid to executives based on earnings that were subsequently restated.

Appendix III

Boards of Directors at Federal Reserve Banks

Each of the twelve Federal Reserve banks has a board of directors, which consists of nine members appointed for three-year staggered terms, with a maximum service tenure of two consecutive terms. Three board members in each bank are classified as Class A directors and represent the member banks in the district. Class A directors usually comprise senior executives at member institutions and are the primary focus of our analysis.

Another three directors, Class B directors, are chosen to represent the public in the respective Federal Reserve District. These directors include representatives from industry, agriculture, nonprofits, and academia. Both Class A and Class B directors are elected by member banks. In this election, all member banks of the Federal Reserve district are divided into three categories by the amount of capital: large, medium, and small. Each category of banks elects one Class A and one Class B director.

Class C directors comprise three members appointed by the Federal Reserve Board of Governors to represent the interests of labor, industry, and agriculture. Two of the Class C directors are appointed to serve as chairman and deputy chairman of the board by the Federal Reserve Board of Governors. Both Class B and Class C directors cannot be employees or directors at any bank.

Among the twelve main banks in the Federal Reserve System, eleven banks also have additional branches located in the main cities of the district. The number of branches ranges from one to four per district, depending on its size. Branches of Federal Reserve Banks have their own boards of directors.

In the majority of branches, boards consist of seven members serving three-year terms with a maximum service limit of two consecutive terms. In a typical branch board, four directors are appointed by the Reserve Bank and three are appointed by the Board of Governors, which also designates the board's chairman. Members of the branch board usually include one or two executives of member banks, with the remaining directors representing industry, agriculture, nonprofits, and academia.

Appendix IV

Variable Definitions

1. CPP Variables

CPP = an indicator equal to 1 if the financial institution was approved for CPP funds.

CPP amount = amount of capital received by a financial institution from the CPP, scaled by the institution's tier-1 capital.

2. Political Variables

Congress finance committee member = average of a set of indicators equal to 1 if the financial institution's congressional representatives in 2008 or 2009 were members of the Financial Services Committee, the Capital Markets subcommittee, or the Financial Institutions subcommittee.

Federal Reserve board member = an indicator equal to 1 if the financial institution had executives that are also Federal Reserve directors in 2008 or 2009.

Lobbying amount = amount of bank's lobbying expenditures from the beginning of 2008 through the first quarter of 2009.

Contribution amount = amount of contributions to congressional candidates in the 2008 election cycle, including bank contributions to PACs and individual contributions of bank employees and their spouses.

Congress representatives, state = the number of congressional representatives in the state where the financial institution is headquartered, scaled by the number of financial institutions headquartered in the state.

Congress financial services committee member = the average of two indicators equal to 1 if the company's congressional representatives in 2008 or 2009 were members of the Financial Services Committee.

Congress capital markets subcommittee member = the average of two indicators equal to 1 if the company's congressional representatives in 2008 or 2009 were members of the Congress Capital Markets subcommittee.

Congress financial institutions subcommittee member = the average of two indicators equal to 1 if the company's congressional representatives in 2008 or 2009 were members of the Financial Institutions subcommittee, respectively.

Federal Reserve board member, main office = an indicator equal to 1 if the company had executives who are also Federal Reserve directors in one of the twelve main offices in 2008 or 2009.

Federal Reserve Board member, branch = an indicator equal to 1 if the company had executives who are also Federal Reserve directors in any of the branch offices in 2008 or 2009.

Federal Reserve board member, number of terms = number of terms served by company executives who are Federal Reserve board members in 2008 or 2009.

3. Financial Variables

Capital adequacy = tier-1 risk-based capital ratio, defined as tier-1 capital divided by risk-weighted assets.

Capital adequacy refers to the amount of a bank's capital relative to the risk profile of its assets. Broadly, this criterion evaluates the extent to which a bank can absorb potential losses. Tier-1 capital comprises the more liquid subset of bank's capital, whose largest components include common stock, paid-in-surplus, retained earnings, and noncumulative perpetual preferred stock. To compute the amount of risk-adjusted assets in the denominator of the ratio, all assets are divided into risk classes (defined by bank regulators), and less risky assets are assigned smaller weights, thus contributing less to the denominator of the ratio. The intuition behind this approach is that banks holding riskier assets require a greater amount of capital to remain well capitalized.

In the robustness section, we also test an alternative specification of capital adequacy: the total risk-based capital ratio, determined as a ratio of total capital to risk-weighted assets.

