

**BRAVE NEW WORLD? MACRO-PRUDENTIAL POLICY AND THE NEW POLITICAL ECONOMY OF
THE FEDERAL RESERVE**

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ABSTRACT

The Financial Crisis of 2007 ushered in new responsibilities for central banks, particularly for what is termed “macro-prudential policy,” or MPP. The goal of this policy is to monitor and contain overall risk in the financial sector. Implementing MPP, however, carries the potential for deep distributional conflict and the politicization of central bank policy. In light of this risk, this essay analyses the institutional implications of MPP for a leading central bank, the U.S. Federal Reserve. Specifically, how will MPP affect the autonomy of the Fed to set policy it thinks right? Based on interviews with financial regulators, including Fed staffers and policymakers, and a case study of the “Volcker Revolution,” I identify the factors that have contributed to Fed autonomy in the conduct of monetary policy and assess the extent to which those same factors hold for MPP. I close with an assessment of what MPP means for the new political economy of the Fed in particular and developed world central banks more broadly.

I. INTRODUCTION

The financial crisis that began in 2007 brought about a strange and in some ways ironic shift in central bank powers and responsibilities, both for the Federal Reserve and for other central banks. While the Federal Reserve was roundly criticized for not having foreseen the full costs associated with financial shocks, the key legislative response, the Dodd-Frank Act, assigned new powers and responsibilities to that agency.¹ Those powers lay in a policy area that was little-known in the US prior to the financial crisis. Macro-prudential policy (henceforth MPP) is intended to gauge the “systemic risks” to overall financial stability (rather than the stability of individual firms) and to consider appropriate responses.

MPP, as Andrew Haldane (2009) has written, is “a new ideology and a big idea.” It marks a profound shift because it assumes that financial sector decisions, while individually rational, can result in excessive overall risk and financial crises. As such, MPP foresees tighter regulation of financial institutions and greater control over their operations. As Baker writes, “macro-prudential regulation implies a return to regulators telling banks what they should do.” (2013, p. 7). To date, however, there has been little assessment of the *institutional* impact of MPP on the Fed, or other central banks, despite the strong likelihood that regulated entities will resist tighter regulation and that conflicts over MPP will be mediated through a political process.²

Such an assessment is of obvious importance. The responsibilities for MPP mark a major shift in the Fed’s mandate and a key legislative attempt to avoid financial crises. Further, and since this mandate could politicize the Fed’s activities, it may also erode the institutional independence that has been held central to a credible low-inflation policy. In this manuscript I consider the effects of MPP on the political economy of the Federal Reserve. Simply put, how will the execution of MPP affect the Fed’s overall independence and what does this tell us about

the new political economy of central banks? The analysis also bears on normative considerations of optimal policy. If, as Rajan (2010) contends, the democratic process is biased towards excessive risk-taking, then agency independence in setting MPP is welfare enhancing.

In examining the independence of the Federal Reserve I look at an attribute that, when applied to government agencies in general, is often termed “autonomy.” This attribute is also distinct from the concept of bureaucratic discretion. Carpenter (2001) defines bureaucratic discretion as the narrow leeway enjoyed by any agency to set policy within the existing structure of Congressional delegation. Autonomy, on the other hand, is taken as a more comprehensive ability to affect the delegation relationship. Thus autonomy describes an agency’s ability to manage and deflect political efforts to control policy. As a result of this ability, more autonomous agencies can move policy closer to their own preferences. Further, and when agencies internalize general welfare, more autonomous agencies can set policy that imposes costs on regulated entities and protects consumers.

Why might the Fed’s autonomy in the new role of MPP be contested? The distributive import of MPP springs from the fact that systemic risk is “pro-cyclical”.³ As the value of assets rise, in what may later be termed a credit boom, the value placed on a firm’s capital will also rise, permitting individual institutions to lend and borrow more, taking on additional risk, while appearing to maintain its capital ratio at benchmark levels. Because this will be true of all firms, the sector as a whole will add “leverage”, expanding its assets and liabilities relative to capital, in the upturn of a credit cycle and will deleverage during downturns.

Based on this insight, the first assumption of macro-prudential analysis is that policy-makers should add to capital ratios (or other risk provisions) during the growth phase of the cycle and ease during recessions.⁴ MPP therefore involves requiring large banks, and other financial

firms, to hold additional capital, to safeguard against risk, just as the prospects for profit-making are greatest. Raising capital requirements means that resources must be directed away from paying dividends or investing in higher return assets. As a result, income flows, profitability and share price are expected to fall.

Because the firms affected by MPP are well poised to mobilize political support, robust operation of the new mandate carries the potential for significant conflict with Congress and attempts at political control of Fed policy decisions. In assessing whether or not the Fed can be autonomous in MPP, therefore, I focus on the factors highlighted by work in American Politics on the degree to which Congress will defer to an agency. First, as an organization, does the Fed possess a recognized knowledge or expertise in MPP that would increase Congressional deference to its decisions and what precisely is the nature of that expertise? Second, considering the political context, will the affected interest group or groups be able to organize a Congressional coalition that works to oppose and overturn Fed actions?

The analysis proceeds in two separate steps. The first is a case study of the 1979 shift in monetary policy undertaken by the Volcker Fed. This episode is most akin to the current introduction of MPP because, while the Volcker Fed was not implementing a new mandate, it effected a dramatic change in the way that the Fed implemented its existing remit for monetary policy. Moreover, the Volcker “Revolution” involved an implicit renegotiation of the relationship between the Fed, Congress and the Executive, on this occasion ushering in much greater operational independence for the Fed. It is thus an appropriate comparison for the contemporary case in which the Fed is charged with implementing a new policy that may, once again, bring into question the delegation relationship.

In the case study, I evaluate the degree to which the factors highlighted in the literature – agency expertise and the mobilization of opposition – affected the outcome in the 1979 policy shift. Next, I compare the case study to the contemporary case of MPP to assess the salience of those factors today. Does the Fed, in other words, possess the same advantages that it did in 1979? That comparison is informed by qualitative data from over twenty interviews with staff members at regulatory agencies and past Fed policymakers conducted during the summer of 2012 and the winter of 2013.⁵ The contribution of the analysis is, at a minimum, to gauge whether the Fed can be an effective, independent, macro-prudential policymaker. In addition, however, the analysis clarifies the political and organizational sources of Fed autonomy, both for monetary policy and in MPP. As such, the analysis is part of a broader scholarly effort to endogenize central bank independence and to consider the impact of the financial crisis on the new political economy of central banks.

