# **Congress and the Federal Reserve**

Gregory D. Hess and Cameron A. Shelton\*
Robert Day School of Economics and Finance
Claremont McKenna College

June 2012

Preliminary Draft: Please do not quote or cite without permission

#### **Abstract**

We examine legislative activity targeting the Federal Reserve to determine when Congress takes an interest in the Fed and whether this interest has an effect on monetary policy. Using a keyword search of the THOMAS catalogue for the period from January 1973 through December 2010, we identify 1575 bills in the House and 728 bills in the Senate pertaining to the Federal Reserve. We classify these bills into several categories including those that expand Fed powers and those that threaten or usurp Fed powers. Using the Romer and Romer (2004) series of monetary policy shocks, we find that, prior to the early 1980s, the Fed responded to bills credibly threatening Fed powers by lowering the federal funds target below that prescribed by current and forecast economic conditions. However, this accommodation ceased following the end of the non-borrowed reserves targeting period in October 1982.

Analyzing the determinants of bill sponsorship, we find that high unemployment, high inflation, and high long-term real borrowing costs—failures of the Fed along the three dimensions of its mandate—all lead to a greater number of bills seeking to alter the Fed's powers. Importantly, we also find that the relative importance of these three dimensions has changed over time. Under Chairmen Burns and Miller, Congress took greater interest when unemployment was high. Under Chairman Greenspan, Congress took greater interest when inflation was high. We believe that these findings are consistent with the view that the lessons of the Great Inflation changed the public perception of the Fed's macroeconomic responsibilities, which in turn better aligned Congressional views on policy with those of the Fed, and allowed the Fed to better resist remaining Congressional pressure to its independence.

Keywords: Federal Reserve, Central Bank Independence, Congress JEL Classification Codes: E58

\* Acknowledgements: The authors would like to thank Richard Burdekin, Masami Imai, Andrew Jalil, and Thomas Willet for helpful comments. We also thank the Lowe Institute of Political Economy for financial support. Andrew Grimm, Tim Park, and David Xu provided excellent research assistance.

It is our understanding that the Board Members of the Federal Reserve will meet later this week to consider additional monetary stimulus proposals...[W]e submit that the board should resist further extraordinary intervention in the U.S. economy.

-Sen. Mitch McConnell, Rep. John Boehner, Sen. John Kyl, Rep. Eric Cantor Excerpt from a letter to Federal Reserve Chairman Ben Bernanke Sent September 19<sup>th</sup>, 2011

#### 1. Introduction

To a generation of economists steeped in the desirability of an independent central bank and comforted by the institutional features that deliver a measure of autonomy to the Federal Reserve (budgetary independence, governors with long and overlapping terms who are not easily dismissed), this public letter from Congressional leaders to the Federal Reserve serves as an important reminder that there are limits to that self-determination. Not only does the executive branch appoint the Federal Reserve Governors subject to Senatorial confirmation, but perhaps more importantly, Congress has charge of the mandate of the Federal Reserve and can, with new legislation, grant or rescind powers. As one analyst puts it, we must avoid "the myth that the Federal Reserve is an independent politically neutral institution." (Havrilesky 1988b, p320) In the words of another, "the question is not whether monetary policy is political, but how politics affects policy." (Beck 1988, p368) Senator Paul Douglas put it most bluntly of all when he told William McChesney Martin during his confirmation hearings to remember that "The Fed is a creature of Congress." (Beck 1990)

We study when Congressional pressure arises and how the Federal Reserve responds to it. Rather than review explicit public letters, we focus on Congressional bill proposals that seek to alter the powers of the Federal Reserve. We analyze when such bills are proposed, when they garner support in the form of co-sponsors and votes, and whether the Federal Reserve changes monetary policy in response to legislative threats.

We find strong evidence that, prior to the early 1980s, the Federal Reserve responded to threatening legislation by accelerating base money growth and lowering the target federal funds rate in excess of what was called for by anticipated economic conditions – in the latter, we control for standard responses to economic forecasts by

using the Romer and Romer (2004) measure of monetary policy shocks. The Fed's response is rapid, coming within the first month after the proposal of a threatening bill. The response is confined to those bills which have cosponsors and are thus more likely to pass, representing more credible threats. The response is confined to bills which threaten existing prerogatives and does not extend to bills proposing to expand Fed powers. The response is also of modest but non-trivial size: a month with three bills threatening the Fed increases the chance of a quarter-point rate cut by 56 percentage points. However, we also find that this accommodation of Congressional pressure ceased in the mid 1980s after which time there is no systematic response of monetary policy to our measures of legislative pressure.

Splitting the bills into those proposed by Democrats and those proposed by Republicans, we find that the Fed responds only to the former. As a result, the change in the Fed's response during the 1980s is entirely accounted for by the change in the Fed's response to Democratic sponsored threats. This result suggests two potential explanations. The first is that the Democratic party shifted away in the 1980s from pressuring for easing. This may have occurred as the Democratic Party, in the aftermath of the Great Inflation and the Volker Disinflation, learned of the dangers of inflation and the consequences of the natural rate hypothesis. While this interpretation cannot explain why the Fed initially responded only to Democratic-sponsored threats, this story has the advantage of being able to explain why the Fed's response to Democratic-sponsored threats.

A second possibility is that the change may have originated within the Fed and among those interested in monetary policy, as the three primary lessons of the Great Inflation were absorbed and applied to the conduct of central banking and formed a new monetary policy consensus. First, explanations of the Great Inflation raised awareness of the transience of the SR Phillips curve tradeoff and the consequent importance of focusing on price stability. Second, economists at this time also became familiar with the connection between lower inflation outcomes and apolitical and independent central banks. Third, the new monetary policy consensus emphasized transparency. Examples include the transition from money based rules (subject to financial innovation and shifts in velocity) to the more easily tracked and understood federal funds rate targeting regime,

the increased openness of the FOMC's deliberative process, the rising popularity and specificity of interest rate rules and inflation targeting, and the proliferation of Fed watchers, all which served to increase the cost of exercising discretion in monetary policy. Thus the modern central bank has greater ability to counter political pressure. At the same time, the increasing prestige of the Fed under Chairmen Volker and Greenspan during the Great Moderation gave them the legitimacy to forestall or ignore political pressure.

Congress generally pressures the Fed when members believe it is failing to do its job. If there has been a change in the perception of the Fed's role and legitimacy, we should see a change in the conditions under which Congress chooses to pressure the Fed. We look at the determinants of Congressional bills mentioning the Fed. In the sample as a whole, we find that high unemployment, high inflation, and high long-run real borrowing costs all lead to an increase in sponsored bills threatening Fed powers. These measures of economic distress also increase the chance that a bill will be cosponsored (and thus the chances that it will pass).

Examining our data by Fed chairman, we find that there has been a shift over time in which economic indicators trigger Congressional interest. During the Burns, Miller, and Volker eras, bills threatening the Fed were generated most strongly by high unemployment. The response to high inflation was tepid by comparison. During the Greenspan era, bills threatening the Fed were triggered more reliably by high inflation while the effects of high unemployment were muted compared to the previous era. Further splitting by party, we find that this is true of both Republican-sponsored bills and Democrat-sponsored bills. It would seem that between the Burns and Greenspan eras, both parties switched from holding the Fed responsible for unemployment to holding the Fed responsible for inflation. Our finding fits well with Meltzer's (2010, 2011) view that the Fed has historically acted lexicographically, with exclusive focus on either inflation or unemployment at the expense of the other. It also fits with Burns' (1979) contemporaneous view that the Keynesian belief in the power and duty of government to ensure full employment was paramount in Federal policymaking. While this finding cannot explain the partisan differences we mention earlier, we take it as evidence supporting our second story: that the lessons from the Great Inflation changed the view of the Fed's responsibilities not only among economists but also among Congressmen, changed the origins of Congressional pressure on the Fed, and muted the Fed's response to pressure.

Our paper is organized as follows. Section 2 reviews some of the prior literature on the relationship between Congress and the Federal Reserve. Section 3 presents our data on the sponsorship and co-sponsorship of bills pertaining to the Fed and our methods of classification. Section 4 analyzes the sources of legislative pressure on the Fed by analyzing the determinants of sponsorship, co-sponsorship, and voting behavior. We then turn in section 5 to the effects of Congressional pressure on monetary policy: first money growth and then the federal funds rate. Section 6 discusses and concludes.

#### 2. Prior Literature

A small prior body of literature addressed these questions during the height of interest in central bank independence, the 80s and early 90s. The literature has proposed a variety of channels whereby politics may influence monetary policy, but the most common is the following. Interest groups affected by monetary policy control resources desired by members of Congress.<sup>1</sup> Thus interest groups pressure Congress who pressures the Fed by threatening its budgetary autonomy, control of policy, and supervisory authority. As Beck (1988) reminds us, "the real political resource of the Fed is legitimacy" [p. 369]. Most actors that are aware of the Fed accord it legitimacy over monetary policy. But this legitimacy is with a narrow constituency—bankers, economists, and elected officials rather than the broader public—and not enshrined in the constitution so in a public battle with Congress or the President the Fed will have a difficult time defending its prerogatives.

The literature seems to agree (and we concur) that when inflation, unemployment, or borrowing costs are high, Congress takes a greater interest in monetary policy. This is confirmed by multiple measures of Congressional interest in the Fed including legislation (Havrilesky 1993, Hess 2011), statements in the financial press (Havrilesky 1988a), and

<sup>&</sup>lt;sup>1</sup> For example, higher interest rates hurt interest rate sensitive sectors such as housing and automobiles.. The incidence of higher inflation is more difficult to identify and likely depends on whether it is anticipated, but at any point in time there is likely to be a group in favor of sound money.

activity in Congressional hearings (Morris 1995). However, this prior literature is divided on whether Congressional pressure actually affects monetary policy.

Kettl (1986) suggests that while Congress takes an interest in the Fed when the economy is performing poorly, its oversight is generally lax, and even when it does take interest, it does little to discipline the Fed and rather enjoys having a scapegoat. Woolley (1984) also downplays Congressional oversight by noting that legislation is typically aimed at the structure of the Fed rather than at explicit economic policies.<sup>2</sup> And Pierce (1978) calls Congressional oversight a myth, arguing that the Fed can and does obfuscate, making it too difficult for Congress to evaluate performance. Like Kettl, Kane (1980) believes that the Fed has an implicit bargain with Congress whereby the Fed takes the blame for poor economic performance in exchange for autonomy. But Kane emphasizes that when the electoral cost of a bad economy is particularly high, the Fed must accommodate Congressional pressure to preserve its prerogatives. Willett (1990) believes that "members of Congress focus attention on monetary policy only occasionally, but when they do so... they have considerable clout" and concludes "because the Fed is influenced by a wide range of pressures, even a fully efficient Fed would not be expected always to manage to avoid annoying its congressional masters, but neither is it likely to consistently ignore pressures from that direction."

Likewise, Grier (1991, 1996) suggests that by credibly threatening the mandate of the Fed, Congressmen can "achieve the policy their constituents' desire without having to shoulder direct legislative responsibility for any macroeconomic consequences." He notes that the lack of overt monitoring does not preclude Congressional influence over the Fed and suggests that oversight committees may be particularly influential. Grier finds that the ADA score of the chairmen of the Senate banking and Finance committee and the two subcommittees charged with Fed oversight are highly significant predictors of the growth rate of base-money but that the full committee and the rest of the Senate have no effect. This is one of the few quantitative studies of this era finding strong effects of Congressional preferences on monetary policy. Like Grier, Havrilesky (1994) cites evidence that the Fed responds to stated concerns by the Senate but not the House – this

\_

<sup>&</sup>lt;sup>2</sup> Our bill classification finds somewhat different results, gently disputes this by showing there are a good number of specific policies proposed while confirming that proposals to change the structure are still more numerous.

is possibly related to the fact that only Senators must confirm appointments of Governors to the Federal Reserve Board. But Beck (1988, 1990) and Chopin, Cole, and Ellis (1996) each question the robustness of Grier's results to longer time periods and note that money supply growth does not respond to the House oversight committee. Grier (1996) addresses these concerns, though he admits that the importance of money growth is likely to wane as it becomes less connected to outcomes. We too find that money growth becomes less responsive to political pressure after the mid-80s. However, we find the same pattern in the federal funds rate, suggesting this is a change in the political equilibrium rather than a switch in intermediate targets.

