The $700 Billion Bailout:
A Public-Choice Interpretation

Carlos D. Ramírez[*]
Department of Economics
George Mason University
Fairfax, VA 22030-4444

and

Center for Financial Research
Federal Deposit Insurance Corporation
Washington, DC 20639

Abstract

On September 29, 2008, the House of Representatives voted to reject HR 3997 (known as the original $700 Billion Bailout Bill). On October 3, the House reversed course and voted to approve the Emergency Economic Stabilization Act of 2008 (EESA). This paper applies a political voting model to these two House votes—the rejection of the bill on September 29 and its passage on October 3. Both economic conditions and PAC contributions matter in explaining the two votes, but their effect is attenuated by legislator's power. PAC contributions from the American Bankers Association appear to matter for explaining the legislators who switched. The role of ideology in explaining either the September 29 or October 3 vote is limited.

I. Introduction

In the United States, major pieces of legislation often are enacted during tumultuous periods. In banking and finance, for example, the extensive New Deal reforms were passed during the Great Depression of the 1930s. Unsurprisingly, the severity of the current economic downturn has provided new impetus for fast and drastic lawmaking activity. A clear example is the recently enacted Emergency Economic Stabilization Act (EESA), more commonly known as the $700 Billion "Bailout" Act. Although at this point it is hard to discern the act's full consequences, one can safely argue that this piece of legislation—which attempts to restore confidence in the banking system and reestablish normal levels of lending activity among banks and between banks and the general public—is one of the most far-reaching in recent U.S. history. It allows the Treasury Secretary to take direct equity positions in financial institutions. It provides for the Treasury Secretary to purchase "troubled assets" from financial institutions.[1] And it temporarily increased FDIC deposit insurance from $100,000 to $250,000.[2]

This legislation became law on October 3, 2008. However, the process of enactment was not smooth. Four days earlier, on September 29, the House of Representatives had voted to reject a previous version of the bill (HR 3997), and within

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[1] Troubled assets are assets backed by mortgages, which in recent weeks the media have described as "toxic" assets.

[2] The text of this legislation is available online: for relevant URLs, see http://www.house.gov/apps/list/press/financialsvcs_dem/press092808.shtml.

minutes the stock market saw one of the largest and most precipitous declines in its recent past, with the Dow Jones and the Standard & Poor's 500 index falling almost 9 percent in that one day.

This unusual path to enactment can be exploited for clues that may illuminate one of the oldest issues in political economy, and still a hotly debated one: to what extent do private interests (interest groups) influence public legislation? The "surprise" element of the September 29 House vote allows us to identify which group within the financial sector industry gained relatively more from the eventual passage of this legislation on October 3. After identifying the groups in the financial sector industry that had a stake in the bill, the paper then investigates the extent to which Political Action Committee (PAC) contributions from these groups influenced the House votes. In addition to PAC contributions, it examines the effect of economic conditions at the congressional-district level (unemployment, foreclosures) on these votes, after controlling for key legislator attributes and characteristics.

Although EESA was passed only recently, it has already been the subject of research in the media as well as in academia. On October 5, just two days after its enactment, Campante and Chor (2008) blogged about the two votes, the one on September 29 as well as the one on October 3. They report that the most crucial factor in determining the outcome of the vote was a legislator's ideological position. In addition, they find that the proportion of financial sector employment in a legislator's congressional district enhanced the chances that the legislator would have voted in favor of the bill. They do not find evidence that economic conditions (unemployment rate, prevalence of subprime loans) influenced voting patterns.

Although Campante and Chor's results reveal important patterns, they are not without problems. For example, the authors did not consider the role of financial-sector PAC contributions in the votes—an important omission because the financial sector can easily be identified as a "winner" in this legislation. Furthermore, some of the variables Campante and Chor use to control for economic conditions are measured at the state level, not at the congressional-district level. Hence, the failure to find statistical significance for these particular variables may be due to mismeasurement problems rather than to the possibility that the variables are inherently unimportant determinants.

Mian, Sufi, and Trebbi (2008) investigate factors that explain the two votes as well. They find that PAC contributions from the financial industry predict votes in favor of EESA. In addition, just like Campante and Chor (2008), they find that ideology was instrumental: conservative representatives were less likely to vote in favor of the first bill and less likely to change their minds and vote for the second bill.

This paper adds to the literature in two important respects. First, whereas previous research emphasizes the role of ideology in the vote, this paper highlights the role of a previously unused variable that Knowlegis researchers have recently developed—a legislator's "power" index, a variable that measures the effectiveness of a legislator in advancing an agenda.[3] This is an important variable to consider because, as discussed in more detail below, it alters the mechanism through which PAC contributions influenced the vote: the marginal effect of PAC contributions changes with the power of the legislator. Power also alters the mechanism through which economic conditions influenced the vote.

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[3] This concept is discussed in more detail in Section III.

Second, exploiting the fact that the September 29 vote was a surprise, this paper identifies groups within the financial sector industry that were more likely to gain from the passage of the legislation and then uses PAC contributions from these groups, along with power, to investigate why legislators voted the way they did on September 29 and why 58 of them changed their minds and voted "Yea" on October 3, after having voted "Nay" just four days earlier.

I find that PAC contributions from the financial industry, and particularly from big banks (institutions with over $100 billion in assets), were influential variables. However, their effect is nonlinear: the marginal effect of PAC contributions on the probability of voting in favor of the bill increases with the power of the legislator. I also find that the influence of unemployment and the number of foreclosures in the legislator's congressional district is nonlinear; in particular, I find that the influence of unemployment and foreclosures on the probability of voting in favor weakens with the power of the legislator. In a sense, therefore, to some extent power immunizes legislators from economic conditions in their district.

I use a regression similar to the one used to examine the September 29 and October 3 votes to investigate why a certain number of representatives changed their minds between September 29 and October 3. The results indicate that contributions from the American Bankers Association (ABA) were particularly influential and increased the likelihood that relatively weak, "inexpensive" legislators would switch their vote.

Section II discusses in more detail the market's reaction to the September 29 vote. It also investigates the extent to which different sectors within the financial services

industry were affected by EESA. Section III discusses the empirical methodology as well as the data. Section IV presents and discusses the results, and Section V concludes.

II. The Market's Reaction

The outcome of the vote on the bailout bill on September 29 was officially announced at 2:07 p.m. Legislators, however, are typically given a 15-minute grace period when casting a vote. Thus, sometime around 1:50 p.m. it became known that the bill had failed. Nearly immediately, the market reacted. This is shown in Figure 1, which displays the September 29 minute-by-minute percentage changes in the Standard & Poor's 500 index. As the figure shows, at around 1:50 p.m. the market reacted with a decline of nearly 1 percent.[4] The panic continued throughout the rest of the afternoon. By the end of the day, the market had lost nearly 9 percent, one of the largest one-day percentage drops in history.[5]

Without a doubt, the outcome of the bailout vote came as a surprise to the market. Because the market's reaction was both instantaneous and dramatic, it is a clear indication of which sector was hurt the most by the rejection of the bill and, by implication, which sector stood to gain the most if the bill were enacted. In this section, I analyze the stock market reaction as it affected three key groups: (1) large banks (banks with assets over $100 billion in assets); (2) banks represented by the American Bankers

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[4] A t-test on the 3-minute window (from 1:49 p.m. to 1:52 p.m.) reveals that the sharp decline is statistically significant at the less than 1 percent level.

[5] This event received a substantial amount of media attention. See, for example, http://money.cnn.com/2008/09/29/markets/markets_newyork/index.htm.