Asset quality = the negative of noncurrent loans and leases, scaled by total loans and leases.

Asset quality evaluates the overall condition of a bank's portfolio and is typically evaluated by a fraction of nonperforming assets and assets in default. Noncurrent loans and leases are loans that are past due for at least ninety days or are no longer accruing interest, including nonperforming real-estate mortgages. A higher proportion of nonperforming assets indicates lower asset quality. For ease of interpretation, this ratio is included with a negative sign so that greater values of this proxy reflect higher asset quality.

In the robustness section, we also test an alternative measure: the ratio of loan and lease allowance to total loans. This ratio (also included with a negative sign) measures the adequacy of the allowance created by the bank to absorb losses on nonperforming loans.

Management quality = the negative of the number of corrective actions that were taken against bank executives by the corresponding banking regulator (FED, OTS, FDIC, and OCC) between 2006 and 2009.

In our sample, we have a total of 1,681 orders issued to 961 QFIs. The most frequent enforcement actions include prohibitions from further participation in banking activities,²¹ orders to cease and desist,²² and orders to pay civil money penalties.²³ To avoid subjectivity, we do not attempt to assess the severity of each corrective action but rather use the total number of enforcement orders issued to a QFI over the three-year period.

Earnings = return on assets (ROA), measured as the ratio of the annualized net income in the trailing quarter to average total assets. For robustness, we also measure Earnings using net interest income to earning assets.

Liquidity = cash divided by deposits. For robustness, we also measure Liquidity using the negative of the noncore dependence ratio, defined as noncore deposits divided by long-term assets.²⁴

Sensitivity to market risk = the sensitivity to interest rate risk, defined as the ratio of the absolute difference (gap) between short-term assets and short-term liabilities to earning assets.

²¹ These orders prohibit bank managers convicted of unlawful activities or unsound banking practices from involvement in any insured depository institution without prior regulatory approval.

²² Cease-and-desist orders are issued when a regulator determines that a bank has engaged in "an unsafe or unsound banking practice or a violation of law." These orders require banks to take corrective actions specified by the banking regulator.

²³ These orders require banking organizations to pay fines for engaging in unsafe banking practices, violations of law, or noncompliance with orders of banking regulators.

²⁴ Noncore deposits represent the more volatile funds, such as brokered deposits, CDs in excess of \$100,000 and deposits by foreign institutions. These sources are most sensitive to changes in interest rates and market conditions. Since a greater reliance on noncore funds indicates lower liquidity, we take the negative of the noncore dependence ratio.

The primary focus of risk analysis by bank regulators is on interest rate risk. The gap between short-term assets and liabilities approximates the net amount of assets or liabilities that need to be repriced within one year, affecting earnings. A greater absolute value of the gap reflects a higher interest rate risk.

Foreclosures = value of foreclosed assets divided by net loans and leases.

Financial strength index = the company's average Camels ranking: Capital adequacy, Asset quality, Management quality, Earnings, Liquidity, and Sensitivity to market risk, normalized to lie between 0 and 1.

ΔCoVaR = a measure of systemic risk developed by Adrian and Brunnermeier (2009). This proxy estimates a bank's marginal contribution to systemic risk of the financial sector. ΔCoVaR is the difference between CoVaR of an individual bank (i.e., value-at-risk of the financial sector conditional on this bank being in distress) and the unconditional value-of-risk of the financial system.

4. Demographic Variables

Size = the natural logarithm of total assets, defined as all assets owned by the bank holding company, including cash, loans, securities, bank premises, and other assets. This total does not include off-balance-sheet accounts.

Age = age (in years) of the oldest bank owned by the bank holding company as of September 30, 2008.