The remainder of the paper proceeds as follows. Section II summarizes the initial legislative response to the financial crisis. It relates how the criticism of the Fed, seen in 2009, contributed to the embrace of the new, macro-prudential mandate and how that mandate was legislated. Section III comprises the case study of the Volcker Revolution. Section IV focuses on the comparison of the organizational and political factors at work in the earlier episode to the current context of macro-prudential policymaking. Section V concludes with a consideration of the import of MPP for the autonomy of central banks in general and the Fed in particular.

II. THE FED’S ROLE AFTER THE FINANCIAL CRISIS

The initial period of legislative response to the financial crisis saw both direct challenge to the Fed’s mandate and the first, official mentions of MPP as an appropriate policy undertaking.

From early 2009, at the start of the 111th Congress, the Fed was the target of legislation that amounted to an attack on its independence (Blinder, 2010).⁶ Media reports from that time spoke of expectations that the Fed would be, as one individual described, “diminished” in the Dodd-Frank legislation then under discussion.⁷ Figure One shows the number of bills introduced in Congress that were related to the Federal Reserve each year from 1973 to 2012 as an indicator of Congressional dissatisfaction with Fed actions. At 112 bills in 2009, legislative activity was higher than it was even in 1983 and 1985, after the interest rate hikes associated with the Volcker Revolution, and approached the maximum number seen, of 142 bills, in 1981. While this legislative activity might be dismissed as “grandstanding” or cheap talk, the time costs involved in initiating bills implies that legislative activity is a meaningful indicator of Congressional interest in a subject area (Salisbury and Shepsle, 1981). In 2009, then, Members of Congress were directing greater attention to the Fed and becoming more combative towards the agency.

<<Figure One approximately here>>

Actions taken in response, including congressional testimony and an op-ed piece in *The Washington Post* by Chairman Bernanke, in late November 2009, suggest that Fed leaders worked hard to forestall challenges to the Fed’s role.⁸ In his testimony in the early summer of 2009, Bernanke for the first time referenced the concept of MPP, suggesting that this framework should play a far larger role in the Fed’s supervision and regulation of the financial system.

This new emphasis on MPP was in some ways ironic given the chilly reception shown to advocates of a macro-prudential approach under the Chairmanship of Bernanke’s predecessor, Alan Greenspan (Baker, 2013). However, the adoption of macro-prudential concepts gave the

Chairman a rhetorical advantage in the depiction of the Fed's policy record. Framing the crisis through the lens of an approach focused on overall risks deflected attention from the failings in "micro-prudential" supervision of individual banks and bank holding companies. The Chairman's rhetoric implied that the Fed could have been more effective if it had possessed the tools and mandate for MPP at an earlier stage and justified a greater macro-prudential role for the Fed in the new legislation.⁹

The actions taken by the Fed may also have tempered the desire for radical change in Congress. Certainly, the legislation developed by the Chairs of the House and Senate Banking Committees (Congressman Barney Frank and Senator Chris Dodd respectively) was relatively moderate.¹⁰ The observed outcomes for financial regulation under Dodd-Frank were incremental, retaining the existing division of institutional labor for bank supervision (Maxfield, 2011).¹¹ In other words, financial regulation in the US remains extremely fractionalized. While Dodd-Frank creates a coordinating committee, the Financial Stability Oversight Council, or FSOC, no single financial regulator is responsible for MPP and the management of systemic risk overall.¹² The FSOC is responsible for aggregate oversight, and reports annually on risks to the financial sector, but the constituent agencies are charged with the response.¹³ Dodd Frank also followed the administration's plan to designate a category of "systemically important financial institutions" (or SIFIs) that would receive additional supervision (U.S. Department of Treasury, 2009).¹⁴ The key decision-making role of the FSOC is to determine which firms should be categorized as SIFIs and, in cases of crisis, to decide on the closure or restructuring of any given SIFI through the Orderly Liquidation Authority.

While the Fed saw its supervisory and regulatory role expanded in different ways under Dodd-Frank, the key change relates to the new category of SIFI.¹⁵ Specifically, the Fed has the

sole responsibility for “heightened prudential supervision” of SIFIs, a set of firms that overlaps with the largest bank holding companies for which the Fed already has lead responsibility. As one member of the regulatory community stated, “It’s the Fed that has the ‘big stick’ on macro-prudential policymaking and systemic risk because of the heightened supervision of SIFIs. It’s a micro-prudential solution to a macro-prudential problem.”

Scholars have questioned whether Dodd-Frank marks a sea change in the conduct of financial regulation (and the quote above indicates similar skepticism among some regulators). Indeed, Baker (2013) describes the move to MPP as “ideational” rather than a paradigm shift.¹⁶ In other words, although MPP was adopted as an appropriate objective, the ambiguity over how the policy should work in practice means that policymakers are not committed to any particular policy action and may not support or condone the Fed’s implementation of the mandate.¹⁷ Effective implementation of MPP, however, would mean requiring banks to take costly precautions against risk. Thus an important question is whether an “ideational” attachment to MPP, within the Fed, in Congress, and among the wider “epistemic community” of specialists, is sufficient to ensure the Fed’s autonomy in this new mandate (Haas, 1992, see also Kapstein, 1992). I turn, next, to the determinants of agency autonomy and their role in the Volcker Revolution.

III. THE VOLCKER REVOLUTION AND BUREAUCRATIC DISCRETION

A. ENDOGENIZING INDEPENDENCE

One of the reasons frequently offered for delegating MPP to the Fed is the high-level of autonomy that the Fed currently enjoys (Mishkin, 2009). Only a very independent agency, it is

argued, could undertake a policy role that will surely meet with political opposition. Yet, as with other agencies, the independence of the Fed is defined by law and can be *amended* by law (Posen, 1995, Keefer and Stasavage, 2003, see also Blinder, 1998). Within the existing legal framework, working independence is a function of how easily Congress and the Executive can influence Fed policy actions.¹⁸ Understanding the independence enjoyed by the Fed is thus analogous to understanding agency autonomy more generally. In both cases, that autonomy is defined by an agency's ability to manage the delegating relationship and thus to set the policy that it considers appropriate, despite potential or actual opposition from Congress and/or the President.