Association (ABA)—mostly small and medium-sized financial institutions; and (3) real estate interests (real estate investment trusts, organizations representing home builders, realtors, etc.). There are good reasons for suspecting that the gains that would have accrued from this bill would probably have been disproportionately distributed among these three financial sub-sectors. Thus, the market's reaction can be expected to bear on the three groups disproportionately as well.

The "too-big-to-fail" doctrine implies that large banks would have benefited from the rescue disproportionately more than smaller financial institutions. Moreover, many of these large institutions were explicitly identified as the largest recipients of the $700 billion bailout fund in the form of direct equity investments.[6] Thus, I expect the stock market surprise on September 29 to have adversely affected the stock price of large banks disproportionately more.

For banks in the second group, those represented by the ABA, my expectations about the stock market's reaction are different. The reason for the difference is that a provision the ABA lobbied strongly for—an increase in the FDIC's coverage of insured deposits from $100,000 to $250,000—was not included in the September 29 bill, and therefore ABA banks were not seen as having had as much at stake in the first bill as the big banks. Accordingly, I expect the stock of ABA-banks to have suffered relatively less on September 29. The provision the ABA wanted was, however, an amendment that was

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[6] See

http://www.nytimes.com/imagepages/2008/10/13/business/20081014_BAILOUT1_GRAPHIC.html

included in the October 3 version of the bill (which ultimately became law) It is important to point out, however, that on October 1 the Senate had approved an amended version of the bill that contained the deposit insurance provision. Thus, I expect the stock of ABA-banks to have gained considerably by that date, and not necessarily by October 3, when the second House vote took place because by that date, the provision was no longer news.

The third group represents interests from the real estate sector (National Association of Home Builders, National Association of Realtors, real estate investment trusts). Because part of the objective of the bailout bill was to purchase "toxic" mortgage assets, one could see this group competing for a share of the $700 billion pie. For this group, it might be more beneficial for the government to allocate a larger share of the bailout money for the purchase of these toxic assets (rather than use the money to provide direct liquidity to banks) in order to stabilize real estate prices and perhaps even resume the volume of real estate activity that this market enjoyed before the meltdown (a rather optimistic scenario).

To determine how the stock prices of these three groups reacted to the events of September 29 (the House's failure to pass the bill) and October 1 (the Senate's approval of the amended version of the bill), I computed daily returns for the week of September 26 to October 3 for a random sample of large banks (banking organizations with more than $100 billion in assets), a random group of ABA-represented banks, a random sample of real estate investment trusts (whose stocks are actively traded), and a control sample of

stocks in the Dow Jones or Standard & Poor's 500 indices. The total portfolio contains 66 stocks.[7]

Table 1 presents the regression results of the pseudo-event study. Regression 1 tests the hypothesis that the stock market reaction was abnormal on September 29 and October 3. It also examines whether the reaction for financial stocks was different from the reaction for the market as a whole. Regressions 2, 3, and 4 test the same specification, but broken down by the three relevant financial groups: Big Banks (Regression 2), ABA Banks (Regression 3), and Real Estate interests (Regression 4). The influence of each of these groups is tested separately in order to quantify the group's stock reaction relative to the market and not relative to one another.

In all regressions we see the "September 29" indicator variable being negative and statistically significant. This confirms what Figure 1 displays—that there was a largely negative market surprise. By contrast, the "October 1" indicator variable is generally not statistically significant (except for the last regression, where the significance level is only at the 10 percent). In Regression 1 the interaction term "Sep. 29 * Financials" is negative and statistically significant, while the "Oct. 1 * Financials" is slightly positive and significant. This indicates that financial firms in general suffered disproportionately more than the market on September 29 and benefited slightly more on October 1.

The results in Regressions 2, 3, and 4 indicate that the negative reaction observed on financial firms (in Regression 1) is largely driven by the large banks and not by ABA banks or the real estate sector. The interaction term "Sep. 29 * Big Banks" is negative and relatively large, while the same interaction term is either positive (for the real estate

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[7] Appendix 2 lists the entire sample.

sector) or statistically indistinguishable from zero (for ABA banks). Hence, it is possible to conclude that the market interpreted the September 29 vote as bad news in general, but particularly worse for the largest financial institutions.

As noted above, the interaction term "Oct. 1 * Financials" in Regression 1 is positive and statistically significant. A glance at the same coefficients in the regressions 2, 3, and 4 reveals that the portfolio of ABA banks largely drives this gain. The "Oct. 1 * ABA" coefficient is positive and significant, while the same coefficients are either negative or statistically zero in the other two financial groups. This suggests that the October 1 version of the rescue bill was perceived to be good news for banks represented by the ABA. These results are consistent with expectations: as pointed out above, the ABA saw the inclusion of the amendment that temporarily increased FDIC deposit insurance coverage as a major achievement.

The next section tests in more detail how these three groups influenced the outcomes of the September 29 and October 3 votes, and especially how they influenced the legislators who changed their minds in those four days.

III. Data and Empirical Methodology

The empirical specification used here is motivated by the existing literature on legislative voting.[8] These theories highlight the role of three broad categories as key determinants of congressional voting: (1) legislator characteristics, (2) constituent characteristics and economic conditions, and (3) PAC contributions. Table 2 presents the

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[8] The literature on this topic is voluminous. For a recent survey, see Ansolabehere, de Figueiredo, and Snyder (2003), and Stratmann (2005).

summary statistics for all the variables included in the regression, split by these three categories. Below is a more detailed description of the variables included in the model.[9]

III. A –Legislator Characteristics

Legislator characteristics include tenure, party affiliation, ideology, and power ranking. Previous literature has highlighted the role of these variables in helping to explain how legislators vote. Tenure, for example, is included to control for seniority; in addition, representatives closer to retirement may face a smaller cost from deviating from their constituents' interests and may, instead, have a higher incentive to vote according to their own preferences (Bronars and Lott, 1997; Munger and Dougan, 1989; Munger, Grier, and Roberts, 1991). As for party affiliation, representatives often vote along party lines, so the inclusion of party affiliation controls for the effects of party discipline.

The role of ideology in explaining legislative voting behavior has often been highlighted (see, for example, Poole and Rosenthal, 1997, and Levitt, 1996). Mian, Sufi, and Trebbi (2008) as well as Campante and Chor (2008) find that ideology was one of the most important determinants of the votes on both September 29 and October 3. Hence, this variable is also included here. A commonly used ideology index is Poole and Rosenthal's (1997) DW-Nominate scores. The more negative the score, the more "liberal" the legislator is deemed to be. Analogously, the higher (and the more positive) the score, the more "conservative" the legislator.

In addition to tenure, party affiliation, and ideology, this paper also examines the effect of a newly constructed variable that quantifies legislative power. "Power ranking" is the Knowlegis rating index developed for each legislator, and it is based on several criteria that measure the power and effectiveness of a legislator in advancing an agenda. The index generally falls in the 0 to 100 range, with a higher number indicating more

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[9] Appendix 1 also contains more details, as well as sources.

power.[10] According to the team that developed this index, it is based on four key criteria: (1) position of legislator, which captures the influence of seniority, committee assignments, and leadership positions; (2) indirect influence, which measures how effective a legislator is in pushing an agenda; (3) legislative activity, which tracks the influence of legislators in shaping bills through amendments; and (4) earmarks, which tracks how much funding (pork, really) a legislator brings to his or her district.[11]

A legislator's "Power Ranking" can be considered a measure of his or her ability to advance an agenda. As explained in more detail below, the inclusion of this variable is critical for determining the "supply curve" of legislation; the marginal effect of a dollar

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[10] For the current Congress, the reported range is –2.59 to 97.3. The negative score assigned to one Republican representative could be the result of a recent recalibration in the formula.