TABLE 1
Summary Statistics

This table reports summary statistics for the sample, which consists of all FDIC-insured, active financial institutions as of September 30, 2008. We exclude non-US banks and banks that declined to apply to CPP. All variable definitions are given in Appendix V. CPP investment is an indicator that equals 1 if the company received CPP funds or was approved and later declined the funds and 0 otherwise. Congress finance committee member is the average of a set of indicators equal to 1 if the company's Congress Representatives in 2008 or 2009 were members of the Financial Services Committee, the Capital Markets sub-committee, or the Financial Institutions sub-committee, respectively. Federal Reserve board member is an indicator that equals 1 if the company had executives that are also Federal Reserve directors in 2008 or 2009. Lobbying amount is the total amount of money invested in lobbying from the beginning of 2008 through the first quarter of 2009. Contribution amount is the total amount of contributions made to Political Action Committees (PACs), as well as individual donations initiated by banks' executives, employees, and their spouses in 2007-2008. Capital adequacy is Tier 1 risk-based capital ratio. Asset quality is the negative of noncurrent loans and leases, scaled by total loans and leases. Management quality is the negative of the number of corrective actions that were taken against bank executives by the corresponding banking regulator (FED, OTS, FDIC, and OCC) between 2006 and 2009. Earnings equal return on assets (ROA). Liquidity is measured by the cash to deposits ratio. Sensitivity to market risk is the sensitivity to interest rate risk, defined as the ratio of the absolute difference (gap) between short-term assets and short-term liabilities to earning assets. Foreclosures equal the total value of foreclosed assets scaled by net loans and leases. Age is the age of the oldest bank owned by the bank holding company in years as of 2009. Assets are all assets owned by the bank holding company including cash, loans, securities, bank premises and other assets. This total does not include off-balance-sheet accounts. Size is the natural logarithm of assets. Panel B reports CPP investment announcement returns and t-statistics (in brackets). Panel C reports pair-wise correlations.

Panel A: Summary Statistics

Variable	Mean	25th percentile	Median	75th percentile	Standard deviation
Politics					
Congress finance committee member	0.033	0.000	0.000	0.000	0.085
Federal Reserve board member	0.011	0.000	0.000	0.000	0.106
Lobbying amount, \$thousands	5,080	160	1,088	4,386	8,999
Contribution amount, \$thousands	36.228	0.708	2.000	6.050	344.937
CPP					
CPP investment indicator	0.099	0.000	0.000	0.000	0.303
CPP amount (\$thousands), recipients	261,000	5,000	11,300	31,762	1,850,000
Financials					
Capital adequacy (%)	18.416	10.763	13.423	18.628	24.211
Asset quality (%)	-1.828	-2.263	-1.022	-0.309	2.901
Management quality	-0.231	0.000	0.000	0.000	1.623
Earnings (%)	0.465	0.142	0.702	1.169	3.876
Liquidity (%)	8.247	2.587	3.872	6.623	74.465
Sensitivity to market risk (%)	13.649	2.981	8.465	18.332	33.637
Demographics					
Age	71	25	81	106	44
Assets, \$thousands	1,700,000	66,408	144,000	335,000	36,600,000

Panel B: CPP Investment Announcement Returns

Window	[-1,0]	[-1,1]	[-2,2]
Unadjusted Raw Returns (%)	0.920 [1.877]	1.920 [3.460]	1.370 [1.980]
Comparison Period Adjusted (%)	1.090 [2.295]	2.170 [3.973]	1.800 [2.643]
Market Adjusted Returns, Value Weighted Index (%)	0.900 [3.622]	1.360 [3.650]	0.940 [2.155]
Industry Adjusted Returns (%)	1.130 [4.519]	1.810 [5.207]	1.610 [3.523]
Fama-French Three-Factor Model (%)	1.280 [3.516]	2.510 [4.837]	2.990 [4.218]

Panel C: Correlation Matrix

Variable	Congress finance committee member	Federal Reserve board member	Lobbying amount	Contribution amount	Congress Reps, state	Capital adequacy	Asset quality	Managers' quality	Earnings	Liquidity	Sensitivity to market risk	Age	Size
Congress finance committee member	1.000												
Federal Reserve board member	0.024	1.000											
Lobbying amount	-0.010	0.003	1.000										
Contribution amount	0.037	0.142	0.232	1.000									
Congress Reps, state	0.058	0.025	0.029	0.064	1.000								
Capital adequacy	0.009	-0.030	0.050	0.004	0.052	1.000							
Asset quality	-0.023	-0.002	0.007	0.001	-0.032	0.096	1.000						
Management quality	-0.034	-0.178	-0.008	-0.618	-0.048	0.038	0.095	1.000					
Earnings	-0.026	0.004	0.001	0.000	-0.116	0.183	0.116	0.026	1.000				
Liquidity	0.007	0.023	0.009	0.116	0.012	0.237	0.010	-0.159	0.099	1.000			
Sensitivity to market risk	0.013	-0.001	-0.010	0.008	0.045	0.122	0.039	0.008	0.022	0.144	1.000		
Age	-0.060	0.022	-0.055	0.013	-0.283	-0.077	0.091	-0.027	0.101	-0.028	0.021	1.000	
Size	0.063	0.197	0.088	0.229	0.237	-0.260	-0.085	-0.262	-0.008	-0.028	-0.024	-0.011	1.000

TABLE 2**Non Parametric Evidence: The Likelihood of Receiving CPP Funds**

This table presents difference-in-means estimates of the likelihood of receiving CPP funds. The sample consists of all FDIC-insured, active financial institutions as of September 30, 2008. We exclude non-US banks and banks that declined to apply to CPP. The financial strength index is the company's average ranking on Capital adequacy, Asset quality, Management quality, Earnings, Liquidity, and Sensitivity to market risk (Camels), normalized to lie between 0 and 1. See Appendix V for all variable definitions.