The potential determinants of autonomy have been extensively discussed within the American Politics literature on delegation. That literature focuses on two factors that can affect how much a legislature (Congress) will rationally delegate to an agency. The first factor is one of organizational expertise, operationalized either as the possession of salient information that is not known to the legislature in general (Gilligan and Krehbiel, 1987) or as a specialized understanding of the mechanisms by which to achieve a given outcome in different states of the world (Callender, 2008). Given this expertise, legislatures delegate to agencies for reasons of welfare maximization. Delegated policy achieves better outcomes.¹⁹

One of the key questions for contemporary accounts is what *constitutes* expertise. As Carpenter (2001) stresses, in a comparative study of growing bureaucratic autonomy during the Progressive era, an essential component of autonomy is “reputational uniqueness” so that “Autonomous agencies must demonstrate uniqueness and show that they can create solutions and provide services found nowhere else in the polity.”²⁰ This construction places weight on agency-specific tools and instruments (as “solutions” and “services”) rather than on mastery of a broad

intellectual framework. While such a framework is vital for legitimating a given type of policy action (and de-legitimizing others) it does not necessarily support claims for agency uniqueness. In looking at the Volcker episode, therefore, I examine whether the Fed could show expertise in the form of policy capacities that were highly specific and not available elsewhere.

The second factor highlighted in the extant scholarship is more distributional and refers to the desire of a legislature to delegate to an agency that shares its policy preferences. While this body of theoretical work shares the assumption of agency expertise, it highlights the potential trade-off between expertise and the content of desired outcomes, since agencies may also have their own biases or preferences. Ideological (or “spatial”) accounts examine distributional conflict between an agency and Congress or between the administration and Congress (Epstein and O’Halloran, 1999).²¹ These distributional concerns can also be triggered for Congress by interest group action (McCubbins and Schwartz, 1984). Objections from interest groups, acting as “firm alarms”, alert Congress to the distributional consequences of agency policy and generate attempts to control the agency, and its policy actions, more closely.

The literature above could imply that Congressional oversight brings democratic accountability to agency decisions and move those decisions closer to the “popular will.” Work on lobbying by special interests in the U.S. case, however, argues that regulatory agencies are often “captured” by the regulated sector, moving policy outcomes *away* from either the location of the welfare optimum or the preferences of the median voter.²² As such, the work on regulatory capture indicates that agency autonomy is endangered when sectors or industries that face concentrated regulatory costs are able to mobilize opposition in Congress. In considering the Volcker Revolution, therefore, I assess the potential role for interest group mobilization. I examine both whether regulatory costs were concentrated, creating the incentives for lobbying,

and whether affected groups were able to enlist support in Congress. I turn next to the discussion of both organizational expertise and political factors in explaining the ultimate success of the Volcker Revolution.

B. THE VOLCKER REVOLUTION

The Volcker “revolution” is a particularly important period in the Fed’s history because it marked a sea change in the Fed’s conduct of monetary policy while the legal framework under which the Fed operated remained the same.²³ Until the “Accord” of 1951 with the Treasury, the Fed often acted as a passive purchaser of Treasury bonds (Timerberlake, 1993, Todd, 2012). Even after this date it frequently came under pressure from the Administration to ease policy.²⁴ Yet under the Chairmanship of Paul Volcker (starting in the summer of 1979), the Federal Reserve implemented interest rate policies that, although extremely painful in the short term, ultimately reduced inflation and strengthened the Fed’s reputation.²⁵ The fact that this change occurred independent of legislative action or institutional reform highlights that, under certain circumstances, agencies can develop greater political independence, conforming to Carpenter’s (2001) concept of autonomy as the ability to affect the “delegation relationship.” What is sought here is a finer understanding of the factors that contribute to the ability to announce and sustain a policy choice that is distinct from those of Congressional overseers, particularly in the period before an agency has been able to demonstrate the effectiveness of that policy.

The bare bones of the “Volcker Revolution” may be summarized thus. In the summer of 1979, and desperately attempting to gain a handle on mounting inflation, the Carter administration turned to Paul Volcker, then serving as the President of the Federal Reserve Bank

of New York (FRBNY). Volcker was formally appointed as Fed Chairman in August 1979. Shortly thereafter, at a special press conference on October 6th, 1979, Volcker announced a dramatic shift in policy, unanimously approved by the Federal Open Market Committee (FOMC), and which he termed “practical monetarism” (Silber, 2012).²⁶ In that shift, open market operations would be conducted in response to monetary targets and Fed policy would no longer be directed to smoothing or containing the level of the interest rate. The federal funds rate (the key interest rate affected by Fed policy) quickly soared upward, reaching the unprecedented level of 20 percent in December 1980 and January 1981. Large increases in the real interest rate induced painful contractions in real activity and mounting unemployment. While the Fed was widely critiqued, and its capacity to implement monetary policy was questioned, inflation gradually declined and the recession eased in 1982.

C. EXPERTISE AND AUTONOMY

I first consider the role played by organizational expertise and consider the content of that expertise. While later analysis has sometimes credited the success of the Volcker Revolution to the growing authority of monetary economics, the Fed’s ability to implement the new policy was not based on a party-line adherence to the newly influential paradigm.²⁷ The FOMC held many diverse viewpoints, as did staff members. Indeed, the Fed had increased its hiring of economists from prominent academic departments in the sixties just when those departments were dominated by Keynesian thinking (Woolley, 1984, p. 60, 100). For his part, Volcker took pains to describe himself as a “practical monetarist,” mining the monetary tool box for new and useful approaches to combatting inflation, but otherwise agnostic (Silber, 2012). The diversity of

viewpoints within the Fed and the FOMC challenge explanations that are based on an adherence to an overarching intellectual framework. Moreover, Axilrod (2009, pp 102-4) recounts that prominent monetarists of the period publicly doubted the Fed's ability to implement a monetarist approach, implying that the Fed was not perceived as a monetarist institution.²⁸