[11] The Knowlegis methodology appears to be very thorough. According to the company's Web site: "Our researchers reviewed thousands of media articles, hundreds of bills that passed out of committee and through each chamber, as well as the amendments that attempted to shape the outcome of legislation. We collected data on the leadership, committee, and caucus positions of each Member of Congress in their chamber, researched relevant campaign contributions, and considered any characteristic or action that could contribute to their "Sizzle-Fizzle" factor. We also integrated earmark data provided by Taxpayers for Common Sense. In sum, there are thousands of data points and variables that were considered in the 2008 Knowlegis Power Rankings." For a more detailed description see

http://www.beavoter.org/congressorg/power_rankings/backgrounder.tt.

of PAC contributions, for example, is likely to be influenced by a legislator's ability (power) or seniority (Munger and Denzau, 1985; and Kroszner and Stratmann, 1998).

III. B –Constituent Interest and Economic Conditions

When explaining congressional voting behavior, the existing literature also typically highlights the role of constituent interests.[12] In general, these variables include district-level characteristics such as the distribution of the population by educational level (i.e., percentage of population with some minimum level of educational achievement), by ethnicity (i.e., the proportion of African Americans, Hispanics, etc.), and even by income level (i.e., proportion of the population whose income is above some threshold level). For the particular votes with which we are concerned, however, the constituent interest variables that are likely to be more relevant are those that measure current economic conditions more directly. After all, it was widely accepted at the time the votes took place that the cause of the current financial and economic downturn originated in the housing market. To capture more directly the influence of economic conditions, I include the 2007 level of unemployment and the number of foreclosures between January and July 2008 in each congressional district. Table 2 includes basic statistics for these two variables.

III. C –PAC Contributions

The role of PAC contributions in shaping legislation has also been extensively studied, but the question of whether these contributions matter "a little" or "a lot" is still not fully resolved (Ansolabehere, de Figueiredo, and Snyder, 2003). Nonetheless, because we can easily identify the "winners" and "losers" of the bill passed on October 3 (see Section II above), and the winners (within the financial services industry) were large

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[12] Early papers include Kau and Rubin (1982) and Peltzmann (1984).

banks, ABA-banks, and possibility the real estate sector, while the losers were the taxpayers, it seems pertinent to investigate the extent to which PAC contributions from the financial services industry mattered in the outcome of the votes on both September 29 and October 3.

The inclusion of PAC contributions in voting regressions allows one to examine the extent to which contributions affect votes. This perspective assumes an explicit directional effect from contributions to votes. It implies that contributions can be seen as a strategic investment that helps to shape legislation favorable to the interests of the donor. However, an important issue that challenges the interpretation of PAC contributions in voting regression models is the likely simultaneity between PAC contributions and legislative votes. That is, it is possible that votes affect contributions. This reverse effect (votes affecting contributions) implies that donors are simply rewarding legislators for voting in the manner donors would have preferred (Bronars and Lott, 1997; Stratmann, 2002).

In this paper, this simultaneity challenge is mitigated by two key factors. First, the PAC contribution data are for the period January to September 2008. Since the first vote took place on September 29, it is hard to argue that the contributions were made after the vote. Instead, it is more likely that contributions were made before the first vote took place, and certainly that they were made before the second one. Second, as already noted, the September 29 vote appears to have been a surprise. The stock prices of the largest financial institutions plunged dramatically on the afternoon of the vote. Thus, it is hard to argue that contributions were made as a reward for the vote.

III. D – Dependent Variable

I analyze legislators' voting patterns on three key votes: the vote on H.R. 3997 (the September 29 vote), the October 3 vote by the whole House, and the October 3 vote by those who changed their minds between September 29 and October 3—the so-called

switchers. Basic statistics on these votes are presented in the summary statistics in Table 2. Table 3 tabulates the September 29 and October 3 votes against each other.

IV. E – Regression Specification

The basic regression is the simple linear specification model:

$$V_i = \alpha_0 + \alpha_1\left(\overline{LC_i}\right) + \alpha_2\left(\overline{EC_i}\right) + \alpha_3\left(\overline{PAC_i}\right) + \varepsilon_i$$

where V_i is the vote that legislator from Congressional District i casts, $\overline{LC}$ represents the vector of legislator characteristics, $\overline{EC}$ represents the vector of economic conditions, and $\overline{PAC}$ represents PAC contributions. V_i is dichotomous in nature: it equals 1 if the representative voted in favor of the bill (or changed his or her mind), 0 otherwise. Hence, all estimations are performed using probit regressions.[13]

Although the basic specification is very popular, it may be too restrictive in the sense that it forces all covariates to influence the outcome of the vote linearly. Conceivably, however, the probability of voting in favor of the bill changes with legislator's attributes. For example, the effect of PAC contributions on the probability of voting in favor of the bill may be sensitive to how powerful the legislator is or how ideologically conservative. To capture possibly nonlinear effects, I introduce the following interaction terms:

$$V_i = \beta_0 + \beta_1\left(\overline{LC_i}\right) + \beta_2\left(\overline{EC_i}\right) + \beta_3\left(\overline{EC_i} \bullet \overline{LC_i}\right) + \beta_4\left(\overline{PAC_i}\right) + \beta_5\left(\overline{PAC_i} \bullet \overline{LC_i}\right) + \varepsilon_i$$

IV. Empirical Findings

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[13] The tables report the marginal effects from probit regressions. Almost identical results were obtained when logistic regressions were performed instead.

IV. A –The September 29 Vote

Table 4 presents the votes on H.R. 3997 (the September 29 vote). The first two regressions display the results of the basic linear specification (Regression 1) and the specification that includes both the "power" variable and the variables that control for economic conditions in a linear fashion (Regression 2). According to regressions 1 and 2, the most important variables in explaining the vote are legislator attributes. In Regression 1, for example, "Tenure" is positive and statistically significant. This suggests that more-senior legislators were more likely to vote in favor of the bill. The "Party" and "DW Nominate" coefficients do not appear to be important in explaining the vote. However, their lack of statistical significance is partly due to the fact that party and ideology are correlated.[14] In contrast to the results reported in Mian, Sufi, and Trebbi (2008), PAC contributions from the financial industry do not appear to be statistically important in the linear specification model.

In Regression 2, which includes "power" as well as the variables that control for economic conditions (unemployment and foreclosures), the only one that enhances the statistical fit of the regression is power, with a positive and statistically significant coefficient. This suggests that power is an important variable. According to Regression 2, controlling for everything else, powerful legislators were more likely to vote in favor of the bill. The other covariates are statistically insignificant.

Regressions 3 and 4 examine the interaction effects, and specifically the effect of power on economic conditions and on PAC contributions (Regression 3—Nonlinear influence of power) and the effect of ideology on the same set of variables (Regression 4—Nonlinear influence of ideology). The results in Regression 3 indicate that what matters is the interaction of power with economic conditions and with PAC contributions.

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[14] Excluding either one from Regression 1 leaves the remaining one statistically significant. For the sake of brevity, such auxiliary regressions are not discussed here.

To see this more precisely, consider first the effect of a change in PAC contributions on the likelihood of voting in favor of the bill, $P(Y)$. According to Regression 3, the effect is

$$\frac{\partial P(Y)}{\partial (PAC)} = -0.071 + 0.005(Power)$$

This expression indicates that the marginal effect of PAC contributions increases with the power of the legislator. According to the coefficients, for PAC to have a positive effect on the probability of voting in favor, the legislator would have to have a power index of at least 14.2 (= 0.071/0.005). Given that the median legislator power index is 16.2, this result suggests that PAC contributions exerted a positive influence on the vote mostly at the top 50-percentile range of power. This result is very intuitive, and it is consistent with the "investment" view of PAC contributions. For PAC contributions to have a positive effect, the money must go to powerful legislators—those who can most effectively push an agenda, where the marginal product of PAC money is highest.