Sort Variable	Low	High	High Minus Low	t-statistic
Politics				
Congress finance committee member	0.103	0.198	0.095	2.526
Federal Reserve board member	0.098	0.476	0.378	11.310
Lobbying amount	0.100	0.397	0.297	8.089
Contribution amount	0.078	0.209	0.123	14.536
Financials				
Capital adequacy	0.175	0.030	-0.145	20.936
Asset quality	0.117	0.088	-0.029	4.039
Management quality	0.134	0.098	-0.036	3.418
Earnings	0.135	0.070	-0.065	9.130
Liquidity	0.129	0.076	-0.054	7.556
Sensitivity to market risk	0.110	0.095	-0.014	2.018
Foreclosures	0.081	0.123	0.042	5.911
Financial strength index	0.165	0.040	-0.125	17.838
Demographics				
Age	0.133	0.072	-0.061	8.585
Size	0.034	0.170	0.136	19.587

TABLE 3
The Likelihood of CPP Investment

This table presents estimates from logit regressions explaining the likelihood of CPP investment. The dependent variable is an indicator equal to 1 if the financial institution was approved for CPP funds. The sample consists of all FDIC-insured, active financial institutions as of September 30, 2008. We exclude non-US banks and banks that declined to apply to CPP. See Appendix V for all variable definitions. All regressions include regulator fixed effects. The t-statistics (in brackets) are based on standard errors that are heteroskedasticity consistent. Significance levels are indicated: * = 10%, ** = 5%, *** = 1%.

Model Number	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Congress finance committee member	0.914*** [2.093]				1.520*** [3.699]	0.896** [2.049]	0.594** [2.333]
Federal Reserve board member		0.753*** [2.617]			1.888*** [7.908]	0.747*** [2.593]	0.714** [2.489]
Lobbying amount			0.750 [0.551]		0.792 [0.099]	0.771 [0.738]	0.871 [0.974]
Contribution amount				0.134* [1.716]	0.777*** [3.400]	0.166 [0.807]	0.075 [0.690]
Capital adequacy	-0.123*** [9.663]	-0.122*** [9.644]	-0.121*** [9.526]	-0.123*** [9.643]		-0.123*** [9.584]	
Asset quality	0.203*** [7.171]	0.204*** [7.164]	0.203*** [7.169]	0.201*** [7.105]		0.203*** [7.115]	
Management quality	0.069*** [2.835]	0.073*** [3.123]	0.069*** [2.891]	0.083*** [2.714]		0.090*** [2.931]	
Earnings	-0.157*** [5.006]	-0.160*** [5.120]	-0.160*** [5.092]	-0.161*** [5.122]		-0.158*** [5.051]	
Liquidity	0.002 [0.891]	0.002 [0.882]	0.002 [0.950]	0.001 [0.714]		0.001 [0.517]	
Sensitivity to market risk	-0.007* [1.901]	-0.007* [1.750]	-0.007* [1.802]	-0.007* [1.797]		-0.007* [1.832]	
Foreclosures	-0.002*** [3.551]	-0.002*** [3.526]	-0.003*** [3.574]	-0.003*** [3.573]		-0.002*** [3.517]	-0.004*** [6.198]
Age	-0.008*** [7.908]	-0.008*** [8.097]	-0.008*** [8.066]	-0.008*** [7.989]		-0.008*** [7.926]	-0.009*** [9.392]
Size	0.738*** [19.551]	0.728*** [19.122]	0.744*** [19.637]	0.738*** [19.404]		0.722*** [18.690]	0.715*** [20.011]
Financial strength index							-2.772*** [7.155]
Regulating agency F.E?	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Pseudo R ²	0.242	0.242	0.241	0.241	0.059	0.243	0.206
N_obs	7,228	7,228	7,228	7,228	7,228	7,228	7,228