What was critical to the Fed's ability to implement the Volcker Revolution, however, was that earlier Chairmen had worked to centralize control of monetary policy tools under the FOMC – particularly open market operations.²⁹ This enabled the Chairman of the Board of Governors (with the agreement of the FOMC) to use monetary tools in pursuit of particular objectives for inflation and the real economy. The key steps in achieving central control were taken during the Chairmanship of William McChesney Martin, from 1951 to 1970. The first was to abolish the Executive Committee, a group dominated by the FRBNY and which had previously decided the conduct of open market operations and to increase the number of meetings of the FOMC (Meltzer, 2009a). Given these changes, the FOMC was assured of control over the Manager of the “system account” in New York, and could use open market operations to affect the interest rate or different measures of the money supply.³⁰

Second, in the sixties, the Fed developed new documents for the FOMC that synthesized information and allowed smoother translation from FOMC discussions to policy outcomes.³¹ Finally, the Fed developed the basic blueprints for using open market operations. In October 1968, Chairman Martin appointed Governor Maisel as Chair of a three-person committee to reconsider FOMC operating procedures (Meltzer, 2009a, p. 588). The FOMC rejected the Maisel Report's specific policy proposals, but the preparation of the Maisel Report meant that there was a working guide available for implementing monetary targeting through open market operations.

As a result of this organizational groundwork, when Volcker asked Steven Axilrod (then serving as Staff Director of the Office for Monetary Policy) and Peter Sternlight (as the System Account Manager in New York) to prepare a memorandum on how the Fed might redirect policy to controlling money growth the practical and technical know-how was in place. Following Carpenter's (2001) phrasing, the Fed was creating solutions and providing services that could not be provided elsewhere. Following the agreement of the FOMC, and after discussions based on the Axilrod-Sternlight memo, Chairman Volcker could announce that the Fed would control price inflation through the use of quantitative targets for money growth (Kettl, 1986, p. 176). Interest rates would then adjust to bring the supply of money that was delivered through Fed policy into line with demand.

D. THE MOBILIZATION OF OPPOSITION

Volcker's presentation of the new policy approach as a technocratic exercise, directed at monetary aggregates, also yielded a strategic advantage to the Fed. It redirected attention from the likely impact on real interest rates, whose immediate, redistributive effects were far more widely understood than the details of monetary aggregates and mitigated the potential for early objections.³² Kettl (1986) cites Governor Henry Wallich "Basically we needed higher interest rates. I doubt they could have been achieved by decision. But by putting the decision in the hands of the market and allowing things to take their course – that was more acceptable."

Given, however, that the real implications of the policy shift soon became apparent, the key question is how the Fed was able to maintain the new policy stance and avoid ex post, political reversal, even if that required an institutional overhaul of the Fed. In part, contemporary

observers link the success of the Volcker chairmanship to changes in the external context which readied the public and administration for dramatic policy measures, even painful ones. As Axilrod (2009, 92) writes, “The costs of inflation had been becoming more and more evident to the public and, by extension, to politicians as the economy stagnated, jobs were lost to foreign competitors, and the real value of savings was eroded.” The perception of these inflation costs was widespread. In October 1979, the month in which Volcker announced the policy shift, 55 percent of respondents to a Gallup poll described inflation (or the general price level) as the most important problem facing the US, with the next most frequently mentioned problem (the energy crisis) named by just 22 percent of Americans. Volcker’s final decision to propose new policy targets was precipitated by signs of imminent panic in the gold markets and critical changes in inflationary expectations (Silber, 2012, p. 158), all producing a near crisis environment.

Despite its own, public commitments to controlling inflation, the Reagan administration was taken aback by the real costs of the Fed’s monetary targeting approach when it came into office in 1981. Assistant Treasury Secretary Craig Roberts (1984) wrote of economic conditions at that time, “The administration had no idea that the Federal Reserve was about to slam on the brakes and throw us all through the windshield.”³³ As the recession deepened, the Fed was attacked from all sides, with the strongest reactions from sectors exposed to interest rate hikes. Auto dealers sent coffins to the Fed with car keys attached (Yergin and Stanislaw, 1998, cited in Todd, 2012) while construction firms and workers addressed pieces of 2x4 lumber to Volcker and mailed them to the Fed (Silber, 2012).

The recession was so serious that, by 1982, members of the House and Senate suggested fundamental reform of the Fed. These included Henry Reuss, the Democratic Chairman of the Joint Economic Committee who threatened “political dismemberment of the Federal Reserve

System” if the Fed did not back away from its “super tight” monetary policy (Kettl, 1986, 181). Opponents also included Republican Jack Kemp, who advocated a return to the gold standard. In late June of that year, Todd (2012) recounts, Don Regan, the Treasury Secretary, ordered his staff, the Council of Economic Advisors and the OMB to institute a wholesale review of monetary policy and the role of the Federal Reserve. The scene was set, in other words, for coordinated political action to change the institutional foundations of Fed policymaking.

The problem was that different opponents to Fed policy were strongly divided on the policy that the Fed should follow if and when it was placed under more direct political control (Kettl, 1986, 181). Senator Kennedy, for example, advocated credit controls and greater monetary easing, while the Administration argued for a tight monetary policy, but for more transparent implementation of strict monetary targets. In other words, and while the real costs of the Volcker policy shift were visible and agonizing, the opposition was fractured. Existing partisan views of monetary policy, and electoral commitments to low inflation, reduced the space for any, alternative proposal embodying direct political control that could receive majority support in Congress and would not be vetoed by the President. This explanation parallels that offered by Keefer and Stasavage (2003) for the choice of delegation to an independent central bank in a polity marked by multiple veto points. However, the account above underscores that the polarization of preferences across different actors arose because monetary policy, and attitudes to inflation, were not solely the province of specialized or concentrated interests. Rather, inflation had become an issue of such wide, popular concern that partisan interests on this issue were clearly structured.

Then, in July 1982, the recession bottomed out and Volcker felt able to ease monetary targets. As inflation declined, Volcker and his colleagues at the Fed saw increased credibility as

an agency that could control inflation (Blinder, 1999). The Fed's actions were broadly popular, with 46 percent of individuals surveyed in a 1983 poll saying that the Fed had made a major contribution to lowering inflation and 64 percent willing to have the Fed tighten again, if needed to curb inflation, even if it meant slowing the economy (*National Journal*, October 8th, 1983, cited in Kettl, 1988).