Meanwhile, Havrilesky (1993) finds that the Fed responds to Congressional pressure during some administrations and not during others. He postulates that it is a confluence of Executive and Congressional pressure that leads to responsiveness. He finds that both executive and congressional pressures intensify as the economy worsens and that legislation threatening the Federal Reserve makes it more responsive to pressure from the executive branch.

Extending this literature, recent work by Weise (2012) develops new binary variables indicating whether a meeting's minutes contained mention of political pressures. These variables are constructed by reading the minutes of FOMC meetings between 1969 and 1979. His measures distinguish whether the pressure is to accommodate or tighten. He then displays evidence that this measure of pressure mounts before a change in policy stance and is related to a measure of monetary policy shocks. This innovative study and explicit measure of the direction of the pressure—tight or loose—is a useful improvement on the rest of the literature which simply assumes all pressure is for looser policy. However, there are a few key areas where our paper provides additional insight into the relationship between political press and the Fed. First, Weise's study is confined to the 1970s and thus does not speak to the transition we document. Second, neither the sources of the pressure—congressional, executive, Democrats, Republicans— nor the conditions that generate pressure are identified. Third, Weise's measure of monetary policy shocks is somewhat sparse on economic controls, admitting concern that his correlation between political pressure and monetary policy may be driven by omitted changes in economic conditions. Finally, while measuring the

FOMC's perception directly has the advantage that it may capture the true pressure it felt, it is also very possible that political pressures are mentioned selectively in FOMC documents, as a rhetorical tactic to buttress an FOMC member's position. By improving along the first three of these dimensions and by measuring Congressional legislative pressure on the Fed directly, our paper builds upon and adds to Weise's (2012) contribution.

In sum, there is a strong verbal theory describing the transmission of pressure from Congress to the Federal Reserve. Empirical evidence in support, however, is less universally accepted. More importantly, much of the empirical work predates fundamental changes in the operating conduct of the Federal Reserve: widespread focus and agreement on the necessity of an apolitical central bank (Cukierman 1992); the primacy of the federal funds rate rather than money growth as the intermediate target; the appropriateness of interest rate rules as an approximate guide to policy (Taylor 1993); and the benefits of transparency and inflation targeting (Bernanke et. al. 1999). Each of these shifts in monetary policy consensus represents an important change in the philosophy of monetary policy which makes it less likely that Congress or the Executive would be able to exert pressure on monetary policy. Moreover, until the Great Recession, it seemed that Chairmen Volker and Greenspan and the Great Moderation had restored the prestige and legitimacy of the Federal Reserve. In a climate where the Fed enjoys great legitimacy as an economic manager, where monetary policy is understood to be properly independent of political influence, and where there is agreement on the general rule of thumb for management of a highly visible indicator, there is seemingly little room for political influence.

#### 3. Data

Our data on Congressional bills come from the Library of Congress website, THOMAS. THOMAS has a searchable catalogue of bill summary and status for all bills introduced in both chambers since the beginning of the 93<sup>rd</sup> Congress (January 1973). We search both chambers for the 93<sup>rd</sup> – 111<sup>th</sup> Congresses (Jan 1973-Dec 2010). Our set of bills consists of those in which the phrase "Federal Reserve", "Board of Governors", or

"Federal Open Market Committee" appears in the bill summary or status. These search parameters deliver 1575 bills in the House and 728 bills in the Senate.

For each bill, we recorded the sponsors and co-sponsors, the committee to which the bill was referred, the furthest stage the bill achieved (e.g. introduction, voted on the floor, passed into law), and the dates it achieved each legislative stage. We then classified each bill according to its intended effect on the Federal Reserve System. The classification system, displayed in Table 1, was devised after looking at a random sample of bills and is intended to capture broad themes. Actual classification of bills was accomplished by RAs who read the bill summary (and if necessary, the full text). Difficult cases were brought to the authors for discussion. The data have not been revised since the start of empirical work. A single bill is often a collection of several clauses so, not surprisingly, many bills were classified under multiple categories. For example, a bill that sought to establish annual audits of the Federal Reserve System and place a ceiling on the Federal Funds rate would be classified as both type 6 and type 5.

For the subset of bills that made it to the floor, we have downloaded data on how each Congressman voted from Keith Poole's *voteview*. To this we have added data on several economic and political variables. Our sources are documented in Table 2.

Table 3 shows the number of bills of each type that were proposed as well as the number that came to a vote on the chamber floor. There are two things to point out. First, notice that most bills die in committee: roughly three quarters of bills proposed that mention the Federal Reserve die in committee. That being said, this is actually a relatively high rate for bills to be reported out of committee. Data from the Congressional Bills Project (Adler and Wilkerson) shows that the annual reporting rate on Congressional bill proposals since WWII has varied between 3.5% and 12%. Second, the reporting rate varies somewhat by type. Bills of type 1 and type 2—those that seek to abolish the Fed or change its mandate—are both rare and have almost never made it to a floor vote, the sole exception being the Humphrey-Hawkins (HH) Act. This does not necessarily mean such bills have no influence on the

9

<sup>&</sup>lt;sup>3</sup> The two House bills of type 1 that made it out of committee were never brought to a vote on the floor. HCR 133, the 1975 predecessor of the Humphrey-Hawkins Act never actually specified revisions to the

Federal Reserve, but it does mean we have too little data for a meaningful statistical analysis. (The HH Act is still included in our analysis because it is also a type 6 bill.) As a result, we restrict our focus to the other categories. Bills of type 5—those that usurp the powers of the Fed to set a specific policy—seem to be much less likely to be reported out of committee suggesting the policy specialists that comprise the committee may be relatively reluctant to dictate to the Fed. Meanwhile, the only significant variation across chambers is the Senate is significantly more likely to report bills pertaining to transparency (type 6).

Table 4 gives summary statistics on who proposes bills addressing the Federal Reserve. While certain congressmen are more involved in the oversight of the financial system, the top 11 legislators propose only 25% of the bills. A further 25% of the bills are proposed by legislators who propose only one or two bills addressing the Fed. Thus, while legislative specialization is apparent, it does not seem the proposal process is monopolized by a relatively few legislators. We have experimented with including legislator fixed effects in our specifications but they have little explanatory power and little effect on the coefficients of interest.

Figure 1 shows the annual time series of the number of bills proposed. The clearest pattern is that bills are more frequently introduced in the first year of a Congress than in the second. This is likely because the legislative process takes time and bills that are not brought to a vote by the end of a Congress are removed from the agenda. Thus early introduction improves a bill's chance of passage. Another pattern is that spikes seem to coincide with periods of economic distress: 1981, 1979, 2009, and 1975 are the four highest peaks, for example. These are periods of high inflation, or high unemployment, or both.

Not surprisingly, the great majority of the bills receiving classifications 1-6 are directed to either the House Committee on Financial Services or Senate Committee on

permanent mandate, specifying monetary policy objectives only for the "second half of 1975" as well as requiring biannual oversight meetings. It is thus classified as types 5 and 6.

10

\_

Banking, Housing, and Urban Affairs.<sup>4</sup> Of the bill proposals classified as types 1-6 in the House, 78% are directed to the House Committee on Financial Services. No other committee receives more than 2.5%. In the Senate, 75% are directed to Senate Committee on Banking. No other committee receives more than 4%. Thus when we look into the role of committee chairs, we restrict ourselves to these two committees only.

## 4. Sponsorship, Co-sponsorship, and Voting

Our first question is: when does a Congressman take an interest in the Federal Reserve? Congressional interest can and does take many forms: press releases, private communications, comments during regularly scheduled testimony by the chairman, extra hearings on special topics, and actual legislation. Each of these can signal approval of or displeasure with the conduct of monetary policy. Of course, Congress does not speak with one voice so the Fed, as any legislative analyst, must gauge the likely actions of the body as a whole from the cacophony of individual communiqués. Each of the above measures has the disadvantage of being difficult to measure exhaustively and difficult to quantify in retrospect. Moreover, each of these constitutes an intermediate step which does not, in itself, constitute a threat to Fed jobs or prerogatives. If Congress wishes to actually punish or reward Fed officials, it must do so by either refusing to confirm (re)appointments or by passing legislation changing the mandate of the Federal Reserve. It is certainly possible that the Federal Reserve responds to intermediate steps: however, given the many voices and the length and uncertainty of the legislative process, we believe such threats become compelling only when actually ensconced in the legislative pipeline. Thus in our study, we focus on legislation affecting the mandate of the Federal Reserve. For there to be legislative pressure on the Federal Reserve requires that a legislator choose to introduce a bill with provisions to change the powers of the Federal Reserve.

Sponsoring bills is a form of voluntary public position-taking signaling to colleagues, interest groups, and voters the issues and positions with which a legislator

\_

<sup>&</sup>lt;sup>4</sup> The House Financial Services committee has also been known during our sample period as the House Committee on Banking and Financial Services and the House Committee on Banking, Financial, and Urban Affairs.

most wishes to be associated (Schiller 1995). Bills sponsored are often discussed during re-election campaigns and sponsorship has been shown to affect campaign contributions (Rocca and Gordon 2010). As a result, legislators pay careful attention to an array of potential costs and benefits when choosing which bills to sponsor.

Tanger, Seals, and Laband (2011) argue that co-sponsoring a bill is a public commitment of support for a bill. They argue that co-sponsorship is a "commitment mechanism that permits members of congress to engage in implicit contracting" thereby mitigating the time-inconsistency issues related to log-rolling. In other words, "bill co-sponsorship is the legislative analog to trade credit." Wilson and Young (1997) find that having at least one co-sponsor improves the chances of a bill progressing out of committee and thus improves rates of final passage. And Bernard and Sulkin (2011) find that congressmen rarely cosponsor and then fail to support final passage.

If co-sponsorship is a public signal of support purchased with a promise for future reciprocity, a bill with more cosponsors is one on which its sponsor has spent more political capital, or for which the price of purchasing support is lower, perhaps because the goals of the bill are widely shared. Thus either the sponsor believes passage is vital to his/her financial and electoral constituency, and/or potential co-sponsors believe alignment is less costly and are thus willing to "charge" a lower price in terms of future support. Whether it is depth or breadth of interest that is driving a bill, co-sponsors are an indicator of greater support and greater likelihood of final passage.

Our approach is to estimate a logistic regression to explain the decision to sponsor or cosponsor legislation. We estimate regressions separately for each chamber and by type of bill. Our dataset is a monthly panel of all congressmen from January 1973 to December 2010. The dependent variable,  $SP(T)_{cm}$  is whether congressman c has sponsored a bill of type T in month m. Because types 1 and 2 are so rare (see Table 3) and have only once made it to a vote, we do not analyze these bills. Types 4, 5, and 6 are all threats to the prerogatives of the Federal Reserve, so we combine these into a single category for the regressions. Thus we have three separate dependent categories: bills that extend Fed powers (type 3), bills that threaten Fed powers (types 4, 5, and 6), and bills that mention the Federal Reserve but do not materially affect its role (type 7). This last

category serves as a control for how our explanatory variables affect bills concerning the economy but not directly affecting the prerogatives of the Federal Reserve.