TABLE 4
Robustness to Sample Selection

This table presents estimates from logit regressions explaining the likelihood of CPP investment. The dependent variable is an indicator equal to 1 if the financial institution was approved for CPP funds. The sample consists of all FDIC-insured, active financial institutions as of September 30, 2008. We exclude non-US banks and banks that declined to apply to CPP. Previous control variable definitions correspond to all columns but (1) and (2). In column (1), Capital adequacy is total risk-based capital ratio, Asset quality is the opposite of net losses to average total loans and leases, Earnings is noninterest income to earning assets, and liquidity is the opposite of the non-core dependence ratio, defined as non-core deposits divided by long-term assets. In column (2), Capital adequacy is the tier 1 leverage capital ratio, Asset quality is the opposite of loan and lease allowance to total loans, Earnings is net interest income to earning assets, and liquidity is core deposits to asset growth. Column (7) estimates placebo tests with banks whose connections to Congress and to the Federal Reserve existed prior to, but not during, the administration of CPP. Column (8) includes banks most likely to apply for CPP funds based on propensity scores estimated from banks that declined to apply. See Appendix V for all variable definitions. All regressions include regulator fixed effects. The t-statistics (in brackets) are based on standard errors that are heteroskedasticity consistent. Significance levels are indicated: * = 10%, ** = 5%, *** = 1%.

Description	Different Controls	Different Controls	Exclude top 25% capital adequacy	Exclude top 25% quality index	Placebo	Propensity Score	Exclude top 1% size	Exclude NY
Model Number	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Congress finance committee member	0.980** [2.065]	0.977** [2.021]	0.994** [2.467]	1.196** [2.497]	-0.554 [1.546]	0.907** [1.962]	0.890** [2.157]	0.802** [1.269]
Federal Reserve board member	0.739** [2.546]	0.751** [2.538]	0.615** [1.967]	0.731** [2.517]	0.846* [1.898]	0.969*** [3.516]	0.759*** [2.677]	0.712** [2.501]
Lobbying amount	2.093 [1.170]	1.291 [0.973]	0.066 [0.072]	2.040 [1.203]	0.757 [0.727]	-0.706 [0.736]	0.887 [0.835]	1.455 [1.403]
Contribution amount	0.128 [0.556]	0.339 [1.141]	0.647 [0.607]	0.041 [0.129]	0.192 [0.849]	0.302 [1.456]	0.250 [1.186]	0.117 [0.772]
Capital adequacy	-0.151*** [7.338]	-0.113*** [7.369]	-0.127*** [9.561]	-0.127*** [9.462]	-0.121*** [9.472]	-0.096*** [7.243]	-0.111*** [8.832]	-0.072*** [4.846]
Asset quality	0.199*** [6.666]	0.207*** [7.091]	0.184*** [6.286]	0.221*** [7.488]	0.197*** [6.968]	0.092*** [2.963]	0.000 [0.221]	0.233*** [3.147]
Management quality	0.086*** [2.662]	0.116*** [3.258]	0.374*** [3.954]	0.083** [2.100]	0.091*** [2.753]	-0.049 [1.036]	0.087*** [2.842]	0.083*** [2.880]
Earnings	-0.090** [2.420]	-0.111*** [3.500]	-0.183*** [5.611]	-0.178*** [5.461]	-0.157*** [4.975]	-0.130*** [3.918]	-0.055 [1.479]	0.030 [0.727]
Liquidity	0.001 [0.597]	0.002 [0.655]	-0.027** [2.473]	0.003** [2.135]	0.001 [0.652]	0.038*** [2.918]	0.000 [1.392]	0.000 [1.202]
Sensitivity to market risk	-0.004 [1.120]	-0.012*** [2.839]	-0.007* [1.758]	-0.008** [2.023]	-0.007* [1.747]	-0.010** [2.453]	-0.006 [1.499]	-0.013*** [3.399]
Foreclosures	-0.002*** [3.245]	-0.003*** [3.658]	-0.003*** [3.663]	-0.003*** [3.649]	-0.002*** [3.537]	-0.003*** [3.380]	-0.004*** [5.882]	-0.003*** [4.467]
Age	-0.008*** [7.120]	-0.007*** [6.918]	-0.009*** [8.201]	-0.009*** [8.072]	-0.008*** [8.133]	-0.008*** [7.270]	-0.009*** [8.355]	-0.010*** [9.944]
Size	0.719*** [17.993]	0.709*** [17.357]	0.775*** [17.647]	0.744*** [18.697]	0.736*** [19.165]	0.162*** [3.463]	0.703*** [18.944]	0.791*** [21.287]
Regulating agency F.E.?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Pseudo R ²	0.202	0.222	0.233	0.244	0.205	0.096	0.227	0.211
N_obs	7,228	7,228	5,421	5,421	7,228	3,000	7,155	7,058