IV: THE MPP COMPARISON

In this section, I take up the comparison between the strategic advantages held by the Fed as it shifted policy and moved towards greater operational independence in 1979, and the context for MPP in the current era. As discussed earlier, one of the factors contributing to Fed independence has been its ability to show unique agency solutions and services (Carpenter, 2001). In this section, I expand upon this initial appraisal, examining whether the Fed has sole control, as a monopoly provider, of the inputs into monetary policy and MPP. This assessment is based on secondary sources as well as qualitative evidence from multiple interviews. I then proceed to a consideration of the mobilization of opposition in both cases.

A. EXPERTISE AND AUTONOMY

In Figure Two, I set out the different inputs used in the production of monetary policy and MPP.

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I look at three different categories of input: data, labor, and tools (as particular mechanisms used to affect outcomes). The first category of data refers to the information that is required to set policy. The second category indicates the labor services (e.g. expert staff) that are needed for policy decisions and implementation, while the category of tools includes, for instance, open market operations and credit ratios to buffer against risk. Thus, the discussion goes beyond that of Section III, which discussed the policy mechanisms developed by the Fed, and considers the broader set of resources that are needed for the agency to produce specialized agency “solutions and services.” In each case, I assess whether these policy inputs are specialized to the Fed or whether they are general and could be provided by another agency.

In the case of monetary policy, all inputs are and have been highly specific. The Fed’s main source of data on the money supply and financial market conditions comprises the information it receives in its role as a clearing house, settling trillions of dollars worth of monetary transactions each day between banks in the US and operating the dollar payment system.³⁴ The Fed is not reliant on any regulated body for that information, which banks freely supply as part of standard daily business practices. Further, and in forecasting the real economy, the Fed works from publicly available data that is not sourced from the regulated sector.

The main labor input into monetary policy is expert monetary economists, who are to be found in academic departments and at the Fed itself. While those monetary economists could presumably work for other agencies, the Fed does better than any other agency at attracting economists from top-rank departments.³⁵ So successful has the Fed been in leading the field of monetary economists that it has recently been accused of exploiting its monopoly role.³⁶

With regards to tools, the Fed, once again, has a pure monopoly over open-market operations, which have never been conducted by another agency or department. Indeed, one of

the gravest threats to Fed independence, in the 1930's, and one source of its subsequent acquiescence to Treasury, was the development by the Treasury of separate, large accounts that were held after the Monetary Control Act of 1934 (Timberlake, 1993, p. 278). In 1936, and in response to an increase in the discount rate by the Fed, Treasury Secretary Henry Morgenthau threatened to use the government's new Exchange Stabilization Fund (developed from seigniorage on the gold that the administration had required individuals to lodge with the Fed) to conduct open market operations himself.³⁷ Since the 1930's, however, there has been no attempt to develop a separate capacity for the government to affect the federal funds rate and the Fed has retained monopoly control of this instrument. Thus, and in the case of monetary policy, the Fed is in a fortunate position. It oversees highly specialized inputs that cannot be easily replicated, and those inputs are under the sole control of the Fed, which does not have to coordinate with other actors in policymaking. It would be extremely difficult, in other words, for Congress or the Executive to circumvent the Fed and conduct monetary policy itself. The Fed, as the case study of 1979 indicated, can still face threats to its independence, but later attempts to control Fed operations have had to rely on strategic appointments, ex post pressure via Congressional oversight, or changes in the legal structure (signed by President and Congress).³⁸

The Fed does not, however, enjoy the same control over policy inputs in the field of MPP. In particular, the Fed is reliant on the regulated entities for information that can help it to determine what the appropriate settings for policy should be. Many measures of systemic risk require information that is internal to individual firms, especially in compiling measures of leverage ratios between capital (or liquidity) and assets outstanding, measures that are affected by an institution's own, internal "risk-weighting" of their assets.³⁹ While the "Call Report" used for examining banks is standardized across institutions, different banks have different models for

calculating risk.⁴⁰ The strategic incentives for struggling firms to adjust risk-weighting are obvious. Indeed, Mariathasan and Merrouche (2012) find evidence of strategic adjustments to risk-weighted asset ratios, prior to the financial crisis, among banks with lower Tier-1 holdings of capital and in less competitive banking systems.

As one individual with Fed policy-making experience said, “It’s a classic case of asymmetric information and when you are dealing with regulation it’s important to get the details right. You know that the banks have a strategic interest in not giving you the real information, but you need *some* information.” Another individual said, “We all agree on the lack of data. If you want to find out about a given institution, you go to the examiners’ reports. They ask a bank about, for instance, their exposure to Europe, and then the bank says, ‘Oh we really have this under control, we have this exposure to...’ and the reports are completely non-comparable.” Thus, and in MPP, the Fed is heavily reliant upon data inputs from the regulated industry particularly in establishing the appropriate settings for macro-prudential instruments (see McCarty (2013) on the likely consequences for regulatory forbearance).⁴¹ Those issues are almost unknown in compiling information on monetary aggregates because money is a standardized asset and financial institutions automatically provide this information as part of their use of the clearing house functions that the Fed provides.

Next, and related to labor inputs, observers mentioned that the Fed has only since 2009 had an economist as the head of the Banking Supervision Division at the Board of Governors.⁴² Prior to that time, the divisions within the Fed that dealt with regulation and supervision were far less prestigious, partly because they were not the province of top-flight economists and were less connected to the Fed’s main mission. Within those divisions, regulators were professionalized,

but the professional background they had gained was one that was common to, and coordinated with, the broader set of banking sector regulators in the US and was not unique to the Fed.⁴³

Finally, and while the policy tools that are available to the Fed, and are listed in Dodd-Frank, sound highly specialized (including loan to value ratios, capital buffers, contingent capital, and dynamic provisioning) they are all in essence a form of regulation. They prescribe for banks (and SIFIs) what kind of liquidity or capital ratios they should employ rather than enacting changes in the market directly, as with open market operations.