The results in Regression 3 also suggest that power affects how legislators react to economic conditions. In particular, the effect of unemployment on the probability of voting in favor of the bill weakens with the power of the legislator. The estimated effect is

$$\frac{\partial P(Y)}{\partial (UE)} = 0.181 - 0.009(Power)$$

According to this, when a legislator's power is low, the probability of voting in favor of the bill is very sensitive to the unemployment level. However, as the legislator becomes more powerful, he or she also becomes more insensitive to economic

conditions. This result is also observed for foreclosures. Evidently, then, power appears to decouple legislator's sensitivity from constituent interest.

Regression 4 presents the results when ideology is combined with PAC contributions, unemployment, and foreclosures. The results here are markedly different. The only interaction effect that is statistically significant is that between ideology and unemployment. According to the results, the effect of unemployment on the probability of voting in favor is higher among the more conservative politicians. This makes intuitive sense given that, at the time these votes took place, Democrats controlled Congress: conservative politicians, being in the minority, evidently felt more vulnerable to constituent needs and conditions.

Although the interaction between ideology with unemployment is significant, the other interaction terms are not; neither the effect of foreclosures nor the effect of PAC contributions on the probability of voting in favor of the bill appears to be sensitive to ideology. A comparison of the regression fit suggests that Regression 3 does better in explaining the vote than Regression 4 does. The pseudo-R2, the percentage of cases classified correctly, and the ROC curve are all higher for Regression 3 than for Regression 4. Taken together, all of this suggests that for this vote, power is more influential than ideology.

IV.B— The October 3 Vote

Table 5 presents the results for the October 3 vote. To facilitate the comparison of results, the functional forms used for the September 29 vote (Table 4) are also used for this vote. Thus, Table 5 reports four probit regressions, the first two examining linear

effects and the last two examining the interaction effects of power (Regression 3) and ideology (Regression 4). Although the overall results are similar to those reported in Table 4, there are important differences. In Regression 1, for example, tenure, which was the only statistically significant covariate in Regression 1 of Table 4, continues to be positive, but the magnitude of the effect (and therefore its statistical significance) declines considerably. More notably, ideology enters negatively and is statistically significant. Indeed, the effect of ideology survives the inclusion of power (which continues to be significant) as well as the inclusion of the covariates that control for economic conditions (Regression 2). Hence, it is likely that ideological considerations were relevant for the October 3 vote: conservative legislators were much less likely to vote in favor of the October 3 bill. This result has been reported in Campante and Chor (2008) and Mian, Sufi, and Trebbi (2008). Nonetheless, the role of power continues to be important in this vote.

To examine the relative importance of power and ideology, Regressions 3 and 4 present the interaction effects of these two variables. Power appears to have a (nonlinear) effect much as it did on the September 29 vote. For example, the effect of unemployment on the likelihood of voting in favor depends on the power of the legislator. As power increases, the legislator becomes more immune to the effect of unemployment conditions.

However, the results for foreclosures are somewhat different in the two votes. In the October 3 vote, the interaction effect of foreclosures is positive and statistically significant at the 6 percent level. Thus, for this vote, power enhances the effect of foreclosures on the vote. It is tempting to speculate that the combination of events—the outcome of the September 29 vote received so much media attention, while so much

detrimental housing news was also announced—raised the visibility of the more powerful legislators in the public forum, thereby enhancing their sensitivity to levels of foreclosure.

Just as Table 4 reported for the September 29 vote, the influence of PAC contributions on the October 3 vote appears to be sensitive to the power of the legislator, with power enhancing the probability of voting in favor of the bill. Given the estimated coefficients, for PAC contributions to have a positive effect on the outcome of the vote, the legislator must have a power index of at least 11.6 (= 0.035/0.003). This power index level corresponds to the 28th percentile in terms of ranking, suggesting that approximately 72 percent of legislators were positively influenced by PAC contributions.

Following the same pattern as in Table 4, Regression 4 in Table 5 reports the interaction effects with ideology. Although regressions 1 and 2 indicate that ideology alone is a statistically important variable explaining the vote, Regression 4 indicates that the importance of ideology is sensitive to the inclusion of other covariates. Instead, the regression suggests that the way ideology influences the vote is by increasing the sensitivity of unemployment.

It is also worth noting that for this regression, the linear effect of foreclosures is positive and statistically significant. Thus, regardless of ideological considerations, foreclosures appear to matter. This result is consistent with the observation made above that the explosion of adverse news about housing and foreclosures may have increased the sensitivity of legislators, especially the more powerful ones, to this variable. Lastly, it is worth noting that in this regression, PAC contributions have an effect on the vote similar to the effect they had on the earlier vote.

IV.C –The Influence of Specific PACs on the September 29 Vote

Although one could argue that the financial services industry as a whole stood to gain from the implementation of this legislation, it is nonetheless possible that these gains will accrue differently to different subgroups within the industry. For example, one of the key differences between the September 29 version of the bill and the version that finally passed on October 3 is the later bill's inclusion of an amendment temporarily increasing the coverage of insured deposits by the FDIC from $100,000 to 250,000. This amendment was strongly supported by the American Bankers Association, whose members (mostly small and medium banks) feared that without it, the likelihood of experiencing bank runs in the currently distressed financial environment would have been unacceptably high. It is also worth noting that (as pointed out in the previous section) the negative stock market reaction to the September 29 vote disproportionately affected the largest financial institutions relative to small (ABA-represented) banks or even real estate investment trusts.

For these reasons, it seems prudent to investigate how different groups within the financial services industry may have influenced the outcome of the votes. To do so, I obtained PAC contribution data from three groups within the industry: large banks, the American Bankers Association, and the real estate sector.[15]

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[15] PAC contributions from large banks include contributions from Citibank, J. P. Morgan Chase, Goldman Sachs, Morgan Stanley, Merrill Lynch, Credit Suisse, and Bank of America. According to the Center for Responsive Politics, these represent the largest banking organizations among the top 100 PAC contributors overall. This set also includes

To test for the influence of these groups on the September 29 and October 3 vote, I use the same functional form that I used in Regression 3 of Tables 4 and 5. That is, I estimate the nonlinear functional form with the independent variables in combination with power. The reason for doing this is that, as pointed out above, PAC contributions from financial groups did not appear to influence the vote in a straightforward, linear fashion. Instead, the influence is nonlinear, working its way to the vote through power (Regression 3, Tables 4 and 5) rather than through ideology (Regression 4, Tables 4 and 5).

The results are presented in Table 6. For the September 29 vote regression, power, unemployment, and their interaction term are statistically significant at the 1 percent level. In particular, the interaction effect is negative, confirming the result discussed above that legislators appear to become more immune to economic conditions as their power increases. The interaction of power and foreclosures is also negative and statistically significant at the 5 percent level. Thus, although power appears to weaken the relationship of foreclosures to the probability of voting in favor, the results are somewhat weaker than those for unemployment.

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the largest recipients of the bailout funds. For more on this, see

http://www.nytimes.com/imagepages/2008/10/13/business/20081014_BAILOUT1_GRAPHIC.html. PAC contributions from the real estate sector include contributions from the National Association of Realtors, National Home Builders Association, and Freddie Mac. These three groups, too, are listed among the top 100 PAC contributors overall, according to the Center for Responsive Politics.

This regression also indicates that PAC contributions from the largest banks appeared to have significantly influenced both votes, but just as before, in a nonlinear fashion. According to the results, power makes a legislator's likelihood of voting in favor of the bill more sensitive to contributions (i.e. there is an interaction effect between power and the size of the specific PAC contribution). PAC contributions from the American Bankers Association or from real estate groups did not appear to be as instrumental as contributions from the largest banks in explaining why legislators voted in favor of the bill on September 29.