As potential explanatory variables, we begin with the three dimensions of the dual mandate: inflation, unemployment, and long-term interest rates.<sup>5</sup> Congressmen are likely to take an interest in the Fed when the economy is not performing well along these dimensions. Because financial stability and effective banking supervision have been a raison d'être of the Fed since its inception, we also include a measure of losses due to bank failures (we take the log of these losses measured in \$trillions). We include local deviations from national averages (state-level for unemployment and losses from bank failures and regional for inflation) to allow Congressmen to respond to local conditions. We also include political variables such as whether the congressman's party has a majority in the chamber, which affects the ability to pass a bill and thus the incentives to introduce it; whether the congressman's party controls the white house, which may affect a Congressman's incentive to criticize the Fed; the ideology of the congressman as measured by McCarty, Poole, and Rosenthal's (1997) DW-nominate first dimension, which they interpret as the classic liberal-conservative axis; and whether the congressman's upcoming reelection turned out to be close, in which case electoral pressure might change incentives for legislative entrepreneurship. In light of the pattern displayed in Figure 1, we also include a dummy variable for whether it is the first year of the Congress.<sup>7,8</sup>

To investigate the determinants of co-sponsorship, we estimate the same regression with dependent variable  $CO(T)_{cm}$  designating whether congressperson c has

\_

<sup>&</sup>lt;sup>5</sup> The Fed's current mandate, established by Congress in the Federal Reserve Act, calls for it to "promote effectively the goals of maximum employment, stable prices, and moderate long-term interest rates." The frequent reference among economists to a *dual* mandate is a misnomer ignoring borrowing costs.

<sup>&</sup>lt;sup>6</sup> We use the actual election results to determine whether the upcoming election was close or not. While this is clearly not information the congressperson would have had at the time, if we assume that they are relatively unbiased predictors of whether they will face a tight reelection battle, this is the best widely available proxy. Our basic threshold is whether the final margin was within 10 percentage points. We have estimated alternate specifications for a final tally within 5 percentage points and found little change to the results.

<sup>&</sup>lt;sup>7</sup> We have also included district fixed effects, using data from Carson, Crespin, Finnochiaro, and Rhode (2007) to track districts through the decadal redistricting. Since districts tend to be relatively fixed in their ideology and thus continuously elect congressmen of similar ideology, district FE soak up much of the variation normally attributed to the congressman's ideology. The results are otherwise unchanged.

<sup>8</sup> We refrain from including Congress fixed effects because this as this would leave us to explain

We refrain from including Congress fixed effects because this as this would leave us to explain Congressional interest as a result of economic conditions relative to a two-year average. We do not believe a two-year average is the baseline by which economic performance is judged.

<u>co</u>-sponsored a bill of type T in month m. These specifications are estimated using panel logistic regressions. We report odds ratios throughout and levels of significance are calculated based on whether an odds ratio is statistically distinct from 1.

$$SP(T)_{c} = \beta_{1}u_{n}at_{m} + \beta_{2}(u_{s}tate_{cm} - u_{n}at_{m})$$

$$+ \beta_{3}\pi_{m} + \beta_{4}(\pi_{r}egional_{cm} - \pi_{n}at_{m}) + \beta_{5}r_{m}$$

$$+ \beta_{6}\ln(1 + ValueFailed_{n}at_{m})$$

$$+ \beta_{7}[\ln(1 + ValueFailed_{s}tate_{cm}) - \ln(1 + ValueFailed_{n}at_{m})]$$

$$+ \beta_{8}WhiteHouse_{c} + \beta_{9}ChamberMajority_{c} + \beta_{10}LR_{s}core_{c}$$

$$+ \beta_{11}\operatorname{Re}election_{c}close_{c} + \beta_{12}FirstYear + \varepsilon_{cm}$$

$$(1)$$

#### 4.1 Sponsorship

Looking at Table 5, we can see that congressmen in both chambers respond strongly to economic conditions. A higher national unemployment rate, a higher national inflation rate, and a higher real interest rate all prompt sponsorship of bills affecting the prerogatives of the Federal Reserve. Importantly, difficult economic conditions increase the incidence of both types of bills: those that seek to extend new powers to the Fed as well as those that threaten the Fed's prerogatives. So while some congressmen hold the Fed responsible for economic misery and attempt to remove or usurp its powers, others congressmen seemingly trust the Fed and seek to extend it new powers to cope with the difficulties. Notice there is no significant effect of economic conditions on the control group (type 7). There is some evidence, especially in the House, that bank failures lead to increased legislative activity involving the Fed. Finally, both chambers seem to pay attention mainly to national economic conditions. State-level variation in unemployment

\_

<sup>&</sup>lt;sup>9</sup> Bills pertaining to the Federal reserve are sufficiently rare that our dependent variable takes the value zero much more often than one. (A given congressman will usually not be sponsoring or cosponsorhing a bill in a given month). Thus we estimate the specifications from sections 4.1 and 4.2 using King and Zeng's (1999) correction for rare events. We also estimate a linear probability model which produces a pattern of signs and levels of significance that are virtually identical to the results we present in tables 5, 6, 8, and 9. <sup>10</sup> This result is previewed in Figure 1. Notice from that figure that there are only two periods during which threats (types 4,5,6) and extensions (type 3) do not move together. From 1979-83, threats far outnumber extensions while in 1991-2, extensions significantly outnumber threats. Perhaps this is evidence that Congress blamed the Fed for the severe recession of 1979-83 but did not blame the Fed and looked to it for aid during the recession of 1990-1991.

rates and bank failures and regional variation in inflation do not consistently predict bill sponsorship.

Elected representatives also respond to political considerations and do so similarly in both chambers. Congressmen from the majority party are more likely to sponsor legislation of any sort, perhaps because the chances of referral and passage are greater and it is thus a better investment of time and effort. However, the effect of being in the majority stimulates fewer additional threats to Fed powers (types 4,5,6) than it does extensions of Fed powers (type 3) or bills referencing the Fed (type 7). This is the first of several indications in the data that the majority party is relatively reluctant to remove or usurp Fed powers, possibly because the majority party will be held responsible for economic outcomes and prefers the Fed to have all tools at its disposal.

However, having a fellow party member in the White House does not seem to affect sponsorship behavior. Moreover, surprisingly, electoral pressure seems to have little consistent effect on sponsorship activity. Perhaps electoral pressure increases the payoff to legislative activity but increases the benefits to other uses of a Congressman's time as well, leaving the benefits net of opportunity costs, and thus the Congressman's allocation of time, unchanged. Or perhaps electoral pressure increases the potential benefits of sponsoring legislation but likewise increases the potential costs.

## 4.2 Co-sponsorship

The results for co-sponsorship (Table 6) reveal a similar responsiveness to poor economic conditions, but the pattern is slightly different. Recall that poor national economic conditions—high unemployment, inflation, and borrowing costs—lead to more bills of all types. As legislative entrepreneurs seek a variety of solutions, some see the Fed as a potential solution, others as part of the problem. However, it seems that, especially in the House, bills removing or usurping Fed powers are more likely to receive co-sponsorship support when the economy is bad, while bills extending Fed powers are less likely to receive support. The data do not fit this story perfectly—three of the sixteen odds ratios are on the "wrong" side of one—but we believe the pattern of coefficients is generally supportive of this characterization.

Political structure influences co-sponsorship much as it does sponsorship. Conservatives are much less likely to co-sponsor any type of bill. And reelection pressures are fairly mild determinants of co-sponsorship just as they were relatively mild determinants of sponsorship. More importantly, majority party members are once again much more likely to cosponsor bills but comparing the coefficients for threats (types 4, 5, and 6) with those for extensions (type 3) and the control (type 7) suggests that the majority party members are less eager to co-sponsor threatening bills. The party in charge of the White House is less likely to co-sponsor bills of any type. Together these further indicate reluctance by the party in power—likely to be held electorally responsible for economic performance—to remove tools from the central bank.

### 4.3 Voting

For each of the bills from our sample that made it to a vote—219 in the House and 283 in the Senate—we have records of how each member in the chamber voted. Using the same set of political and economic explanatory variables from our analysis of (co)sponsorship, we estimate a logistic regression to explain whether a particular Congressman voted in favor of or against a bill of a particular type, T. This is no longer a true panel so we use a standard logistic regression, clustering the standard errors by bill, once again reporting odds ratios and testing for differences from 1. 12

-

<sup>&</sup>lt;sup>11</sup> Abstentions make up only a small fraction, 4.3%, of our sample. We have treated them as missing votes in the binary analysis presented. Because abstentions are so rare, adopting a ternary analysis makes little difference to the results while complicating the interpretation and presentation.

<sup>&</sup>lt;sup>12</sup> We have tried some variations on this specification. Dropping state-level unemployment, which is available only starting in 1976, allows us to include three more years of bills. This does not change the results. We have allowed nonlinearity in the response to unemployment and inflation. No systematic results. We have added interaction terms to see if Senators respond differently to economic conditions before elections. There is some weak evidence that they become cautious, less likely to vote for any bill.

$$VoteAye(T)_{c} = \beta_{1}u_{nat_{m}} + \beta_{2}(u_{state_{cm}} - u_{nat_{m}})$$

$$+ \beta_{3}\pi_{m} + \beta_{4}(\pi_{regional_{cm}} - \pi_{nat_{m}}) + \beta_{5}r_{m}$$

$$+ \beta_{6}\ln(1 + ValueFailed_{nat_{m}})$$

$$+ \beta_{7}[\ln(1 + ValueFailed_{state_{cm}}) - \ln(1 + ValueFailed_{nat_{m}})]$$

$$+ \beta_{8}WhiteHouse_{c} + \beta_{9}ChamberMajority_{c} + \beta_{10}LR_{score_{c}}$$

$$+ \beta_{11}\operatorname{Re} election_{close_{c}} + \varepsilon_{cm}$$

$$(2)$$

While national economic conditions have a strong effect on the frequency with which bills are generated and receive co-sponsorship support, they have much less effect on whether a bill receives votes on the floor. While there is some scattered evidence of voting-behavior responding to economic conditions—bank failures make Senators more likely to vote in favor of bills threatening Fed powers—the overall picture is mixed (see Table 7). So a bad economy leads to more bills passed affecting the Fed because it leads to more bills generated, not because the bills generated pass at a higher rate. In the Senate, conservatives are much less likely to support bills extending Fed powers and much more likely to support bills threatening Fed powers. The party that controls the Whitehouse is less likely to support any bill, especially those that remove Fed powers.

## 4.4 Differences by Party and Over Time

As we noted in the introduction, there is reason to believe that the legitimacy of the Fed and the consensus view of the proper role of political oversight of the Fed have both changed during our sample period. A large literature on partisan political business cycles also postulates that Democrats and Republicans generally have different views of the relative weights the Fed ought to place on unemployment and inflation (Kramer 1973). Thus we return to the determinants of sponsorship and co-sponsorship of bills threatening the prerogatives of the Fed to ask two questions. Do the two parties respond differently to economic conditions? Moreover, has this response changed over time? To test how sponsorship and co-sponsorship activity have varied over time, we estimate a variation of equation (1). First we limit to the three nationwide mandate variables: unemployment, consumer price inflation, and the real return on 10 year T-bonds. We then add interactions of each of these economic variables with the Burns/Miller and Volker

eras. Thus we allow sponsorship behavior to vary between the tenures of Burns/Miller, Volker, and Greenspan. As before, we estimate a panel logistic regression and report odds ratios and statistical significance relative to 1. We estimate separate regressions for each chamber and for each party. The results are reported in Tables 8 and 9.

Looking at Table 8 and focusing on the House, we can see a clear difference between the Greenspan era and the Volker and Burns/Miller eras. Relative to the Greenspan era, the Burns/Miller and Volker eras are characterized by larger coefficients on unemployment and lower coefficients on inflation. (There is no consistent difference in the response to real interest rates.) The Senate displays a similar pattern though the effects are too small to be statistically significant. In other words, under Burns and Volker, Congressional pressure was generated mainly when unemployment was high; under Greenspan, Congressional pressure was generated mainly when inflation was high. This suggests a significant shift in the conditions under which Congress thinks the Federal Reserve is performing poorly, support for the idea that lessons of the Great Inflation and the Volker disinflation changed not only how economists view the role of the Fed, but also how Congress views and judges the Fed. This effect is visible in both parties. While it appears to be stronger in the Democratic party, when we include triple interactions and test for a partisan difference, we cannot reject the null that both parties evolve identically.