While the appropriate setting of tools like capital ratios requires specialized knowledge, it would be very possible for any regulatory agency to actually announce and implement MPP.⁴⁴ Moreover, the other banking agencies, particularly the OCC, have also been involved in setting and implementing capital ratios as part of previous rounds of the Basel Accords. Because of this, the Fed is not the only institution involved in the debate about appropriate MPP and, as such, is not the only actor establishing what Carpenter (2010) calls the moral and legislative understanding of MPP.⁴⁵

In other words, and in the conduct of MPP, the Fed does not hold the advantage of mastery over specialized tools, for which it is currently the monopoly provider with little prospect of other market entrants. In this regulatory realm, the Fed's activities are closer to ordinary agency politics and in the fractionalized context of agency politics the Fed is less able to craft its own narrative.

In the case of monetary policy, successful Chairmen have been able to construct a reputation as an all-knowing seer. When in-coming Governor of the Bank of England, Mervyn King, asked Volcker if he had any advice for a new central banker, the Chair apparently whispered in his ear a one-word answer, "Mystique" (see Lindsey et al, 2005, p. 74). Chairman

Greenspan was known as the “maestro” with one former policymaker commenting that Congressional committees withheld tough questions because they were so awed by his reputation. In the case of MPP, there are many other agencies available to provide a counter-narrative to the Fed’s version of events, reducing the extent to which it can project an esoteric authority.

Perhaps that is why regulators and policymakers distinguish the worlds of monetary policy and MPP, even though they could not always put a finger on why this should be so. One former Fed policy-maker said that he never felt, as a Governor, that monetary policy was affected by the political process but he did feel that politics was more “invasive” on the regulatory front. One staffer said of monetary policy (in comparison to MPP), “it’s more Olympian, detached.”

B. THE MOBILIZATION OF OPPOSITION

In this section, I take up the comparison between the mobilization of the opposition to monetary policy and that seen, or likely to be seen, in MPP. Many interview subjects averred that MPP would meet with opposition from affected firms and that this opposition would exceed what could be expected from monetary policy. The role for political science, though, is to consider why this might be so and what factors could help us to predict the extent to which firms will be able to mobilize support in Congress and hinder new regulation.

A first answer is that the costs of MPP are focused on a relatively small set of large and concentrated enterprises – even more so than with the construction and auto firms that protested high real interest rates in 1981 and 1982. Because the firms slated for categorization as SIFIs,

and for heightened supervision under Dodd-Frank, are large and interconnected with the financial sector overall, the active use of MPP in the US means applying higher capital ratios to very large, concentrated entities, during the upswing of the credit cycle.⁴⁶ The firms that face those costs are easily able to overcome the collective action issues in political mobilization. As such, and as Olson (1965) would predict, we should expect effective lobbying from regulated firms, either individually or severally. Many interview subjects, for instance, mentioned the potential role of the Clearing House. This trade association of 17 of the world's largest commercial banks was active in lobbying for delay of the Basel III accords, with the implementation of new Basel III capital ratios delayed from the proposed start of January 1st, 2013 and threatened with a quantitative impact analysis by the US Congress.⁴⁷

Moreover, evidence from past and contemporary debates on financial regulation implies that lobbying has been effective in influencing Congressional actions and votes. Lobbying by financial firms was influential in driving deregulation of thrifts (Romer and Weingast, 1991) and contributed to growing risk in the housing market at the turn of the century. Examining the subprime mortgage credit expansion, starting in 2002, Mian et al (2010) find that mortgage industry campaign contributions were increasingly associated with Congressional votes on housing issues.⁴⁸ The effect of contributions was also seen in the legislative *response* to the financial crisis, with Members of Congress who received contributions from the financial services industry more likely to vote for the Emergency Economic Stabilization Act of 2008 (Mian et al, 2008). The financial industry is also well-represented in the House and Senate banking committees, with members coming disproportionately from districts or states in which the banking industry is strong (Schonhardt-Bailey with Bailey, forthcoming).

In addition to the highly concentrated nature of regulatory costs, MPP also differs from monetary policy in the visibility of its policy actions. In particular, the use of open market operations in 1979 was a way for the Fed to blur regulatory accountability. Because minutes (and other records of policy actions) of the FOMC are released with a lag, it is not possible for those affected to predict exactly when the Fed will act or how if the Fed does not wish to communicate this.⁴⁹ Interest rate changes in the early eighties could also be attributed to market sentiments or to anticipations of inflation with the direct role of the Fed obscured. At critical times, the Fed sought to limit information on its likely policy actions further. During the 1970's, for example, the Fed sought to avoid issuing long-term forecasts for monetary growth, to which it could be held accountable, to Congressional oversight committees (Kettl, 1986, Timberlake, 1993). The opaque nature of the Fed's role, and the lack of advance information on Fed actions, meant that it was hard for opposing interests to mobilize in *advance* of Fed action. That opacity does not hold in the case of MPP. Dodd-Frank lists many areas in which the Fed must issue draft regulation, and allow for a period of feedback, and that process allows for advance notice and effective, pre-emptive lobbying.⁵⁰

These factors may explain why political opposition to monetary policy was relatively muted in the early 1980's and why that opposition should be more sustained in the case of MPP. It may also explain why economists anticipate greater scope for distributional conflict as MPP is administered.⁵¹ Yet, and even in the monetary case, the distributive effects of monetary policy ultimately gave rise to organized opposition from affected interest groups, with this diminishing only when the effectiveness of the policy tools was proved effective. What was also important in the earlier case, however, was that the broadly diffused costs of inflation had become an electoral issue, acting as a counterweight to the protests, and contributions, of affected industries. Further,

partisan interests in monetary policy were well-defined, reducing the potential for bi-partisan congressional coalitions in favor of political control of the Fed. Given the lobbying influence of the banking sector in the US, the prospects for implementation of MPP are likely to depend on the same factors. In other words, are there existing partisan or electoral commitments to financial sector regulation that structure the legislative environment and impede the formation of a congressional coalition that pushes back on the Fed?⁵²