Similar, but not identical, results were obtained for the October 3 vote. The only differences are that power, in its linear term, does not appear to exert a statistically significant effect. Power affected this vote via its indirect influence on unemployment, on contributions from large financial institutions, and to some extent on contributions from real estate PACs.

IV. D—Explanation of Why Representatives Switched

As Table 3 indicates, between the September 29 and October 3 votes, 59 legislators changed their minds—58 of them switching from originally voting No to then voting Yes, and 1 from a Yes to a No. Why did they change their minds? Given the stock market reaction on the afternoon of September 29, one may be tempted to argue that the precipitous decline in stock prices shocked legislators and jolted some "nay" voters into voting in favor of the bill. But this begs the question of why it jolted some and not others. Thus, we still need to investigate whether key legislator attributes (power or ideology) or contributions from relevant PACs were instrumental as explanations for the switch.

To investigate this issue, I estimate probit regressions on the "switchers" (those who changed their minds between September 29 and October 3). Given the lopsided nature of the switch, I concentrate on investigating only the No-to-Yes switch. The independent variables are the same as before, but unemployment or foreclosures are excluded in order to isolate the effects of legislator attributes and PAC contributions.[16] Legislator attributes could be relevant to the extent that they reveal particular characteristics that make legislators more or less likely to switch their votes. For example, as Mian, Sufi, and Trebbi (2008) argue, conservative legislators may be more concerned about maintaining their reputations among their constituents and thus may be less inclined to switch their votes. Similar arguments could be made for the reputational consequences of power, another attribute that has shown to be at least as important as (if not more important than) ideology.

The reported PAC contribution measures did not change between September 29 and October 3, but a tremendous amount of lobbying activity occurred between those two dates. It is plausible that the volume of lobbying activity is proportional to PAC contributions. If Representative X received $10,000 from the ABA, while Representative Y received nothing, it is plausible to argue that the ABA, in its efforts to influence legislative outcomes, will target Representative X more frequently than Representative Y in subsequent lobbying activity. Thus, the level of PAC contributions could be used as a

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[16] In most specifications unemployment and foreclosures did not appear to explain the behavior of switchers in any case. This is not surprising. After all, these measures of economic conditions did not change between September 29 and October 3.

proxy for the connections between legislators and contributors, and hence as a proxy for the effects of lobbying.

Table 7 presents the regression results. Regression 1 indicates that, from a statistical standpoint, ideology and power are the more relevant characteristics. According to this regression, both ideologically conservative legislators and powerful legislators were less likely to change their minds. Mian, Sufi, and Trebbi (2008) as well as Campante and Chor (2008) note that ideology is an important determinant of the switchers. The results in Regression 1 indicate that, in addition to ideology, power seems to matter as well. In the statistical sense, none of the other covariates appears to matter in the linear specification.

To ascertain the relative importance of power and ideology, I test separately the role of these two variables in combination with PAC contributions. Regressions 2 and 3 report the regression estimates. According to Regression 2, power matters, but as discussed above, the effect works through PAC contributions. The estimated effect is

$$\frac{\partial \mathrm{P}(switch)}{\partial (PAC)} = 0.028 - 0.001(power)$$

This suggests that the effect of PAC contributions on the probability of switching declines with power. In other words, the more power a legislator has, the less he or she is likely to be induced by PAC contributions to switch. Viewed from the "investment" perspective of PAC contributions, this result intuitively makes sense. To the extent that the level of contributions is a signal for lobbying, it appears to be the case that lobbyists, in their effort to try to convince legislators to switch, resorted to contacting the "cheapest," least powerful ones first, leaving the more expensive, powerful ones for last.

The point estimates suggest that legislators with a power index of less than 28 (which is about 80 percent of them) were positively influenced by PAC contributions.

Regression 3 suggests that ideology did not affect the sensitivity of the likelihood of switching with respect to PAC contributions. In other words, the likelihood that contributions would induce switching was not a function of ideology. Although ideology enters negatively and significantly as a linear covariate, its interaction term with PAC contributions is not statistically different from zero. Evidently, then, a legislator's power has a greater effect on the passage of legislation than the legislator's ideology.

To identify which PAC group had the largest effect on the probability of switching, I redo Regression 2 of Table 7 (which measures the nonlinear effects of power) for the three different PAC groups: large banks, the ABA, and real estate interests. Table 8 presents the results. Of the three PAC groups, the role of one—the ABA—in influencing legislators to switch stands out. Thus, apparently the ABA was instrumental in getting enough legislators to switch. This result is very consistent with expectations. As pointed out above, the American Bankers Association lobbied very strongly to include as an amendment a provision that would increase deposit insurance coverage from $100,000 to $250,000. This result is also consistent with the fact that on October 1, when the Senate version of the bill (a version that contained the amendment) was passed, the stock price of ABA-represented banks reacted positively, whereas the stock price for the other two groups (large banks, real estate groups) either did not increase or declined.

V. Concluding Remarks

This paper addresses three important questions regarding the recently enacted Emergency Economic Stabilization Act of 2008: (1) To what extent did the financial services industry benefit from this legislation? (2) Were there sectors within this industry that benefited relatively more? (3) Why did the House fail to pass the bailout bill on September 29, only to reverse course and pass it on October 3rd?

The answer to the first question is, to put it bluntly, a lot. The market reaction to the vote on September 29 indicates that the outcome of the vote was an unpleasant surprise: with the market as a whole suffering a drastic decline that day, the decline in the financial services industry's stocks was twice as large as the decline for the whole market. The negative effects of the failure to pass on September 29 can be used as a gauge of the value of this bill when it finally passed on October 3.

To address the second question, I investigated the extent to which stock returns from three groups within the financial services industry (big banks, ABA banks, and the real estate sector) reacted to the September 29 vote. The results show that the largest financials institutions also had the largest stake in the outcome of this vote. The stock market decline in the big-bank portfolio was particularly severe on that day—a drop of nearly 30 percent. Banks represented by the ABA (mostly small and medium sized institutions) did not suffer the same fate as the big banks did on September 29. While their stock also declined, their decline was comparable to the fall off in the market that day. Instead, I find that ABA-represented banks appear to have benefited from the modified version of the bill, which was approved by the Senate on October 1: the stock market reaction for the ABA portfolio was positive that day. This last result is consistent

with expectations, for the ABA lobbied strongly for the inclusion of the deposit insurance increase amendment.

The analysis done here provides an answer to the third question as well. The bill did not pass on September 29 because, despite significant pressure from the financial sector, the real side of the economy had not suffered commensurately with the financial side. That is, neither unemployment nor foreclosures were "high enough" in a sufficient number of congressional districts. The regressions show that legislators who switched their vote between September 29 and October 3 likely caved in to the lobbying efforts of the American Bankers Association. Hence, in all probability the October 3 vote would have failed again had it not been for the pressure exerted by the ABA.