Co-sponsorship has also shifted away from unemployment and toward inflation but co-sponsorship exhibits stronger partisan differences than did sponsorship, especially in the House (Table 9). Both parties display similar behavior during the Greenspan era: high unemployment decreases the likelihood of co-sponsoring threatening legislation while high borrowing costs increases it, high inflation increases threats from the Senate but somewhat decreases threats from the House. But the parties arrived at this common point from different starting points in the Burns/Miller era. During the Burns/Miller era, high unemployment made Republican Congressmen much less likely to sponsor threats whereas high inflation made them much more likely to do so. On the contrary, during the same time period, Democratic Congressmen were much more likely to sponsor threats

\_

<sup>&</sup>lt;sup>13</sup> Because Miller's tenure is so short, he is lumped with Burns. Bernanke is dropped so as to focus on the period for which we have policy outcomes: see section 5 below.

when unemployment was high and less likely to do so when inflation was high. Senators of both parties have shifted from threats when unemployment is high to threats when inflation is high, with Republicans shifting first under Volker and Democrats shifting later, under Greenspan.

#### 5. Policy

Ultimately, we care not only about when Congress chooses to pressure the Federal Reserve, but also about what the Federal Reserve does in response to that pressure. Does the Federal Reserve accede to pressure by altering the conduct of monetary policy? On the one hand, Kettl tells us the only meaningful pressure comes from the executive branch and the community of economists. And Havrilesky suggests that Congressional pressure simply makes the Federal Reserve susceptible to executive pressure as it seeks political cover. On the other hand, Grier finds a connection between money growth and the ideology of the Senate banking committee. And Weise finds evidence that FOMC decisions reference and respond to political pressure broadly defined, from the public and the executive branch as well as Congress.

#### 5.1 Base money growth

We begin by re-estimating Grier's (1991) specification for a longer sample, regressing the growth rate of base money on the lag of the GNP growth rate, the lag of central government debt, the lag change in the 3-month t-bill rate, and a measure of the ideological position of the Senate banking committee members. Grier chooses the first three variables because they foster a desire for faster growth in the money supply among members of Congress (see Laney and Willett 1983 for evidence on political monetization of the deficit.) Grier uses the ADA score of the committee chairman to measure the ideological stance of the committee. We prefer Poole and Rosenthal's DW-Nominate score (not available at the time of Grier's study) because it is based on voting record for all bills rather than those selected by a particular interest group and because it is

comparable across Congresses. We prefer the median rather than the chair because reporting a bill to the floor requires a majority vote by the full committee.

$$g_{M,t} = L.g_{GNP,t} + L\left(\frac{G}{Y}\right)_{t} + L.D.i_{3,t} + DWN_{committee \ median,t} + \varepsilon_{t}$$
(3)

Grier's sample was 1958q1 – 1984q4. We have data from 1948q1 to 2010q4 which we estimate as a whole and in sub-samples to show the change in the relationship over time. However, because the dependent variable is base money growth, we have halted our sample at the end of 2007 to avoid the extraordinary events of 2008.

As Grier notes in later work (Grier 1996), as the relationship between money growth and economic outcomes broke down in the mid-80s, changing the base money growth rate would do less to accommodate Congressional preferences. Hence we might expect that Fed accommodation of political pressures would no longer be directed at faster money growth. Indeed, as the R-squared and F-statistics show, base money growth is much better explained by these variables in the early period. It is also much more closely tied to the ideology of the median member of the Senate banking committee in the early period (Table 10, columns 2 and 3). Base money growth averaged 4.6% with a standard deviation of 5.2 percentage points in the early period and 6.5% with a standard deviation of 4.2 percentage points in the later period. The average difference between the median Republican and the median Democrat over the entire sample is roughly two thirds of a point on the DW-Nominate scale. Thus in the earlier period, a switch from a Democrat to a Republican would reduce base money growth by more than a full standard deviation. In the later period, the figure is less than half a standard deviation. In sum, base money growth has gone from being strongly related to GDP growth, government surplus, and political ideology to being mostly independent of these factors. 14

#### 5.2 Interest Rates

-

<sup>&</sup>lt;sup>14</sup> Preparation for Y2K and the response to the attacks of September 11<sup>th</sup> resulted in unusually rapid growth in the monetary base in 1999q4 and 2001q3. Introducing dummy variables for these quarters does not significantly affect the results of table P1.

While base money may have been a relevant policy target in the past, it has become much less important as the Fed has shifted to targeting the Federal Funds rate. In a review of the verbatim transcripts of FOMC meetings, Thornton (2005) dates the change to October 1982. Thus, perhaps accommodation of Congressional pressure hasn't vanished, but has simply shifted to a different intermediate target. In particular, does Congressional pressure affect the federal funds rate target chosen by the Fed?

Naturally, the causality is complicated. Current and expected future economic conditions affect both Congressional pressure and determine the federal funds rate target. Our definition of monetary policy responding to political pressure is that the Fed would, for equivalent economic conditions and forecasts, vary the interest rate target according to Congressional pressure. To ensure that we adequately control for real-time economic conditions and forecasts, we use the measure of monetary policy shocks developed by Romer and Romer (2004). They construct their measure by using Greenbook forecasts to "purge the intended funds rate of monetary policy activity taken in response to information about future economic developments." Their measure is thus constructed to be free of endogenous and anticipatory movements and thus to represent that part of policy which represents discretionary changes separate from typical responses to the economic conditions. If the Fed responds to Congressional pressure, it should show up in this series of monetary policy shocks.

Romer and Romer's monthly series runs from January 1969 through December 1996. We have extended this dataset through December 2005. <sup>15</sup> Our dataset of Congressional bills begins in January 1973. Using the dates given by Thornton, we compare the post-Volker period of federal funds rate targeting, October 1982 – December 2005, which we have split into the Volker and Greenspan eras, to the pre-Volker period of federal funds targeting, January 1973 – September 1979. <sup>16,17</sup> For each period, we regress the Romer and Romer monetary shock against a lagged measure of Congressional pressure. Our measure is the total number of bills threatening the Fed (types 4, 5 and 6)

<sup>&</sup>lt;sup>15</sup> Recall that Greenbook forecasts are available only with (at least) a five year lag. Greenbook forecasts for 2006 were not yet available on the Fed's website as of early February 2012.

<sup>&</sup>lt;sup>16</sup> We have also looked at the period 1982m10 –1996m12 to alleviate concerns that our extension of the Romer and Romer dataset, which involves some small subjectivity in interpreting the FOMC meeting minutes, is inconsistent with the original dataset. The results are very similar to those for 1982m10 – 2005m12.

<sup>&</sup>lt;sup>17</sup> Given Miller's short tenure, we have pooled Miller with Burns.

that were introduced in the previous month. Focusing for the moment on the Burns/Miller era, this raw measure of bills introduced has only a weakly statistically significant effect on monetary policy (Table 11, column 2). However, many bills will never emerge from committee and thus pose no threat. As we have noted, one of the most important indicators of a bill's likelihood of emerging from committee is the existence of even a single cosponsor (Wilson and Young 1997). If we adjust our measure to count only bills that have at least one cosponsor, there is a strong and significant relationship between Congressional pressure and the federal funds target (column 3). Including more lags of the measure of Congressional pressure (column 4) shows that monetary policy responds swiftly to credible Congressional pressure, the full response coming within the first month. Finally, we can regress the Romer and Romer monetary shock on the lagged total number of bills proposing to extend Fed powers (type 3) as a falsification test. The point estimate is indistinguishable from zero (column 1). Columns 5-8 and 9-12 repeat these regressions for the Volker and Greenspan eras.

Three things stand out in these results. First, Congressional pressure, in the form of legislation threatening the prerogatives of the Fed, has a significant effect on monetary policy only during the Burns/Miller era. During this period, the Fed accommodated Congressional pressure by lowering rates. During the Volker (1982m10 – 1987m7) and Greenspan (1987m8 – 2005m12) eras, interest rate policy was indifferent to Congressional interest. We return to this result momentarily.

Second, during the Burns/Miller era, the effect seems to be modest but non-trivial. The Romer and Romer shocks are measured in percentage points, so each additional cosponsored bill threatening the Fed changed the intended federal funds target rate by four and a half basis points during the earlier period. For our entire sample (1973 – 2010), the median month had 0 such bills, the mean was 0.75 bills, the standard deviation was 1.3 bills, and the maximum was 8 bills. Thus a month with 3 bills is not unheard of (95th percentile) and would change the federal funds target rate by as much as 14 basis points on average. As the federal funds rate is generally targeted in intervals of 25 basis points, one could think of this as increasing the chance of an additional quarter point drop (beyond whatever adjustment would be standard given the economic fundamentals and forecasts) by 56 percentage points.

Third, we are surprised at how swiftly the Fed responds to proposed legislation. This suggests that the Fed is (or was) engaged in a high frequency political battle and occasionally resorts to adjusting monetary policy in order to reduce support for a bill under consideration.

One potential problem with our empirical strategy is that we have implicitly assumed all threats are aimed at loosening monetary policy. However, both our motivating quote and Weise (2012) clearly demonstrate that Congress does, at times, pressure the Fed to tighten (or refrain from loosening) monetary policy. In this light, we must allow that derailing threats requires easing at some times and tightening at others. As a result, the estimates in Table 11 are the net response to pressure and may be an underestimate of the Fed's response to pressure from a given direction. The change in the sign of the coefficient between the early (1973:1 – 1979:9) and the later (1982:10 – 2005:12) periods may be due to a change in the direction of the prevailing Congressional winds.

While the Fed likely knows of the monetary policy preferences of a bill's framers and promoters, there is unfortunately no consistent trace of these desires left in the text of a bill that would enable useful classification. However, as the long literature on partisan political business cycles has noted, Republicans and Democrats likely have systematically different preferences over the relative importance of unemployment and inflation given their differing constituencies. Thus, we expect that threatening bills proposed by Republicans might engender different responses from the Fed than threats proposed by Democrats, on average. Table 12 shows the effects of allowing threats to have different effects by party of origin.

We would expect a negative sign on democratic pressure and a positive sign on republican pressure. The results are more complex. In the early period, both Democratic and Republican threats resulted in monetary easing, though bills sponsored by Democrats had a larger and statistically significant effect. In the later period, the point estimates for both parties have become more positive and are essentially indistinguishable from zero. Repeating the analysis using bills extending Fed powers (type 3) confirms this response is limited to bills threatening Fed prerogatives (columns 1, 3, and 5).

## 6. Summary and Discussion

We have examined the determinants of Congressional pressure. In general, poor national economic conditions—high unemployment, high inflation, high borrowing costs, and costly bank failures—lead to more bills of all types: some that seek to revoke Fed powers and some that seek to extend. We interpret this as evidence that in tough times, some Congressmen see the Fed as the problem, whereas others see it as the potential solution. Interestingly, the majority party, which has a greater electoral stake in finding solutions to poor economic times, is consistently less willing to revoke Fed powers.

We have shown that during the Burns/Miller era the Fed responded to Congressional pressure—in the form of legislation threatening Fed prerogatives—by targeting a federal funds rate lower than economic conditions would otherwise have engendered. We estimated that this response could reach economically significant magnitude when the threat was sufficiently great. By contrast, there was no significant Fed response to Congressional pressure during the Volker and Greenspan eras. Splitting by party, we find that the threats to which the Fed responded during the Burns/Miller era were initiated by Democrats.