It is here that the lack of a fully developed intellectual understanding of MPP as a new paradigm could be the most telling. In the absence of a fully-fleshed out causal account of risk and financial crises, groups or individuals may not yet be able to identify their preferences over MPP quickly or easily. Members of Congress have clearly been able to identify their constituent interests, with members from districts with a heavy bank presence more likely to sit on the House or Senate banking committees, and members with a high proportion of sub-prime borrowers more likely to vote to ease subprime borrowing (Schonhardt-Bailey, forthcoming, Igan et al, 2011). Yet, and while early scholarly analysis has identified stronger support among Republicans for reining in banks (Broz, 2012, see also Mian et al, 2008), partisan identification with MPP is not yet deep or entrenched. Further, there has been little attention to or measurement of public attitudes towards risk and financial sector regulation.⁵³

The ways in which interview subjects saw a broader constituency mobilized (and special interests cowed) was also revealing, as this was not presented along partisan lines but as an instance of simple animus towards banks. “Banks are in the hot seat,” said one former Fed policymaker, “They are despised right now.” However, populist animus towards banks may not provide a reliable foundation for a mass, political coalition for tougher regulation. Because heightened levels of risk are not highly visible or salient in the absence of crisis, broad-based,

electoral support for MPP is unlikely to emerge in the years leading up to a crisis. The same individual who pointed to a populist rejection of banks indicated that regulators could seek support by reminding the public of the events of 2008. This tactic, however, amounts to an exercise in retrospection and is unlikely to be as effective as the consistent experience of inflation that changed public perceptions in 1979. Because MPP is pro-cyclical, regulators would have to call upon public support for tighter regulation during the up-swing of a credit cycle and just as memories of the last crisis are receding into the distance.

Another former Fed policymaker, asked whether there existed a coalition for the control of systemic risk, responded not by talking about tax payers or parties but about heterogeneity within the financial system – “You have to play the fissures.” Within the US system, and while bank concentration has risen markedly in the last three decades (Amel, 2004) there are still many smaller, “community” banks. These banks do not generally take on as much leverage as the bigger banks and are less likely to invest in sophisticated arbitrage instruments.⁵⁴ In addition, some of the largest financial entities will cultivate a reputation for stronger risk management so that macro-prudential regulation will be a “non-binding constraint.” These institutions could all support prudential standards that act as a barrier to entry against firms that might seek profit through taking on higher levels of risk (Bartel and Thomas, 1985). The Fed could generate a support coalition, in other words, by playing off different interests in the financial sector against each other. That negotiated outcome for MPP would not necessarily provide the socially optimal level of protection against systemic risk, and would conform to a model of partial industry capture of the regulator, but it might be preferable to no protection.

A strategy of divide and conquer, however, that set one segment of the financial industry against another, however, could also complicate the management of tensions *within* the Federal

Reserve System. Within the System, the Presidents of the regional Reserve Banks are appointed by and responsive to their directors, who are drawn from the ranks of local industry and finance. Because regional financial industries also differ, the Presidents of the regional Reserve banks are becoming increasingly differentiated in their attitudes to risk. Where once this group was a relatively cohesive bulwark against inflationary pressures (Havrilesky and Schweitzer, 1990), the Reserve Bank Presidents, particularly those with a financial background, express different viewpoints on financial regulation. Because the presidents of the regional Reserve Banks play a voting role, on a rotating basis, in the FOMC, the increasing heterogeneity in outlook could make the FOMC consensus that was earlier seen as essential to Fed credibility much more difficult.⁵⁵

C. REPUTATIONAL ARBITRAGE

The analysis above examines the factors that contribute to Fed autonomy. To this point, however, the analysis has been partial, in that it has considered organizational and political influences on that autonomy separate from the Fed's existing role in monetary policy. Thus it has not considered the use of potential "reputational arbitrage," with the Fed able to borrow from its existing reputation in monetary policy to aid its activities in a field in which its credibility is less established. An asset that the Fed brings to MPP is the reputation that was carefully developed in the case of monetary policy. Thinking about institutions "in time" also means that we consider the interrelationship across the two policy mandates, given the ordering in which they were established (Pierson, 2004). But reputational arbitrage is a two-way street. The reputation that was gradually constructed in monetary policy can also be threatened by protests

against MPP. Should the Fed draw on its existing reputation in order to implement MPP more firmly and how does that affect its overall reputational stock?

That the Fed understands the reputational trade-off is clear from statements by Chairman Ben Bernanke in 2012 on the non-conventional monetary measures that have been deployed since the financial crisis. Speaking in 2012, the Chairman said:

“We, the Federal Reserve, have spent 30 years building up credibility for low and stable inflation, which has proved extremely valuable in that we’ve been able to take strong accommodative actions in the last four, five years,” ... “To risk that asset for what I think would be quite tentative and perhaps doubtful gains on the real side would be, I think, an unwise thing to do.”⁵⁶

Thus the Fed understands how its reputation may be affected by an untested policy action and is unlikely to endanger that reputation unless the benefits are clear and direct. Why would the Fed then accept and implement the MPP mandate given the extent to which it risks politicizing the Fed?

One answer, suggested in Section II, is that the Fed may have adopted the mantle of MPP strategically and to deflect attention from the regulatory failures that preceded and contributed to the financial crisis. A possible inference, therefore, is that the Fed is not fully committed to MPP and will await greater intellectual consensus before investing institutional capital in this area. Another interpretation, however, is that the Fed understands the likely impacts on its image and independence but is starting to believe that it cannot avoid taking policy decisions that bear on risk and affect financial sector decision-making.

An emerging field of study on monetary politics highlights the transmission mechanism from monetary policy to real outcomes through credit risk (Borio and Zhu, 2012). As interest

rates fall, individual undertake a “search for yield.” The sources of that yield may incorporate risk in ways that are not visible to market participants and not priced into assets, setting the scene for higher overall risk. Monetary policy, in other words, is starting to be implicated in financial crises because of its effect on incentives for risk-taking. As an individual with experience at the policy-making level of the Fed commented, “There is no new normal. We don’t go back to normal policy-making once nonconventional monetary policies are done.” The rollback of the Fed’s vast purchase of public sector debt under quantitative easing, this individual implies, would not return the Fed to standard monetary policy-making. Given the potential link between interest rates and risk, the Fed cannot operate monetary policy solely with an eye on inflation. Instead, the Fed will have to care about the management of risk in the financial sector and the indicators of systemic risk, even when deciding monetary policy.⁵⁷ Further, and because monetary policy at the zero bound of interest rates involves large direct purchases of particular asset classes, which may generate losses for the bank’s balance sheet, the Fed and other central banks are already more concerned about political support in the unconventional monetary measures that they have adopted since 2007. MPP, in other words, is just one of a number of factors that have complicated the institutional autonomy of the Fed.