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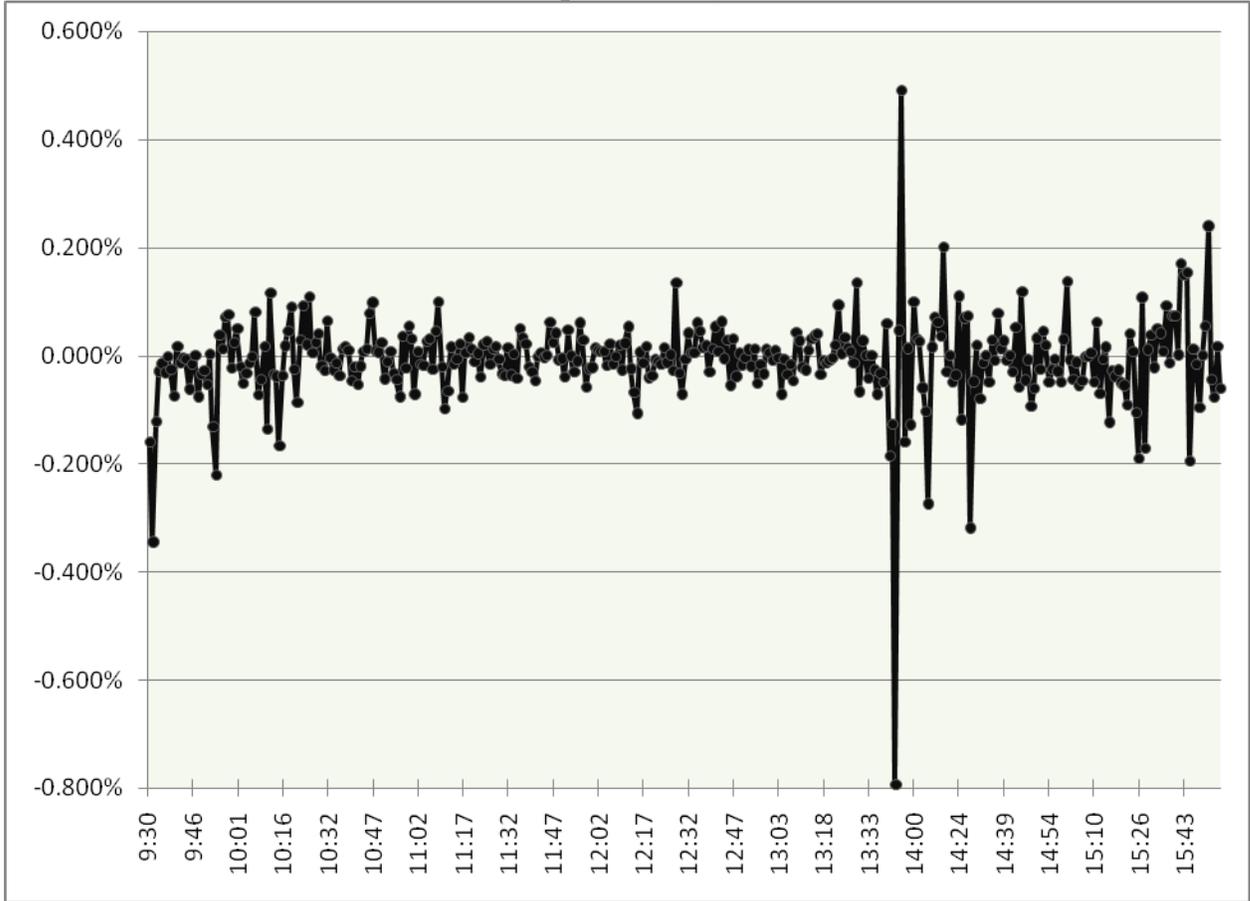
Figure 1
S&P 500 on September 29, 2008

Table 1
Stock Market Returns: Pseudo-Event Study

	Regression 1			Regression 2			Regression 3			Regression 4		
	Coef	Std Err	P-value	Coef	Std Err	P-value	Coef	Std Err	P-value	Coef	Std Err	P-value
September 29	-0.059***	0.005	0.000	-0.084***	0.010	0.000	-0.130***	0.032	0.000	-0.135***	0.030	0.000
October 1	-0.006	0.004	0.140	0.014*	0.008	0.082	0.000	0.009	0.991	0.015	0.010	0.107
Sep 29 * Financials	-0.131***	0.050	0.009									
Oct 1 * Financials	0.035**	0.016	0.025									
Sep 29 * Big Banks				-0.307*	0.166	0.065						
Oct 1 * Big Banks				-0.014	0.038	0.714						
Sep 29 * ABA							0.017	0.042	0.677			
Oct 1 * ABA							0.066***	0.023	0.005			
Sep 29 * REITs										0.078**	0.032	0.016
Oct 1 * REITs										-0.033**	0.016	0.039
Constant	0.006	0.005	0.254	0.006	0.005	0.243	0.006	0.005	0.255	0.006	0.005	0.256
R² within	0.227			0.289			0.181			0.183		
Num Observations	396			396			396			396		

Notes: Dependent variable is the difference of the log of the daily stock price, adjusted for dividends and splits for the week of September 26 to October 3, 2008. The independent variables are as follows: "September 29" and "October 1" are indicator variables. The rest of the variables are interaction terms for different groups of stocks: financial stocks, real estate investment trust (REIT) stocks, American Bankers Association (ABA) stocks, and "big banks" stocks (banks that are over $100 billion in assets). All regressions include fixed effects. "Coef" is the coefficient estimate. "Std Err" means (robust) standard errors. "P-value" is the significance level.

Table 2
Summary Statistics by Category

Category	Variable	No. Obs.	Median	Mean	Std. Dev.	Min	Max
Legislator Attributes	Vote on HR 3997	425	0	0.476	0.499	0	1
	Switch to "Yea" after "Nay"	426	0	0.133	0.340	0	1
	Age	426	58	57.48	9.68	32	85
	Tenure	426	12	12.39	8.654	1	54
	Democrat	426	1	0.540	0.498	0	1
	DW Nominate	426	-0.196	0.026	0.509	-0.922	1.364
	Power Index	425	16.2	19.41	12.698	-2.59	97.3
PAC Contributions	Finance PAC, Total	426	44,000	86,091	107,393	0	797,185
	Big Bank PAC	426	2,250	8,774	18,003	0	167,650
	American Bankers Assoc.	426	3,000	3,762	3,774	0	12,500
	Real Estate PAC	426	8,500	8,424	5,247	0	31,249
Constituent Economic Conditions	Unemployment rate 2007	426	4.693	4.851	1.202	2.35	12.1
	No. Foreclosures, Jan to Jul 2008	426	797	1,322	1,444	59	7,167

Note: For sources and definitions, see Appendix 1.

Table 3
September 29 Votes Tabulated against October 3 Votes

		October 3 Vote		
		Nay	Yea	Total
September 29 Vote	Nay	170	58	228
	Yea	1	204	205
	Total	171	262	433

Table 4
The September 29 Vote

	Variable	Reg. 1: Basic Specification			Reg. 2: Power and Econ. Conditions			Reg. 3: Nonlinear Influence of Power			Reg. 4: Nonlinear Influence of Ideology		
		Coefficient	Std. Error	P-value	Coefficient	Std. Error	P-value	Coefficient	Std. Error	P-value	Coefficient	Std. Error	P-value
Legislator Attributes	Tenure	0.120***	0.030	0.000	0.014	0.039	0.717	0.040	0.040	0.329	0.114***	0.031	0.000
	Party	0.127	0.155	0.415	-0.045	0.162	0.781	0.089	0.071	0.215	0.077	0.158	0.626
	DW Nominate	-0.170	0.157	0.280	-0.153	0.155	0.323				-0.784	0.561	0.162
	Power				0.016***	0.004	0.000	0.046*	0.027	0.088			
Economic Conditions	UE 2007				0.009	0.023	0.699	0.181***	0.045	0.000	0.000	0.022	0.988
	Power*UE 2007							-0.009***	0.002	0.000			
	Foreclosures				-0.007	0.028	0.810	0.088	0.059	0.138	-0.006	0.028	0.822
	Power*Foreclosures							-0.006**	0.003	0.036			
	DWNom*UE 2007										0.088**	0.044	0.046
	DWNom*Foreclosures										0.073	0.055	0.185
PAC	Finance PAC	0.029	0.018	0.110	0.000	0.018	0.992	-0.071***	0.026	0.006	0.034*	0.020	0.096
	Power*Finance PAC							0.005***	0.002	0.002			
	DWNom*Finance PAC										-0.035	0.035	0.326
Regression Statistics	Pseudo-R-squared	0.089			0.122			0.172			0.105		
	Percent Correct	62.59			65.80			65.80			64.24		
	ROC Curve	0.703			0.732			0.756			0.714		
	Number of Obs.	425			424			424			425		