Between the pre- and post-Volker eras, there was a significant change in the generation of Congressional pressure on the Fed. Congress moved from threatening when unemployment was high (and ignoring inflation) to threatening when inflation was high (and *refraining* from threatening when unemployment was high). The evolution of cosponsorship shows an even stronger picture of movement away from unemployment and towards a focus on inflation and borrowing costs. It is clear that there was a collective bipartisan shift in Congress' view of the capabilities and responsibilities of the Fed and thus the conditions under which the Fed was failing to perform its duties.

With this evidence in mind, we propose two potential explanations for the change in Fed response to threats, specifically those sponsored by Democratic Congressmen. First, concurrent shifts in the consensus view and practice of central banking may have reduced political pressure, especially from the Democratic Party, as well as helping the Fed resist accommodation. Chief among these would be the understanding of the short run nature of the Phillips curve, leading to a widespread norm that central banks ought to

focus primarily on price stability and be free of short-term political influences. Changes in conduct such as changing intermediate targets from monetary aggregates to interest rates, the gradually increasing volume of material published on FOMC deliberation, the development of a community of Fed watchers, and the development of rules of thumb such as Taylor rules and inflation targets also played a role.

The increase in transparency and the development of monetary policy rules make it harder to hide and justify politically motivated policy actions and thereby improve the ability of the Fed to resist Congressional pressure. As a result, Democratic Congressmen ceased to pressure for more stimulative policies to reduce unemployment. <sup>18</sup> In this story, an evolving view of the macroeconomy altered Democratic pressure to the point where it was in line with the Fed's preferred response to economic conditions. Thus Congressional pressure had no effect on policy once those conditions are controlled for in our empirical specification.

The second idea is that, rather than a change in the direction of Democratic pressure, it is the response of the Federal Reserve to a given pressure that has changed. In this story, Volker enjoyed strong support from the Carter and Reagan administrations, enabling the Volker Fed to resist Congressional (especially Democratic) pressure to lower rates. Volker's successful campaign against inflation, the ensuing economic recovery, and the Great Moderation successively restored the credibility and legitimacy of the Fed, enabling Greenspan to continue to ignore Congressional pressure through four administrations. In this story, Republican pressure was and is aligned with the Fed's preferred response. However, Democrats pressure for lower rates than the Fed would prefer. In the Burns/Miller era, the Fed didn't have the stature to resist this pressure and occasionally acceded. The Volker and Greenspan eras restored the credibility of the Fed and enabled the Fed to ignore Democratic legislative threats.

It remains difficult to distinguish between these two hypotheses and it is likely that both are operational. But the evidence of a radical shift in sponsorship and cosponsorship behavior during the Volker era suggests that increased stature and credibility of the Fed is not the entire answer. The macro-economic education of Congress and the

<sup>&</sup>lt;sup>18</sup> Naturally these need not be the same Congressmen. Change may come both from a change in the views of existing Democratic Congressmen or by a changing of the guard.

subsequent realignment of priorities relieved the Fed of cross-pressure from Congress that contradicted the interest rate policy preferred on economic grounds.

As Blinder (1998) notes, "[I]n a democracy, it seems entirely appropriate for the political authorities to set the goals and then instruct the central bank to pursue them...

[T]he goals of monetary policy are set forth in legislation but are then sufficiently imprecise that they require considerable interpretation by the central bank." (p54) Of course, as Blinder later notes, "if politicians made monetary policy on a day-to-day basis, the temptation to reach for short-term gains at the expense of the future would be hard to resist." Whether the pressure that we have documented is justified democratic feedback or short-sighted intemperance is the critical question. The generally unfavorable consensus view that Fed policy was too lax during The Great Inflation suggests this political pressure was unhelpful.

Our results show that legislative threats have had no systematic effect on interest rate policy since the 1970s. Nonetheless, we cannot yet conclude that legislative pressure has had no effect on Federal Reserve policy. The modern era of Fed-watching, transparency, and Taylor-rules leaves little room for politically-pressured manipulation of highly visible interest rates in directions not supported by economic data. Despite this, however, the Federal Reserve is an important regulator of the financial system. Regulation and oversight are a less transparent purview, where judgment can more easily be influenced by political pressure and yet still be justified ex-post as pursuing legitimate goals. It remains possible that legislators threaten legislative action against Fed powers as a means to secure favorable treatment of local financial firms. Investigation of this and related hypotheses remains for further research.

Moving forward, it seems clear that the Federal Reserve's legitimacy has been gravely weakened by the Great Recession. Nor, as our motivating quote suggests, is this challenge confined to the Fed's oversight of financial institutions; its competence to conduct open market operations and interest rate policy are also being publicly questioned. Moreover, the consensus among macroeconomists as to proper monetary policy has frayed. Will modern transparency and a community of Fed watchers help sustain widespread acceptance of an apolitical Fed? Or will a vilified Fed, constantly questioned about its mandate, opaqueness, and legitimacy and missing a unified

academic, philosophic, and political consensus, return to occasional accommodation of political pressure to safeguard its prerogatives? Our analysis, emphasizing the role of a consensus on monetary policy in forestalling political cross-pressure, suggests that the latter is a distinct possibility.

# **Bibliography**

Adler, E. Scott and John Wilkerson, *Congressional Bills Project: 1947-2008*, NSF 00880066 and 00880061.

Beck, Nathaniel (1988) "Politics and Monetary Policy" in *Political Business Cycles: the Political Economy of Money, Inflation, and Unemployment*, ed. Thomas D. Willett, Duke University Press.

Beck, Nathaniel (1990) "Congress and the Fed: why the dog does not bank in the night" in *The Political Economy of American Monetary Policy*, ed. Thomas Mayer, Cambridge University Press.

Bernanke, Ben S., Thomas Laubach, Frederic S. Mishkin, and Adam S. Posen (1999) *Inflation Targeting: Lessons from the International Experience*, Princeton University Press.

Bernhard, William and Tracy Sulkin (2011) "Commitment and Consequences: Reneging on Cosponsorship Pledges in the U.S. House" *Working papers* 

Blinder, Alan S. (1998), Central Banking in Theory and Practice, MIT Press.

Burns, Arthur (1979) "The Anguish of Central Banking" Per Jacobsson Lecture.

Chappell, Henry, Thomas Havrilesky, and Rob McGregor (1993) "Partisan Monetary Policies: Presidential Influence through the Power of Appointment" *Quarterly Journal of Economics*, pp. 185-218.

Chopin, Marc C., Steven Cole, and Michael A. Ellis (1996) "Congressional influence on U.S. monetary policy: A reconsideration of the evidence" *Journal of Monetary Economics*, v. 38, pp. 561-570.

Cukierman, Alex (1992), Central Bank Strategy, Credibility, and Independence, MIT Press.

Grier, Kevin B. (1991) "Congressional influence on U.S. monetary policy" *Journal of Monetary Economics*, v. 28, pp. 201-220.

Grier, Kevin B. (1996) "Congressional oversight committee influence on U.S. monetary policy revisited" *Journal of Monetary Economics*, v. 38, pp. 571-579.

Havrilesky, Thomas (1988a) "Monetary Policy Signaling from Administration to the Federal Reserve" *Journal of Money, Credit, and Banking* v. 20, pp. 83-99.

Havrilesky, Thomas (1988b) "Two Monetary and Fiscal Policy Myths" in *Political Business Cycles: the Political Economy of Money, Inflation, and Unemployment*, ed. Thomas D. Willett, Duke University Press.

Havrilesky, Thomas (1993) *The Pressures on American Monetary Policy*, Boston: Kluwer.

Havrilesky, Thomas (1994) "Outside Influences on Monetary Policy: A Summary of Recent Findings" *Contemporary Economic Policy* v. 12(1), pp. 46-51.

Hess, Gregory D. (2011) "Comment on: "Politics and the Fed" by Allan H. Meltzer" *Journal of Monetary Economics*, v. 58, pp. 49-53.

Kettl, Donald (1986) Leadership at the Fed, New Haven: Yale University Press.

King, Gary, and Langche Zeng. "Logistic Regression in Rare Events Data." *Political Analysis* 9 (2001): 137-163

Laney, Leroy O. and Thomas D. Willett (1983) "Presidential Politics, Budget Deficits, and Monetary Policy in the United States; 1960-1976" *Public Choice* v. 40(1), pp. 53-69.

McCarty, Nolan, Keith Poole, and Howard Rosenthal (1997) *Income Redistribution and the Realignment of American Politics*. Washington DC: SEI Press.

Meltzer, Alan (2010). A History of the Federal Reserve, volume 2: Book 2, 1970–1986. University of Chicago Press, Chicago.

Meltzer, Alan (2011) "Politics and the Fed" Journal of Monetary Economics 58:39-48.

Morris, Irwin L. (1995) "Monetary Policy Signaling and the Senate Banking Committee" *Social Science Quarterly*, v. 76(4), pp. 902-910.

Nelson, Garrison. Committees in the U.S. Congress, 1947-1992.

Pierce, James L. (1978) "The Myth of Congressional Supervision of Monetary Policy" *Journal of Monetary Economics* v. 4, pp. 363-370.

Rocca, Michael S. and Stacy B. Gordon (2010) "The Position-taking Value of Bill Sponsorship in Congress" *Political Research Quarterly*, v. 63(2), pp. 387-397.

Romer, Christina D. and David H. Romer (2004) "A New Measure of Monetary Shocks: Derivation and Implications" *American Economic Review*, v. 94(4), pp.1055-1084.

Schiller, Wendy J. (1995) "Senators as Political Entrepreneurs: Using Bill Sponsorship to Shape Legislative Agendas" *American Journal of Political Science*, v. 39(1), pp. 186-203.

Stewart, Charles and Jonathan Woon. Congressional Committee Assignments, 103rd to 112<sup>th</sup> Congresses, 1993-2011.

Tanger, Shaun M., Richard A. Seals Jr., and David N. Laband (2011) "Does Bill Cosponsorship Affect Campaign Contributions?: Evidence from the U.S. House of Representatives, 2000-2008" *Auburn University Working Paper*.

Taylor, John B. 1993. "Discretion Versus Policy Rules in Practice," *Carnegie-Rochester Conference Series on Public Policy*, 39, pp. 195-214.

Thornton, Daniel L. (2005) "When Did the FOMC Begin Targeting the Federal Funds Rate? What the Verbatim Transcripts Tell Us" *FRB St. Louis Working Paper 2004-015B*.

Tomz, Michael, Gary King, and Langche Zeng. 1999. RELOGIT: Rare Events Logistic Regression, Version 1.1 Cambridge, MA: Harvard University, October 1, <a href="http://gking.harvard.edu/">http://gking.harvard.edu/</a>

Weintraub, Robert E. (1978) "Congressional Supervision of Monetary Policy" *Journal of Monetary Economics* v. 4, pp. 341-362.

Willett, Thomas D. (1990) "Studying the Fed: toward a borader public-choice perspective" in *The Political Economy of American Monetary Policy*, ed. Thomas Mayer, Cambridge University Press.

Wilson, Rick K. and Cheryl D. Young (1997) "Cosponsorship and the U.S. Congress" *Legislative Studies Quarterly*, v. 22(1), pp. 25-43.

Woolley, John T. (1984) *The Federal Reserve and the Politics of Monetary Policy*, Cambridge: Cambridge University Press.