TABLE 5
Robustness to Systemic Importance

This table presents estimates from logit regressions explaining the likelihood of CPP investment. The dependent variable is an indicator equal to 1 if the financial institution was approved for CPP funds. The baseline sample consists of all FDIC-insured, active financial institutions as of September 30, 2008. We exclude non-US banks and banks that declined to apply to CPP. In each column of Panels A and B, we consider subsample of all banks that are politically connected according to the political connections measure in the title of the column and their best-match unconnected counterpart. In Panel A, banks are matched by their size. In Panel B, banks are matched by size to banks headquartered in their state. In both panels, matched pairs in which the size difference between two banks is greater than 10% are excluded from the analysis. In Panel C, systemic importance is measured by ΔCoVaR , suggested by Adrian and Brunnermeier (2009), and defined as the value at risk of the financial system conditional on institutions being under distress. The sample is limited to publicly traded institutions, as the calculation of the ΔCoVaR measure is based on market values. Connected is an indicator equal to 1 if the company is politically connected according to any of the political connections measures. See Appendix V for all other variable definitions. All regressions include regulator fixed effects. The t-statistics (in brackets) are based on standard errors that are heteroskedasticity consistent. Significance levels are indicated as follows: * = 10%, ** = 5%, *** = 1%.

Panel A: Size-Matched Sample

Sample Criterion (Measure of Political Connections)	Congress finance committee member	Federal Reserve board member	Lobbying amount	Contribution amount	Connected
Model Number	(1)	(2)	(3)	(4)	(5)
Political connections	1.499*** [2.653]	0.205** [2.359]	0.505 [0.467]	0.230 [0.474]	2.272*** [2.772]
Regulating agency F.E.?	Yes	Yes	Yes	Yes	Yes
Controls?	Yes	Yes	Yes	Yes	Yes
Pseudo R ²	0.193	0.412	0.260	0.135	0.152
N_obs	2,352	152	80	2,572	4,422
T-statistic for the difference in mean size across matched banks	0.014	0.019	0.012	0.041	0.018

Panel B: State-Size-Matched Sample

Sample Criterion (Measure of Political Connections)	Congress finance committee member	Federal Reserve board member	Lobbying amount	Contribution amount	Connected
Model Number	(1)	(2)	(3)	(4)	(5)
Political connections	1.759*** [2.831]	0.572** [2.347]	0.151 [0.675]	0.564 [0.998]	2.678*** [2.754]
Regulating agency F.E.?	Yes	Yes	Yes	Yes	Yes
Controls?	Yes	Yes	Yes	Yes	Yes
Pseudo R ²	0.169	0.503	0.597	0.169	0.174
N_obs	2,140	99	50	2,118	3,778
T-statistic for the difference in mean size across matched banks	0.007	0.030	0.048	0.063	0.078

Panel C: Δ CoVaR

Model Number	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Δ CoVaR	2.958*** [3.633]	2.810*** [3.448]	3.049*** [3.709]	3.053*** [3.716]	3.109*** [3.707]	2.552*** [2.159]	2.550** [2.134]
Congress finance committee member	1.672** [2.236]				1.694** [2.235]	2.699** [2.329]	2.679** [2.275]
Federal Reserve board member		1.960*** [3.162]			1.888*** [3.027]	1.560*** [3.348]	1.402** [2.036]
Lobbying amount			2.74 [1.476]		1.829 [0.963]	6.019*** [2.776]	5.270** [2.313]
Contribution amount				0.297 [1.623]	0.182 [1.097]	0.224 [0.918]	0.139 [0.581]
Capital adequacy						-0.392*** [7.024]	-0.364*** [6.470]
Asset quality						0.212*** [2.803]	0.230*** [3.049]
Management quality						0.052 [1.330]	0.089** [2.238]
Earnings						0.329*** [3.429]	0.323*** [3.373]
Liquidity						0.001 [0.216]	0.002 [0.740]
Sensitivity to market risk						-0.031*** [3.060]	-0.027*** [2.620]
Foreclosures						-0.003 [1.237]	-0.002 [0.980]
Age						0.001 [0.090]	-0.001 [0.508]
Size							0.320*** [3.064]
Regulating agency F.E?	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Pseudo R ²	0.050	0.067	0.049	0.054	0.079	0.282	0.296
N_obs	528	528	528	528	528	528	528

TABLE 6

CPP Investment Amount

This table presents estimates from OLS regressions where the dependent variable is the amount of capital received by a financial institution from the CPP, scaled by the institution's tier-1 capital. The sample consists of all financial institutions that received capital from CPP. See Appendix V for all variable definitions. All regressions include regulator fixed effects. The t-statistics (in brackets) are based on standard errors that are heteroskedasticity consistent. Significance levels are indicated: * = 10%, ** = 5%, *** = 1%.