Notes: Dependent Variable is the vote on HR 3997. The independent variables are defined as follows: "Tenure" is defined as the log of (2009-first year of congressperson tenure). "Party" equals 1 if congressperson is Democrat, 0 otherwise. DW Nominate is the DW Poole and Rosenthal (1997) ideology score. Power is the congressperson's power ranking. Economic Condition variables: "UE 2007" is the 2007 unemployment rate level at the congressional-district level. "Foreclosures" is the number of foreclosures in the congressional district from January to July 2008. "Finance PAC" represents total contributions from the financial services industry. The reported standard errors are the robust (White-1980 corrected) standard errors. The Regression statistics are as follows: "Pseudo R-sq" is the McFadden's Pseudo R-squared; "Percent correct" is the count R-squared, or the proportion of correctly classified observations; "ROC Curve" is the Receiver Operating Characteristic curve; "Number of. Obs." is the number of observations.

Table 5
The October 3 Vote

	Variable	Reg. 1: Basic Specification			Reg. 2: Power and Econ. Conditions			Reg. 3: Nonlinear Influence of Power			Reg. 4: Nonlinear Influence of Ideology		
		Coefficient	Std. Error	P-value	Coefficient	Std. Error	P-value	Coefficient	Std. Error	P-value	Coefficient	Std. Error	P-value
Legislator Attributes	Tenure	0.056*	0.029	0.056	-0.018	0.037	0.628	0.010	0.038	0.790	0.060**	0.030	0.047
	Party	-0.035	0.155	0.820	-0.167	0.155	0.293	0.122*	0.066	0.067	-0.017	0.159	0.915
	DW Nominate	-0.331**	0.158	0.037	-0.315**	0.156	0.045				-0.372	0.523	0.477
	Power				0.013***	0.004	0.001	-0.015	0.025	0.559			
Economic Conditions	UE 2007				-0.003	0.022	0.877	0.133***	0.043	0.002	-0.017	0.022	0.425
	Power*UE 2007							-0.007***	0.002	0.001			
	Foreclosures				0.007	0.026	0.795	-0.077	0.049	0.117	0.104**	0.043	0.017
	Power*Foreclosures							0.004*	0.002	0.059			
	DWNom*UE 2007										0.028*	0.015	0.068
	DWNom*Foreclosures										-0.019	0.028	0.493
PAC	Finance PAC	0.024*	0.015	0.099	0.008	0.016	0.600	-0.035	0.023	0.128	0.028*	0.015	0.068
	Power*Finance PAC							0.003**	0.001	0.028			
	DWNom*Finance PAC										-0.019	0.028	0.493
Regression Statistics	Pseudo-R-squared	0.082			0.106			0.127			0.095		
	Percent Correct	67.84			69.88			68.24			69.25		
	ROC Curve	0.693			0.722			0.727			0.709		
	Number of Obs.	426			425			425			426		

Notes: Dependent Variable is roll-call vote number 681, the October 3 vote. The independent variables are defined as follows: "Tenure" is defined as the log of (2009-first year of congressperson tenure). "Party" equals 1 if congressperson is Democrat, 0 otherwise. DW Nominate is the DW Poole and Rosenthal (1997) ideology score. Power is the congressperson's power ranking. Economic Condition variables: "UE 2007" is the 2007 unemployment rate level at the congressional-district level. "Foreclosures" is the number of foreclosures in the congressional district from January to July 2008. "Finance PAC" represents total contributions from the financial services industry. The reported standard errors are the robust (White-1980 corrected) standard errors. The Regression statistics are as follows: "Pseudo R-sq" is the McFadden's Pseudo R-squared; "Percent correct" is the count R-squared, or the proportion of correctly classified observations; "ROC Curve" is the Receiver Operating Characteristic curve; "Number of. Obs." is the number of observations.

Table 6
The Influence of Specific PACs on the September 29 and October 3 Votes

	Variable	September 29 Vote			October 3 Vote		
		Coefficient	Std. Error	P-value	Coefficient	Std. Error	P-value
Legislator Attributes	Tenure	0.000	0.041	0.997	-0.009	0.038	0.816
	Party	0.056	0.073	0.445	0.102	0.069	0.140
	Power	0.087***	0.023	0.000	0.004	0.023	0.866
Economic Conditions	UE 2007	0.182***	0.044	0.000	0.139***	0.046	0.003
	Power*UE 2007	-0.010***	0.002	0.000	-0.008***	0.002	0.001
	Foreclosures	0.086	0.062	0.164	-0.077	0.055	0.168
	Power*Foreclosures	-0.006**	0.003	0.044	0.004	0.003	0.136
PAC	Big Bank PAC	-0.023*	0.014	0.100	-0.018	0.013	0.165
	Power*Big Bank PAC	0.002**	0.001	0.017	0.001**	0.000	0.035
	ABA PAC	-0.021	0.015	0.139	-0.002	0.013	0.910
	Power*ABA PAC	0.000	0.001	0.526	-0.000	0.001	0.474
	Real Estate PAC	-0.016	0.025	0.527	-0.032	0.022	0.149
	Power*Real Estate PAC	0.001	0.001	0.233	0.002**	0.001	0.042
Regression Statistics	Pseudo-R-squared		0.173			0.139	
	Percent Correct		65.79			67.78	
	ROC Curve		0.758			0.738	
	Number of Obs.		418			419	

Notes: Dependent Variable is either the September 29 vote or the October 3 Vote. The independent variables are defined as follows: "Tenure" is defined as the log of (2009-first year of congressperson tenure). "Party" equals 1 if congressperson is Democrat, 0 otherwise. DW Nominate is the DW Poole and Rosenthal (1997) ideology score. Power is the congressperson's power ranking. Economic Condition variables: "UE 2007" is the 2007 unemployment rate level at the congressional-district level. "Foreclosures" is the number of foreclosures in the congressional district from January to July 2008. "Big Bank PAC" represents contributions from the largest financial institutions (with assets over $100 billion). "ABA PAC" represents contributions from the American Bankers Association. "Real Estate PAC" represents contributions from real estate groups. See text for a detailed list of PACs included. The reported standard errors are the robust (White-1980 corrected) standard errors. The Regression statistics are as follows: "Pseudo R-sq" is the McFadden's Pseudo R-squared; "Percent correct" is the count R-squared, or the proportion of correctly classified observations; "ROC Curve" is the Receiver Operating Characteristic curve; "Number of. Obs." is the number of observations.