Table 1: System for classifying a bills' effect on the Federal Reserve System

or abolishes the Fed as we know it: (e.g. reinstate gold standard)  [2] Change in mandate: the bill changes the philosophy and/or mandate of the Fed (e.g. ending dual mandate to focus solely on price stability)  [3] Extending Fed Powers: open-ended goal with powers to match. Key: Fed has discretion in interpretation or enforcement. (e.g. in charge of new consumer protection standards.)  [4] Revoking Fed Powers: opposite of [3]: removing a set of powers from the Fed. (e.g. transfer all financial sector oversight powers to the Treasury Department.)  [5] Dictating policy: Congress legislating their preferred monetary policy outcome and simply directing the Fed to enforce. (e.g. setting an acceptable range for the federal funds rate or requiring lower interest rates for certain preferred industrial sectors)  [6] Transparency and accountability: asking the Fed to testify on certain behaviors, submit to audits, etc.	Table 1. Sy	stem for classifying a bins' effect on the Federal Reserve System
or abolishes the Fed as we know it: (e.g. reinstate gold standard)  [2] Change in mandate: the bill changes the philosophy and/or mandate of the Fed (e.g. ending dual mandate to focus solely on price stability)  [3] Extending Fed Powers: open-ended goal with powers to match. Key: Fed has discretion in interpretation or enforcement. (e.g. in charge of new consumer protection standards.)  [4] Revoking Fed Powers: opposite of [3]: removing a set of powers from the Fed. (e.g. transfer all financial sector oversight powers to the Treasury Department.)  [5] Dictating policy: Congress legislating their preferred monetary policy outcome and simply directing the Fed to enforce. (e.g. setting an acceptable range for the federal funds rate or requiring lower interest rates for certain preferred industrial sectors)  [6] Transparency and accountability: asking the Fed to testify on certain behaviors, submit to audits, etc.	Category	Summary
[2] Change in mandate: the bill changes the philosophy and/or mandate of the Fed (e.g. ending dual mandate to focus solely on price stability)  [3] Extending Fed Powers: open-ended goal with powers to match. Key: Fed has discretion in interpretation or enforcement. (e.g. in charge of new consumer protection standards.)  [4] Revoking Fed Powers: opposite of [3]: removing a set of powers from the Fed. (e.g. transfer all financial sector oversight powers to the Treasury Department.)  [5] Dictating policy: Congress legislating their preferred monetary policy outcome and simply directing the Fed to enforce. (e.g. setting an acceptable range for the federal funds rate or requiring lower interest rates for certain preferred industrial sectors)  [6] Transparency and accountability: asking the Fed to testify on certain behaviors, submit to audits, etc.	[1]	Revolutionary: the bill fundamentally changes the monetary policy system
Fed (e.g. ending dual mandate to focus solely on price stability)  [3] Extending Fed Powers: open-ended goal with powers to match. Key: Fed has discretion in interpretation or enforcement. (e.g. in charge of new consumer protection standards.)  [4] Revoking Fed Powers: opposite of [3]: removing a set of powers from the Fed. (e.g. transfer all financial sector oversight powers to the Treasury Department.)  [5] Dictating policy: Congress legislating their preferred monetary policy outcome and simply directing the Fed to enforce. (e.g. setting an acceptable range for the federal funds rate or requiring lower interest rates for certain preferred industrial sectors)  [6] Transparency and accountability: asking the Fed to testify on certain behaviors, submit to audits, etc.		or abolishes the Fed as we know it: (e.g. reinstate gold standard)
<ul> <li>[3] Extending Fed Powers: open-ended goal with powers to match. Key: Fed has discretion in interpretation or enforcement. (e.g. in charge of new consumer protection standards.)</li> <li>[4] Revoking Fed Powers: opposite of [3]: removing a set of powers from the Fed. (e.g. transfer all financial sector oversight powers to the Treasury Department.)</li> <li>[5] Dictating policy: Congress legislating their preferred monetary policy outcome and simply directing the Fed to enforce. (e.g. setting an acceptable range for the federal funds rate or requiring lower interest rates for certain preferred industrial sectors)</li> <li>[6] Transparency and accountability: asking the Fed to testify on certain behaviors, submit to audits, etc.</li> </ul>	[2]	Change in mandate: the bill changes the philosophy and/or mandate of the
has discretion in interpretation or enforcement. (e.g. in charge of new consumer protection standards.)  [4] Revoking Fed Powers: opposite of [3]: removing a set of powers from the Fed. (e.g. transfer all financial sector oversight powers to the Treasury Department.)  [5] Dictating policy: Congress legislating their preferred monetary policy outcome and simply directing the Fed to enforce. (e.g. setting an acceptable range for the federal funds rate or requiring lower interest rates for certain preferred industrial sectors)  [6] Transparency and accountability: asking the Fed to testify on certain behaviors, submit to audits, etc.		Fed (e.g. ending dual mandate to focus solely on price stability)
consumer protection standards.)  [4] Revoking Fed Powers: opposite of [3]: removing a set of powers from the Fed. (e.g. transfer all financial sector oversight powers to the Treasury Department.)  [5] Dictating policy: Congress legislating their preferred monetary policy outcome and simply directing the Fed to enforce. (e.g. setting an acceptable range for the federal funds rate or requiring lower interest rates for certain preferred industrial sectors)  [6] Transparency and accountability: asking the Fed to testify on certain behaviors, submit to audits, etc.	[3]	Extending Fed Powers: open-ended goal with powers to match. Key: Fed
<ul> <li>[4] Revoking Fed Powers: opposite of [3]: removing a set of powers from the Fed. (e.g. transfer all financial sector oversight powers to the Treasury Department.)</li> <li>[5] Dictating policy: Congress legislating their preferred monetary policy outcome and simply directing the Fed to enforce. (e.g. setting an acceptable range for the federal funds rate or requiring lower interest rates for certain preferred industrial sectors)</li> <li>[6] Transparency and accountability: asking the Fed to testify on certain behaviors, submit to audits, etc.</li> </ul>		has discretion in interpretation or enforcement. (e.g. in charge of new
Fed. (e.g. transfer all financial sector oversight powers to the Treasury Department.)  [5] Dictating policy: Congress legislating their preferred monetary policy outcome and simply directing the Fed to enforce. (e.g. setting an acceptable range for the federal funds rate or requiring lower interest rates for certain preferred industrial sectors)  [6] Transparency and accountability: asking the Fed to testify on certain behaviors, submit to audits, etc.		consumer protection standards.)
Department.)  [5] Dictating policy: Congress legislating their preferred monetary policy outcome and simply directing the Fed to enforce. (e.g. setting an acceptable range for the federal funds rate or requiring lower interest rates for certain preferred industrial sectors)  [6] Transparency and accountability: asking the Fed to testify on certain behaviors, submit to audits, etc.	[4]	Revoking Fed Powers: opposite of [3]: removing a set of powers from the
<ul> <li>[5] Dictating policy: Congress legislating their preferred monetary policy outcome and simply directing the Fed to enforce. (e.g. setting an acceptable range for the federal funds rate or requiring lower interest rates for certain preferred industrial sectors)</li> <li>[6] Transparency and accountability: asking the Fed to testify on certain behaviors, submit to audits, etc.</li> </ul>		Fed. (e.g. transfer all financial sector oversight powers to the Treasury
outcome and simply directing the Fed to enforce. (e.g. setting an acceptable range for the federal funds rate or requiring lower interest rates for certain preferred industrial sectors)  [6] Transparency and accountability: asking the Fed to testify on certain behaviors, submit to audits, etc.		Department.)
acceptable range for the federal funds rate or requiring lower interest rates for certain preferred industrial sectors)  [6] Transparency and accountability: asking the Fed to testify on certain behaviors, submit to audits, etc.	[5]	Dictating policy: Congress legislating their preferred monetary policy
for certain preferred industrial sectors)  [6] Transparency and accountability: asking the Fed to testify on certain behaviors, submit to audits, etc.		outcome and simply directing the Fed to enforce. (e.g. setting an
[6] Transparency and accountability: asking the Fed to testify on certain behaviors, submit to audits, etc.		acceptable range for the federal funds rate or requiring lower interest rates
behaviors, submit to audits, etc.		for certain preferred industrial sectors)
	[6]	Transparency and accountability: asking the Fed to testify on certain
[7] Referencing the Fed as an expert in a trivial way F g calling on them for		behaviors, submit to audits, etc.
[1] Rejereneing the rea as an expert in a dividi way. E.g. canning on them for	[7]	Referencing the Fed as an expert in a trivial way. E.g. calling on them for
testimony or to collect and publish data. Key: no discretion for the Fed,		testimony or to collect and publish data. Key: no discretion for the Fed,
they are simply a tool.		
[0] Irrelevant (e.g. referring to the Federal Petroleum Reserve.)	[0]	

**Table 2: Data Sources** 

Table 2. Data Sources		
Concept	Definition	Source
Bill Data	Sponsors, dates, committee, summary	THOMAS
Voting data	Each legislator's vote (Y/N) on bills in our	Voteview
	sample that reached the floor	
Unemployment	Monthly rate for state and national	BLS
Inflation	12 month % change in CPI (urban)	FRED
Interest Rates	Nominal 10 year t-bond yield	FRED
Ideology	Poole and Rosenthal DW-Nominate 1 <sup>st</sup>	Voteview
	dimension score	
Legislator information	Dates in office, party affiliation,	
	committee chairmanship	
Election outcomes	Vote percentage by party for each district	
Committee Assignments	Members of Senate banking committee	Cannon, Nelson, Stewart, and Woon

Table 3: Bills by type and chamber of Congress, 1973-2010

House Proposed Reported to the Floor Passed on the Floor							
Туре	Freq.	Freq.	Marg.	Freq.	Marg.	Cum.	
1: Revolutionary	33	2	6.1%	0	0.0%	0.0%	
2: Change Mandate	8	1	12.5%	1	100.0%	12.5%	
3: Extend Powers	423	113	26.7%	84	74.3%	19.9%	
4: Revoke Powers	80	18	22.5%	14	77.8%	17.5%	
5: Dictate Policy	115	13	11.3%	7	53.8%	6.1%	
6: Accountability	261	41	15.7%	34	82.9%	13.0%	
7: Reference	412	140	34.0%	115	82.1%	27.9%	
0: Irrelevant	426	120	28.2%	104	86.7%	24.4%	
All bills*	1576	366	23.2%	286	78.1%	18.1%	

en	

	Proposed	Reported to the Floor		Proposed Reported to		Pass	ed on the Flo	or
Type	Freq.	Freq.	Marg.	Freq.	Marg.	Cum.		
1: Revolutionary	9	0	0.0%	0		0.0%		
2: Change Mandate	3	0	0.0%	0		0.0%		
3: Extend Powers	227	48	21.1%	34	70.8%	15.0%		
4: Revoke Powers	38	9	23.7%	3	33.3%	7.9%		
5: Dictate Policy	40	4	10.0%	2	50.0%	5.0%		
6: Accountability	119	35	29.4%	21	60.0%	17.6%		
7: Reference	181	58	32.0%	38	65.5%	21.0%		
0: Irrelevant	215	60	27.9%	39	65.0%	18.1%		
All bills*	726	176	24.2%	108	61.4%	14.9%		

\*Notice the category "all bills" is not equal to the total of the eight individual categories because many bills are placed in more than one category. Marg. refers to the percentage of bills that proceed from one legislative step to the next: from "Proposed" to "Reported to the Floor" to "Passed on the Floor." Cum. refers to the percentage of bill proposals that are passed on the floor (Note that passage into law additionally requires passage by the other chamber, reconciliation of the two chambers' bills in conference committee, and the signature of the President.)