Model Number	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Congress finance committee member	0.161 [1.106]				0.205 [1.401]	0.186 [1.336]	0.169 [1.157]
Federal Reserve board member		0.043 [0.579]			0.081 [1.145]	0.065 [0.929]	0.043 [0.584]
Lobby amount			2.306*** [7.466]		1.931*** [5.490]	1.834*** [5.035]	1.862*** [5.293]
Contribution amount				1.121*** [6.086]	0.261** [2.357]	0.548** [2.559]	0.192** [2.143]
Capital adequacy	-3.373*** [6.244]	-3.385*** [6.264]	-3.964*** [7.555]	-3.805*** [7.175]		-4.016*** [7.672]	
Asset quality	3.405*** [2.986]	3.405*** [2.983]	2.883*** [2.626]	2.688** [2.408]		2.714** [2.473]	
Management quality	-0.964 [1.632]	-0.945 [1.591]	-1.097* [1.932]	0.792 [1.229]		-0.141 [0.212]	
Earnings	-3.488*** [2.779]	-3.616*** [2.894]	-4.019*** [3.346]	-3.462*** [2.847]		-3.656*** [3.037]	
Liquidity	-0.114*** [2.905]	-0.113*** [2.882]	-0.113*** [3.010]	-0.103*** [2.707]		-0.109*** [2.911]	
Sensitivity to market risk	-0.015 [0.101]	-0.005 [0.036]	-0.117 [0.827]	-0.028 [0.195]		-0.112 [0.794]	
Foreclosures	-0.032 [1.135]	-0.033 [1.169]	-0.032 [1.160]	-0.037 [1.327]		-0.031 [1.147]	-0.042 [1.509]
Age	-0.094*** [2.641]	-0.095*** [2.665]	-0.064* [1.853]	-0.084** [2.409]		-0.067* [1.931]	-0.073** [2.079]
Size	2.249* [1.922]	2.150* [1.800]	0.735 [0.643]	0.654 [0.559]		-0.002 [0.001]	1.965* [1.677]
Financial strength index							-0.325** [1.966]
Regulating agency F.E.?	Yes	Yes	Yes	Yes	Yes	Yes	Yes
R ²	0.117	0.116	0.184	0.162	0.081	0.195	0.099
N_obs	714	714	714	714	714	714	714

TABLE 7
Political Connections and Financial Strength

This table presents estimates from logit regressions explaining the likelihood of CPP investment. The dependent variable is an indicator equal to 1 if the financial institution was approved for CPP funds. The sample consists of all FDIC-insured, active financial institutions as of September 30, 2008. We exclude non-US banks and banks that declined to apply to CPP. The financial strength index is the company's average ranking on Capital adequacy, Asset quality, Management quality, Earnings, Liquidity, and Sensitivity to market risk (Camels), normalized to lie between 0 and 1. See Appendix V for all variable definitions. All regressions include regulator fixed effects. The t-statistics (in brackets) are based on standard errors that are heteroskedasticity consistent. Significance levels are indicated: * = 10%, ** = 5%, *** = 1%.

Explanatory Variable (var)	Congress finance committee member	Federal Reserve board member	Lobbying amount	Contribution amount
Model Number	(1)	(2)	(3)	(4)
var	-0.767 [0.622]	-0.410 [0.335]	-1.642 [1.088]	-1.720* [1.929]
var x medium strength index	1.071 [0.738]	0.908 [0.696]	0.166 [0.080]	1.654* [1.832]
var x low strength index	1.931** [2.422]	1.468** [2.148]	2.974* [1.730]	1.661* [1.844]
Financial strength index	-1.625*** [4.288]	-1.783*** [4.920]	-1.770*** [4.911]	-1.692*** [4.668]
Age	-0.009*** [8.775]	-0.009*** [8.951]	-0.009*** [8.945]	-0.009*** [9.044]
Size	0.747*** [21.748]	0.733*** [21.044]	0.754*** [21.805]	0.767*** [21.621]
Regulating agency F.E?	Yes	Yes	Yes	Yes
Pseudo R ²	0.192	0.193	0.192	0.193
N_obs	7,228	7,228	7,228	7,228