Table 7
Explaining Switchers

	Variable	Reg. 1: Basic Specification			Reg. 2: Nonlinear Influence of Power			Reg. 3: Nonlinear Influence of Iideology		
		Coefficient	Std. Error	P-value	Coefficient	Std. Error	P-value	Coefficient	Std. Error	P-value
Legislator Attributes	Tenure	-0.020	0.023	0.403	-0.017	0.023	0.457	-0.050**	0.020	0.013
	Party	-0.149	0.112	0.172	0.050	0.039	0.208	-0.191*	0.114	0.083
	DW Nominate	-0.209**	0.103	0.046				-0.363**	0.169	0.033
	Power	-0.004**	0.002	0.029	0.012	0.008	0.130			
PAC	Total Finance PAC	0.012	0.008	0.108	0.028**	0.012	0.021	-0.001	0.007	0.896
	Power*Finance PAC				-0.001**	0.000	0.044			
	DWNom*Finance PAC							0.016	0.014	0.269
Regression Statistics	Pseudo-R-squared	0.035			0.027			0.031		
	Percent Correct	86.82			86.82			86.62		
	ROC Curve	0.624			0.600			0.615		
	Number of Obs.	425			425			426		

Notes: Dependent variable is "switch," which equals 1 if congressperson switched his or her vote from Nay (Sep 29) to Yea (Oct 3), 0 otherwise. The independent variables are defined as follows: "Tenure" is defined as the log of (2009-first year of congressperson tenure). "Party" equals 1 if congressperson is Democrat, 0 otherwise. DW Nominate is the DW Poole and Rosenthal (1997) ideology score. Power is the congressperson's power ranking. Economic Condition variables: "UE 2007" is the 2007 unemployment rate level at the congressional-district level. "Foreclosures" is the number of foreclosures in the congressional district as of July 2008. The reported standard errors are the robust (White-1980 corrected) standard errors. The Regression statistics are as follows: "Pseudo R-sq" is the McFadden's Pseudo R-squared; "Percent correct" is the count R-squared, or the proportion of correctly classified observations; "ROC Curve" is the Receiver Operating Characteristic curve; "Number of. Obs." is the number of observations.

Table 8
The Influence of Specific PACs on Switchers

| | Variable | October 3 Vote | | |
		Coefficient	Std. Error	P-value
Legislator Attributes	Tenure	-0.007	0.024	0.777
	Party	0.060	0.041	0.157
	Power	-0.006	0.005	0.217
PAC	Big Bank PAC	0.001	0.001	0.892
	Power*Big Bank PAC	0.000	0.000	0.921
	ABA PAC	0.015*	0.008	0.062
	Power*ABA PAC	-0.001**	0.003	0.033
	Real Estate PAC	-0.011	0.013	0.404
	Power*Real Estate PAC	0.001	0.001	0.281
Regression Statistics	Pseudo-R-squared	0.029		
	Percent Correct	86.87		
	ROC Curve	0.605		
	Number of Obs.	419		

Notes: Dependent variable is "switch," which equals 1 if congressperson switched his or her vote from Nay (Sep 29) to Yea (Oct 3), 0 otherwise. The independent variables are defined as follows: "Tenure" is defined as the log of (2009-first year of congressperson tenure). "Party" equals 1 if congressperson is Democrat, 0 otherwise. Power is the congressperson's power ranking. PAC contribution variables are as follows: "Big Bank PAC" represents contributions from the largest financial institutions (those with assets over $100 billion); "ABA PAC" represents contributions from the American Bankers Association; and "Real Estate PAC" represents contributions from real estate groups. See text for a detailed list of PACs included. The reported standard errors are the robust (White-1980 corrected) standard errors. The Regression statistics are as follows: "Pseudo R-sq" is the McFadden's Pseudo R-squared; "Percent correct" is the count R-squared, or the proportion of correctly classified observations; "ROC Curve" is the Receiver Operating Characteristic curve; "Number of. Obs." is the number of observations.

Appendix 1
Data Sources

Variable	Description	Source
September 29 Vote	House vote no. 674	http://thomas.loc.gov/home/rollcallvotes.html
October 3 Vote	House vote no. 681	http://thomas.loc.gov/home/rollcallvotes.html
Tenure	Log (2009-first year in Congress)	First year in Congress figures are from http://www.govtrack.us/
Party	Democrat = 1, Republican = 0	http://thomas.loc.gov/home/rollcallvotes.html
DW Nominate	DW Nominate ideology index	Poole and Rosenthal (1997). Data available in www.voteview.com
Power	Power rankings	Knowlegis Research. Source: http://beavoter.org/congressorg/home/
Unemployment 2007	Unemployment rate at the county level	USDA Economic Research Service.
Foreclosures	Number of subprime and Alt-A foreclosures between January and July 2008	LoanPerformance ABS Database http://www.loanperformance.com/
Total finance PAC and contributions from individual PACs	Contributions from January 2008 to September 2008	Center for Responsive Politics (www.opensecrets.com)
Stock market data	Daily and minute-by-minute stock prices	www.price-data.com

Appendix 2
Portfolio of Stocks in Sample

Number	Name	Financial	Big Bank	REIT	ABA	Other
1	3M	0	0	0	0	1
2	Abbott Labs	0	0	0	0	1
3	Alcoa	0	0	0	0	1
4	Amerisourcebergen CP	0	0	0	0	1
5	Analog Devices Inc	0	0	0	0	1
6	AT&T	0	0	0	0	1
7	Auto Zone	0	0	0	0	1
8	Baxter International	0	0	0	0	1
9	Black & Decker	0	0	0	0	1
10	Boeing	0	0	0	0	1
11	Bristol-Myers Squibb	0	0	0	0	1
12	Caterpillar	0	0	0	0	1
13	Chevron Corp	0	0	0	0	1
14	Coca Cola	0	0	0	0	1
15	DuPont de Nemours	0	0	0	0	1
16	Exxon Mobil	0	0	0	0	1
17	General Electric	0	0	0	0	1
18	Hewlett Packard	0	0	0	0	1
19	Home Depot	0	0	0	0	1
20	IBM	0	0	0	0	1
21	Intel	0	0	0	0	1
22	Johnson & Johnson	0	0	0	0	1
23	Kraft	0	0	0	0	1
24	McDonalds	0	0	0	0	1
25	Merck	0	0	0	0	1
26	Microsoft	0	0	0	0	1
27	Pfizer	0	0	0	0	1
28	Proctor & Gamble	0	0	0	0	1
29	United Technologies	0	0	0	0	1
30	Verizon Comm	0	0	0	0	1
31	WalMart Corp	0	0	0	0	1
32	Walt Disney	0	0	0	0	1
33	Federated Investors	1	0	0	0	0
34	E-Trade	1	0	0	0	0
35	Franklin Resources	1	0	0	0	0
36	American International Group	1	0	0	0	0
37	Ameriprise Financial	1	0	0	0	0
38	American Express	1	0	0	0	0
39	Bank of America	1	1	0	0	0
40	Citigroup	1	1	0	0	0
41	JP Morgan Chase	1	1	0	0	0
42	BB & T Corp	1	1	0	0	0
43	Bank of NY Mellon	1	1	0	0	0
44	Goldman Sachs	1	1	0	0	0
45	PNC Financial Services	1	1	0	0	0
46	Wachovia	1	1	0	0	0
47	Wells Fargo	1	1	0	0	0

48	Equity Residential	1	0	1	0	0
49	Colonial Property Trust	1	0	1	0	0
50	Mid-America Apartment Comm	1	0	1	0	0
51	Associated Estates Realty	1	0	1	0	0
52	American Land Lease Inc	1	0	1	0	0
53	Home Properties Inc	1	0	1	0	0
54	Essex Property Trust	1	0	1	0	0
55	Brookline Bancorp	1	0	0	1	0
56	Banco Popular Inc.	1	0	0	1	0
57	Cathy General Bancorp	1	0	0	1	0
58	Commerce Bancshares Inc	1	0	0	1	0
59	City Holding Company Inc	1	0	0	1	0
60	Citizens Republic Bancorp	1	0	0	1	0
61	Dime Community Bancshares	1	0	0	1	0
62	East West Bancorp	1	0	0	1	0
63	First Niagara Financial Group	1	0	0	1	0
64	Fulton Financial Corporation	1	0	0	1	0
65	People's United Financial Inc	1	0	0	1	0
66	Prosperity Bancshares	1	0	0	1	0
	Totals	34	9	7	12	32