Table 4: Frequent sponsors of legislation addressing the Federal Reserve System

Legislator	District(s)	Count
St Germain, Fernand	RI - 1	99
Proxmire, William	WI	80
LaFalce, John	NY - 29/36	55
Gonzalez, Henry	TX - 20	54
Schumer, Charles	NY - 9 / NY	41
Annunzio, Frank	IL - 5/11	39
Reuss, Henry	WI - 4/5	38
Barnard, Doug, Jr	GA - 7/10	37
Garn, EJ	UT	34
Leach, James	IA - 1	32
Riegle, Donald, Jr	MI	32
Top 11		541
9 different legislators		21 - 30
23 different legislators		11 - 20
220 different legislators		3 – 10
125 different legislators		2
301 different legislators		1
Remaining 689		2132



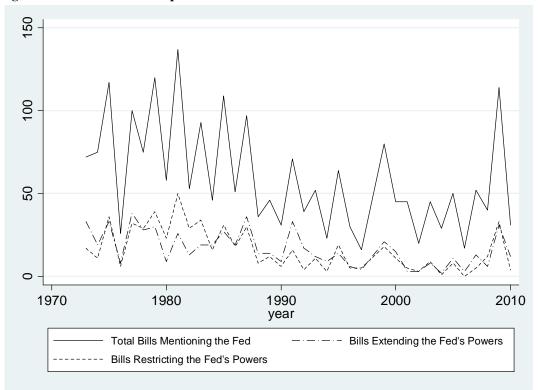


Table 5:
Determinants of sponsorship of bills pertaining to the Federal Reserve

	Dependent variable: probability a Congressman sponsored a bill of this type					
•	(1) (2) (3) (4) (5)					
		Senate			House	
Bill Type (see Table 1)	Extensions	Threats	References	Extensions	Threats	References
	[3]	[4,5,6]	[7]	[3]	[4,5,6]	[7]
<b>National Economic Conditions</b>						
National Unemployment Rate	1.132**	1.235***	0.977	0.996	1.131***	0.998
	(0.067)	(0.069)	(0.061)	(0.041)	(0.049)	(0.042)
National Inflation Rate	1.062**	1.133***	1.064*	1.068***	1.161***	0.973
	(0.030)	(0.036)	(0.034)	(0.025)	(0.024)	(0.025)
Real yield on 10-year T-bonds	1.010	1.158***	1.017	1.075**	1.063*	0.957
	(0.042)	(0.053)	(0.046)	(0.035)	(0.034)	(0.034)
Ln(Value of Failed Banks, Nationwide)	1.105	1.054	0.930	1.079	1.141**	1.007
(\$trillion)	(0.085)	(0.080)	(0.080)	(0.062)	(0.066)	(0.064)
<b>Local Economic Conditions</b>						
Rep's State Unemployment Rate	0.995	1.009	0.970	0.810***	0.924*	0.900**
-National Unemployment Rate	(0.036)	(0.041)	(0.048)	(0.032)	(0.037)	(0.041)
Rep's Regional Inflation	1.115	1.062	1.182	1.063	0.982	1.115
- National Inflation	(0.147)	(0.137)	(0.203)	(0.108)	(0.092)	(0.127)
Ln(Value of Failed Banks in Reps' state)	1.007	1.000	1.060**	1.027**	0.971*	1.029**
- Ln(Value of Failed Banks nationally)	(0.023)	(0.024)	(0.024)	(0.013)	(0.015)	(0.014)
<b>Political Conditions</b>						
Rep's party controls the WH	0.909	1.073	0.815	1.038	1.121	0.980
	(0.182)	(0.249)	(0.170)	(0.148)	(0.185)	(0.144)
Rep's party has a majority in chamber	2.115***	1.169	1.878***	2.406***	1.788***	2.316***
	(0.385)	(0.193)	(0.330)	(0.340)	(0.258)	(0.323)
DW-nominate score	0.343***	0.529**	0.631*	0.545***	0.711*	0.711*
(positive is conservative)	(0.089)	(0.140)	(0.161)	(0.083)	(0.133)	(0.125)
Reps' Upcoming re-election was close	1.285	0.974	1.300	0.631**	1.002	0.628**
(vote difference < 10%)	(0.294)	(0.263)	(0.314)	(0.124)	(0.163)	(0.128)
First year of the Congress	1.756***	1.998***	2.550***	2.134***	2.321***	2.130***
	(0.271)	(0.327)	(0.459)	(0.252)	(0.279)	(0.258)
N	41912	41912	41912	182000	182000	182000

This table presents coefficient estimates relating sponsorship activity by an individual legislator in a particular month to current economic and political conditions of that legislator, his/her district, and the country as a whole. The method of estimation is King and Zeng's rare events logit. Coefficients reported are likelihood ratios. Standard errors are reported in parentheses. \*\*\*, \*\*, \*\* indicate the coefficient estimate is statistically distinct from 1 at the 1%, 5%, 10% levels respectively.

Table 6: Determinants of co-sponsorship of bills pertaining to the Federal Reserve

	Dependent variable: probability a Congressman sponsored a bill of this type					
	(1) (2) (3) (4) (5)					
		Senate			House	
Bill Type (see Table 1)	Extensions	Threats	References	Extensions	Threats	References
_	[3]	[4,5,6]	[7]	[3]	[4,5,6]	[7]
<b>National Economic Conditions</b>						
National Unemployment Rate	1.140***	1.178***	0.886***	0.873***	1.051***	0.914***
	(0.034)	(0.033)	(0.025)	(0.010)	(0.009)	(0.010)
National Inflation Rate	0.944***	1.169***	1.074***	0.969***	1.040***	0.952***
	(0.017)	(0.016)	(0.015)	(0.008)	(0.006)	(0.007)
Real yield on 10-year T-bonds	0.943***	1.134***	0.982	1.014	1.030***	0.905***
	(0.020)	(0.019)	(0.018)	(0.010)	(0.009)	(0.009)
Ln(Value of Failed Banks, Nationwide)	0.985	1.066**	1.165***	1.278***	1.241***	1.084***
(\$trillion)	(0.040)	(0.032)	(0.035)	(0.018)	(0.019)	(0.018)
<b>Local Economic Conditions</b>						
Rep's State Unemployment Rate	0.999	1.038**	1.003	0.914***	1.012	0.983
-National Unemployment Rate	(0.022)	(0.019)	(0.022)	(0.011)	(0.010)	(0.012)
Rep's Regional Inflation	0.967	0.930	1.108*	0.936**	0.910***	0.985
- National Inflation	(0.063)	(0.046)	(0.063)	(0.031)	(0.025)	(0.030)
Ln(Value of Failed Banks in Reps' state)	1.025**	0.980**	1.012	1.006	0.992**	0.993
- Ln(Value of Failed Banks nationally)	(0.012)	(0.010)	(0.010)	(0.004)	(0.003)	(0.004)
<b>Political Conditions</b>						
Rep's party controls the WH	0.980	0.809**	0.779***	0.890***	0.868***	0.816***
	(0.089)	(0.071)	(0.062)	(0.034)	(0.033)	(0.030)
Rep's party has a majority in chamber	1.164**	0.842***	1.245***	1.765***	1.076**	1.507***
	(0.094)	(0.053)	(0.088)	(0.062)	(0.033)	(0.051)
DW-nominate score	0.641***	0.448***	0.721***	0.437***	0.701***	0.595***
(positive is conservative)	(0.074)	(0.046)	(0.074)	(0.019)	(0.029)	(0.024)
Reps' Upcoming re-election was close	1.192	1.045	1.339***	0.881***	0.943	0.938
(vote difference < 10%)	(0.146)	(0.107)	(0.135)	(0.043)	(0.041)	(0.042)
First year of the Congress	3.695***	1.543***	1.893***	3.543***	4.697***	4.170***
	(0.337)	(0.097)	(0.134)	(0.128)	(0.164)	(0.150)
N	41912	41912	41912	182000	182000	182000

This table presents coefficient estimates relating co-sponsorship activity by an individual legislator in a particular month to current economic and political conditions of that legislator, his/her district, and the country as a whole. The method of estimation is King and Zeng's rare events logit. Coefficients reported are likelihood ratios. Standard errors are reported in parentheses. \*\*\*, \*\*, \*\* indicate the coefficient estimate is statistically distinct from 1 at the 1%, 5%, 10% levels respectively.

Table 7:
Determinants of voting on bills pertaining to the Federal Reserve

	Dependent var.: probability a Congressman votes in favor of a bill of this type					
	(1)	(2)	(3)	(4)	(5)	(6)
		Senate			House	
Bill Type (see Table 1)	Extensions	Threats	References	Extensions	Threats	References
	[3]	[4,5,6]	[7]	[3]	[4,5,6]	[7]
<b>National Economic Conditions</b>						
National Unemployment Rate	0.839***	0.930	0.894*	0.939	0.945	0.984
	(0.049)	(0.047)	(0.054)	(0.047)	(0.039)	(0.047)
National Inflation Rate	1.034	1.032	1.033	1.117***	1.126***	1.012
	(0.033)	(0.031)	(0.035)	(0.045)	(0.042)	(0.032)
Real yield on 10-year T-bonds	1.100***	0.967	1.020	1.023	1.024	0.979
	(0.039)	(0.030)	(0.036)	(0.031)	(0.025)	(0.029)
Ln(Value of Failed Banks, Nationwide)	1.150	1.409***	1.101	0.984	0.99	1.278**
(\$trillion)	(0.128)	(0.131)	(0.123)	(0.048)	(0.061)	(0.123)
<b>Local Economic Conditions</b>						
Rep's State Unemployment Rate	0.994	0.990*	1.011	0.997	0.999	0.993
-National Unemployment Rate	(0.011)	(0.005)	(0.010)	(0.007)	(0.008)	(0.007)
Rep's Regional Inflation	1.020	0.931**	1.010	1.028	1.067**	1.021
- National Inflation	(0.047)	(0.030)	(0.050)	(0.057)	(0.030)	(0.050)
Ln(Value of Failed Banks in Reps' state)	1.091	1.346***	1.061	0.988	0.988	1.284***
- Ln(Value of Failed Banks nationally)	(0.121)	(0.125)	(0.118)	(0.047)	(0.060)	(0.124)
<b>Political Conditions</b>						
Rep's party controls the WH	0.599*	0.431***	0.695**	0.773	0.833	0.867
	(0.160)	(0.108)	(0.127)	(0.155)	(0.187)	(0.155)
Rep's party has a majority in chamber	0.841	1.307	0.814	0.747	0.908	0.971
	(0.218)	(0.329)	(0.148)	(0.147)	(0.204)	(0.170)
DW-nominate score	0.492**	1.825**	0.917	0.705	0.978	0.686*
(positive is conservative)	(0.158)	(0.448)	(0.228)	(0.164)	(0.253)	(0.154)
Reps' Upcoming re-election was close	0.960	0.929*	1.057	0.951	0.930	1.008
(vote difference < 10%)	(0.061)	(0.041)	(0.051)	(0.058)	(0.049)	(0.044)
N	14841	23272	22415	74039	72195	95251

This table presents coefficient estimates relating the vote of an individual legislator in a particular month to current economic and political conditions of that legislator, his/her district, and the country as a whole. Coefficients reported are likelihood ratios. Standard errors are reported in parentheses. \*\*\*, \*\*, \* indicate the coefficient estimate is statistically distinct from 1 at the 1%, 5%, 10% levels respectively.