TABLE 8**Extensions: The Likelihood of Receiving CPP Funds**

This table presents estimates from logit regressions explaining the likelihood of CPP investment. The dependent variable is an indicator equal to 1 if the financial institution was approved for CPP funds. The sample consists of all FDIC-insured, active financial institutions as of September 30, 2008. We exclude non-US banks and banks that declined to apply to CPP. Panel A considers Congressional committees. Congress financial services committee member is the average of 2 indicators equal to 1 if the company's Congress representatives in 2008 or 2009 were members of the Financial Services Committee. Congress financial institutions sub-committee member and Congress capital markets sub-committee member are defined analogously with respect to the Capital Markets sub-committee and the Financial Institutions sub-committee, respectively. Panel B considers Federal Reserve board members. Federal Reserve board member, main office is an indicator that equals 1 if the company had executives that are also Federal Reserve directors in one of the 12 main offices in 2008 or 2009. Federal Reserve board member, branch is defined analogously with respect to directors in the different branch offices. Federal Reserve board member, number of terms is the total number of terms served by company executives that are Federal Reserve board members in 2008 or 2009. The list of control variables is similar to that of previous tables. See Appendix V for all other variable definitions. All regressions include regulator fixed effects. The t-statistics (in brackets) are based on standard errors that are heteroskedasticity consistent. Significance levels are indicated: * = 10%, ** = 5%, *** = 1%.

Panel A: Congressional committees

Model Number	(1)	(2)	(3)
Congress financial services committee member	0.192 [0.542]		
Congress financial institutions sub-committee member		0.707** [2.511]	
Congress capital markets sub-committee member			0.533*** [3.188]
Control variables?	Yes	Yes	Yes
Regulating agency F.E?	Yes	Yes	Yes
R ²	0.241	0.241	0.241
N_obs	7,228	7,228	7,228

Panel B: Federal Reserve board members

Model Number	(1)	(2)
Federal Reserve board member, main office	0.772** [2.268]	
Federal Reserve board member, branch	0.717** [2.262]	
Federal Reserve board member, number of terms		0.497*** [3.515]
Control variables?	Yes	Yes
Regulating agency F.E?	Yes	Yes
R ²	0.243	0.243
N_obs	7,228	7,228

TABLE 9
Extensions: CPP Amounts

This table presents estimates from OLS regressions where the dependent variable is the amount of capital received by a financial institution from the CPP, scaled by the institution's tier-1 capital. The sample consists of all financial institutions that received capital from CPP. Panel A considers contribution amounts. PAC amounts are amounts contributed through Political Action Committees. Private amounts are amounts contributed by individuals working for the company. Senior is an indicator variable equal to 1 if the house member or senator has longer-than-median tenure. Panel B considers lobbying amounts. Lobbying amount, issues only considers lobbying for the following issues: Finance, Banking, and Bankruptcy. Lobbying amount, agency only considers amounts spent lobbying the Treasury and the banking regulators (FED, OTS, FDIC, and OCC). The list of control variables is similar to that of previous tables. See Appendix V for all other variable definitions. All regressions include regulator fixed effects. The t-statistics (in brackets) are based on standard errors that are heteroskedasticity consistent. Significance levels are indicated: * = 10%, ** = 5%, *** = 1%.

Panel A: Contributions

	Congress	Senate	Congress	Senate
Model Number	(1)	(2)	(3)	(4)
PAC contribution amount	0.244** [2.576]	0.522*** [3.944]		
Private contribution amount	0.410* [1.809]	0.124* [1.692]		
Contribution amount			3.321*** [6.230]	1.767*** [5.523]
Contribution amount x senior			-3.986*** [5.686]	-2.300*** [4.998]
Control variables?	Yes	Yes	Yes	Yes
Regulating agency F.E?	Yes	Yes	Yes	Yes
R ²	0.158	0.164	0.197	0.194
N_obs	714	714	714	714

Panel B: Lobbying Amounts

Model Number	(1)	(2)	(3)
Lobbying amount, total	2.306*** [7.466]		
Lobbying amount, issues		3.948*** [9.059]	
Lobbying amount, agencies			3.880*** [6.872]
Control variables?	Yes	Yes	Yes
Regulating agency F.E?	Yes	Yes	Yes
R ²	0.184	0.213	0.174
N_obs	714	714	714