Table 8: How the Determinants of Sponsorship have Varied Across Fed Chairmanships

Dep. Var.: probability a Congressman has sponsored a bill threatening the Fed							
(1)   (2)   (3)   (4)   (5)							
		Senate			House		
Bill cosponsored by member of this party	All	Democrat	Republican	All	Democrat	Republican	
National Unemployment Rate	0.911	1.039	0.800	0.823**	0.838	0.745*	
	(0.127)	(0.193)	(0.175)	(0.081)	(0.107)	(0.123)	
Unemployment Rate * Chairman Burns	1.189	1.065	1.170	1.330*	1.338	1.300	
	(0.280)	(0.341)	(0.425)	(0.211)	(0.258)	(0.415)	
Unemployment Rate * Chairman Volker	1.209	1.206	1.142	1.388***	1.487***	1.099	
	(0.171)	(0.217)	(0.269)	(0.131)	(0.179)	(0.187)	
National Inflation Rate	1.063	1.252	0.822	1.305***	1.350***	1.185	
	(0.139)	(0.199)	(0.191)	(0.112)	(0.150)	(0.165)	
Inflation Rate * Chairman Burns	0.946	0.954	1.093	0.797	0.820	0.760	
	(0.210)	(0.285)	(0.378)	(0.122)	(0.155)	(0.218)	
Inflation Rate * Chairman Volker	0.981	0.897	1.149	0.815**	0.785**	0.964	
	(0.133)	(0.149)	(0.277)	(0.075)	(0.094)	(0.155)	
Real yield of 10-year T-bonds	1.078	1.139	0.981	1.127	1.232*	0.973	
	(0.141)	(0.203)	(0.200)	(0.097)	(0.142)	(0.123)	
Real T-bond yield * Chairman Burns	0.952	1.073	0.838	0.814	0.856	0.653	
	(0.239)	(0.414)	(0.207)	(0.145)	(0.190)	(0.225)	
Real T-bond yield * Chairman Volker	1.002	0.951	1.134	0.865	0.791*	1.078	
	(0.147)	(0.188)	(0.257)	(0.084)	(0.101)	(0.174)	
First Year of the Congress	1.749***	1.573*	2.270***	2.228***	2.472***	1.770*	
	(0.295)	(0.338)	(0.649)	(0.268)	(0.362)	(0.403)	
Constant	0.002	0.000	0.007	0.001	0.000	0.002	
	(0.001)	(0.000)	(0.008)	(0.000)	(0.000)	(0.002)	
N	39642	20480	18938	173000	96804	75263	

This table presents coefficient estimates relating sponsorship activity by an individual legislator in a particular month to current economic and political conditions of that legislator, his/her district, and the country as a whole. The method of estimation is King and Zeng's rare events logit. Coefficients reported are likelihood ratios. Standard errors are reported in parentheses. \*\*\*, \*\*, \*\* indicate the coefficient estimate is statistically distinct from 1 at the 1%, 5%, 10% levels respectively.

Table 9: How the Determinants of Cosponsorship have Varied Across Fed Chairmanships

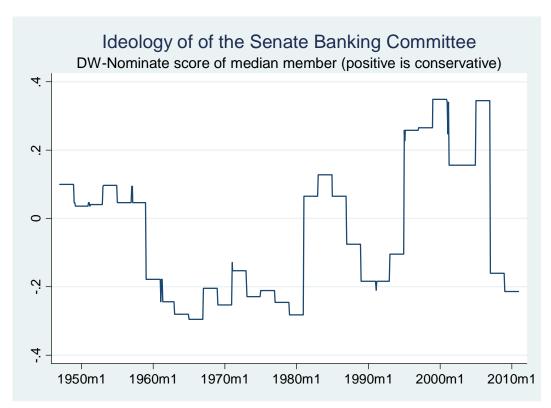
Dep. Var.: prob. a Congressman has co-sponsored a bill threatening the Fed							
	(1) (2) (3) (4) (5)						
		Senate			House		
Bill cosponsored by member of this party	Both	Democrat	Republican	Both	Democrat	Republican	
National Unemployment Rate	0.820***	0.839***	0.690***	0.899***	0.875***	0.916**	
	(0.047)	(0.071)	(0.057)	(0.020)	(0.024)	(0.033)	
Unemployment Rate * Chairman Burns	2.239***	2.489***	1.966***	1.582***	2.214***	0.680***	
	(0.335)	(0.514)	(0.476)	(0.097)	(0.186)	(0.088)	
Unemployment Rate * Chairman Volker	1.483***	1.793***	0.983	1.013	1.132***	0.773***	
	(0.096)	(0.163)	(0.119)	(0.026)	(0.036)	(0.035)	
National Inflation Rate	1.234***	1.390***	1.024	0.940**	0.976	0.858***	
	(0.048)	(0.068)	(0.072)	(0.023)	(0.029)	(0.037)	
Inflation Rate * Chairman Burns	0.563***	0.545***	0.612**	0.616***	0.444***	1.221*	
	(0.081)	(0.108)	(0.146)	(0.036)	(0.038)	(0.128)	
Inflation Rate * Chairman Volker	0.947	0.867***	1.196**	1.094***	0.995	1.359***	
	(0.040)	(0.044)	(0.104)	(0.028)	(0.032)	(0.063)	
Real yield of 10-year T-bonds	1.883***	2.416***	1.392***	0.867***	0.866***	0.853***	
	(0.145)	(0.288)	(0.128)	(0.017)	(0.023)	(0.026)	
Real T-bond yield * Chairman Burns	0.382***	0.308***	0.546***	0.526***	0.424***	0.773***	
	(0.063)	(0.072)	(0.094)	(0.031)	(0.036)	(0.083)	
Real T-bond yield * Chairman Volker	0.583***	0.452***	0.946	1.228***	1.151***	1.464***	
	(0.047)	(0.054)	(0.112)	(0.032)	(0.038)	(0.064)	
First Year of the Congress	1.477***	1.230**	2.351***	3.770***	3.792***	3.846**	
	(0.093)	(0.096)	(0.295)	(0.136)	(0.171)	(0.246)	
Constant	0.002***	0.001***	0.020***	0.028***	0.034***	0.028***	
	(0.001)	(0.000)	(0.008)	(0.003)	(0.005)	(0.006)	
N	39642	20480	18938	173000	96804	75263	

This table presents coefficient estimates relating co-sponsorship activity by an individual legislator in a particular month to current economic and political conditions of that legislator, his/her district, and the country as a whole. The method of estimation is King and Zeng's rare events logit. Coefficients reported are likelihood ratios. Standard errors are reported in parentheses. \*\*\*, \*\*, \*\* indicate the coefficient estimate is statistically distinct from 1 at the 1%, 5%, 10% levels respectively.

Table 10: Base Money Growth and the Senate Banking Committee

Buse Honey Grown	Dependent variable: Base Money Growth Rate						
	(1)	(3)					
	1948q1 - 2007q4	1948q1 – 1984q4	1985q1 - 2007q4				
Lag of quarterly GNP growth rate	0.294***	0.348***	-0.165				
	(0.100)	(0.100)	(0.350)				
Lag of Government Surplus	-74.701***	-82.749***	-19.924				
	(13.560)	(16.680)	(28.670)				
Lag of Change in 3-month T-bill yield	-0.937**	-0.729	-1.949*				
	(0.420)	(0.460)	(1.030)				
Median member of Senate banking committee	-2.294	-7.589***	-2.769				
(DW-Nominate score: conservative is positive)	(1.620)	(2.410)	(2.780)				
Constant	2.690***	1.252	7.102***				
	(0.770)	(0.830)	(2.310)				
N	239	147	92				
F	10.81	12.69	2.5				
R-squared	0.156	0.263	0.103				
rho	0.078	-0.024	0.07				

This table explains the growth rate of the base money supply as a function of the ideology of the median member of the Senate banking committee as well as several economic variables. The specification closely follows Grier (1991). Standard errors are reported in parentheses. \*\*\*, \*\*, \* indicate the coefficient estimate is statistically distinct from 0 at the 1%, 5%, 10% levels respectively.



**Figure 2:** This figure plots the DW-Nominate score of the median member of the Senate Banking Committee (positive is conservative). When the committee consists of an even number of members, the arithmetic average of the co-medians is plotted. While the variation is largely driven by the oscillating partisan control of the Senate (which determines which party nominates a majority of the committee), there is some variation within a given party's control.

Table 11 Congressional pressure and the Federal Funds Rate

	Dependent Variable: Romer and Romer monetary policy shock											
	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]
		Burns/Miller			Volker				Greenspan			
		1973m1 – 1979m9			1982m10 – 1987m9				1987m10 - 2005m12			
# of cosponsored Bills (type 3)	-0.006				0.0003				-0.0003			
introduced last month	(0.023)				(0.015)				(0.008)			
# of Bills (types 4, 5, 6)		-0.023*				0.002				0.002		
introduced last month		(0.013)				(0.009)				(0.008)		
# of cosponsored Bills (types 4, 5,			-0.046**	-0.044*			0.024	0.024			0.012	0.010
6) introduced last month			(0.023)	(0.023)			(0.017)	(0.017)			(0.010)	(0.010)
# of cosponsored Bills (types 4, 5,				-0.013				0.004				0.017
6) introduced two months ago				(0.023)				(0.017)				(0.010)
# of cosponsored Bills (types 4, 5,				0.032				-0.008				-0.004
6) introduced three months ago				(0.024)				(0.016)				(0.010)
Senate Banking Committee	-1.689	-2.347	-1.952	-2.259	-0.367	-0.360	-0.266	-0.268	-0.044	-0.043	-0.047	-0.049
Median (positive is conservative)	(1.717)	(1.663)	(1.667)	(1.718)	(0.382)	(0.370)	(0.367)	(0.382)	(0.052)	(0.052)	(0.051)	(0.052)
Constant	-0.429	-0.543	-0.462	-0.555	0.054	0.049	0.019	0.024	0.022	0.019	0.016	0.011
	(0.405)	(0.386)	(0.391)	(0.404)	(0.042)	(0.043)	(0.043)	(0.053)	(0.013)	(0.013)	(0.012)	(0.014)
N	80	80	80	78	58	58	58	58	219	219	219	219
Adjusted R-squared	-0.013	0.027	0.036	0.042	-0.018	-0.017	0.020	-0.011	-0.006	-0.006	0.001	0.004

This table explains monetary policy shocks as a function of legislative pressure. The measure of monetary policy shocks is that of Romer and Romer (AER 2004), extended by the authors through 2005m12. As such, this measure already accounts for adjustments to current and forecasted economic conditions and represents the unanticipated component of changes in the federal funds rate. Standard errors are reported in parentheses. \*\*\*, \*\*, and \* indicate the coefficient estimate is statistically distinct from 0 at the 1%, 5%, and 10% levels respectively.

Table 12 Congressional Pressure and the Federal Funds Rate by Party

	Dependent Variable: Romer and Romer monetary policy shock								
	[1]	[2]	[3]	[4]	[5]	[6]			
	Burns	s/Miller	Voll	ker	Greenspan				
	1973m1	– 1979m9	1982m10 - 1987m9		1987m10 - 2005m1				
# of cosponsored Bills (type 3)	-0.019		0.007		-0.014				
introduced last month by Democrats	(0.026)		(0.019)		(0.014)				
# of cosponsored Bills (type 3)	0.077		-0.022		0.010				
introduced last month by Republicans	(0.064)		(0.042)		(0.011)				
# of cosponsored Bills (types 4,5,6)		-0.049**		0.027		0.027*			
introduced last month by Democrats		(0.024)		(0.020)		(0.014)			
# of cosponsored Bills (types 4,5,6)		-0.017		0.013		-0.010			
introduced last month by Republicans		(0.057)		(0.037)		(0.018)			
Senate Banking Committee Median	-1.811	-1.987	-0.332	-0.270	-0.061	-0.022			
(positive is conservative)	(1.787)	(1.680)	(0.388)	(0.373)	(0.054)	(0.053)			
Constant	-0.459	-0.471	0.052	0.021	0.025*	0.013			
	(0.421)	(0.394)	(0.043)	(0.043)	(0.013)	(0.012)			
Test Rep = Dem ( $Prob > F$ )	0.178	0.590	0.571	0.737	0.216	0.130			
N	80	80	58	58	219	219			
Adjusted R-squared	-0.004	0.027	-0.031	0.003	-0.004	0.007			
Rho	0.312	0.272	0.113	0.108	0.063	0.040			

This table continues Table 11, now allowing the influence of bills to depend on the party of the sponsor. The measure of monetary policy shocks is that of Romer and Romer (AER 2004), extended by the authors through 2005m12. As such, this measure already accounts for responses to current and forecasted economic conditions and represents the unanticipated component of changes in the federal funds rate. Standard errors are reported in parentheses. \*\*\*, \*\*, and \* indicate the coefficient estimate is statistically distinct from 0 at the 1%, 5%, and 10% levels respectively.