To conclude this section, the reputational arbitrage that would have the Fed invest its existing reputation into the conduct of MPP is not easy. Reputation is a long-lived asset and agencies will think hard before drawing on it. On the other hand, the Fed may decide that it cannot avoid a political debate on appropriate policy – both in the monetary realm and for MPP. An emerging view within monetary economics is that monetary policy contributes to systemic risk and must take account of risk. If the Fed operates monetary policy according to this new

understanding, it will not be able to avoid confrontation with the financial sector, even in the “Olympian” context of monetary policy.

V. CONCLUSION

The recent, great financial crisis of 2007-8 could have been a body blow to the reputation and powers of the Fed and other central banks. Instead, and fascinatingly, it wasn't. Given the lack of alternative actors who could have played an equivalent role in maintaining liquidity (and confidence) in the financial sector, the Fed gained a pre-eminent role, often referenced as a fourth branch of government. An extension to that role came with new responsibilities for defending overall financial stability. The relevant targets for MPP, however, include a set of financial institutions that are already well-poised to press their arguments in the halls of Congress. The actions that the Fed could take to preserve financial stability would have direct costs to those actors. The connection to Fed independence is obvious.

The literature that advocates for greater central bank independence has often treated that independence as following fairly easily from initial legislative changes. A second generation of scholarship on central bank independence has made independence endogenous, highlighting the institutional factors that increase the incentives to delegate and inhibit attempts at subsequent political control (Posen, 1995, Keefer and Stasavage, 2003). That analysis is particularly important as central banks take on new mandates. In this essay, I have treated Fed independence as a specific instance of the more general phenomenon of agency autonomy and have clarified the political and organizational factors that enabled the Fed to act more autonomously and implement tough anti-inflation policy under Volcker's leadership. I have done so in order to

conduct a more considered appraisal of the Fed's potential autonomy in the operation of MPP. That assessment is sobering. The Fed possesses no macro-prudential analog to open market operations and no monopoly control over the policy instruments of MPP. Moreover, there is little evidence to date of structured mass attitudes, or partisan attachments, on issues of financial sector risk that could act as a countervailing force to mobilization by regulated firms. The analysis, then, casts doubt on whether macro-prudential regulation, by the Fed or others, can meet the expectations raised by Dodd-Frank. To the extent that it can, the Fed appears likely to seek support for macro-prudential policies from institutions within the financial industry that are smaller, less competitive and less exposed to systemic risk.

That analysis also highlights, however, that the impact of the financial crisis on the Fed was not limited to MPP. The experience of crisis has also altered intellectual understandings of monetary policy. Because of the links that are increasingly drawn between monetary policy and risk, the Fed is unlikely to retain the role of a technocratic agency, guided by a relatively narrow concern with price stability (and unemployment), and achieving its role primarily through open market operations. It has been relatively easy for the Fed, given this role, to maintain its independence, at least after the success of the Volcker Revolution brought credibility to the Fed's policies.

The final point made in this paper is that the assumption that MPP should be given to the Fed because of its existing reputation is flawed – the new mandate can in turn affect the reputation. The point, however, may be moot. If the shifting understanding of monetary policy holds, and becomes authoritative, then the prior quarter-century of experience of a highly independent, and seemingly technocratic, Fed may come to seem more the exception than the rule. Macro-prudential policy, then, rather than standing as a new and radical departure for the

Fed's policy model, would herald a turn "back to the future", of more contested policy-making for the Fed and a more fractious relationship with its political masters.

¹ From this point on, the phrase "the Federal Reserve" or "the Fed" will be used to refer to the Federal Reserve System comprising the Board of Governors and regional Reserve Banks.

² For an explanation of the diffusion of MPP concepts, see Baker (2013). For a discussion of changing mandates at the Fed and the need for new policy tools, see Reinhart and Rogoff (2013).

³ See Adrian and Shin (2010), Borio (2011), Goodhart (2010).

⁴ This is analogous to what Elliott et al (2012) refer to as "cyclical MPP."

⁵ These interviews were anonymous and designed to yield personal rather than official views. In order to maintain anonymity, I do not include identifying descriptions, including agency of employment. I spoke with staff members at the Office of the Comptroller of the Currency (OCC) and the Federal Deposit Insurance Corporation (FDIC) in addition to staffers at the Board of Governors, two of the Regional Reserve Banks of the Federal Reserve System and the Office of Financial Research. I also spoke with a smaller number of former Governors of the Fed's Board of Governors, who were in a position to gauge the likely policy consequences of MPP.

⁶ See Ron Paul's bill, HR 1207, the Federal Reserve Transparency Act introduced in February 2009. The bill threatened Fed independence through its provisions for wider monitoring and oversight.

⁷ Anonymous interview.

⁸ See <http://www.federalreserve.gov/newsevents/testimony/bernanke20090724a.htm> for Chairman Bernanke's testimony and "The Right Reform for the Fed," by Ben Bernanke, *The Washington Post*, November 29th, 2009.

⁹ This argument also assumes that the Fed is the appropriate macro-prudential supervisor. For discussions of the institutional location for macro-prudential policy, see Blinder (2010), Feldstein (2010) and Goodhart (2012).

¹⁰ The House Committee is formally the House Financial Services Committee while its Senate analog is the Committee for Banking, Housing and Urban Affairs but both are informally described as banking committees. Kaiser (2013) reports that Congressman Frank supported a central role for the Fed in the new legislation, in contrast to Senator Dodd who advocated for more radical reform. Dodd-Frank was ultimately passed in July 2010.

¹¹ The only institutional change for *banking* regulation with Dodd-Frank was the formal closure of the Office of Thrift Supervision (OTS) and the roll-in of its functions and personnel into the OCC. The largest general institutional change within Dodd-Frank was the creation of the Consumer Financial Protection Bureau.

¹² The Dodd-Frank Act of 2010 did, however, create a new agency, the Office of Financial Research (or OFR), as a Bureau of the Treasury, charged with data collection and analysis for the financial system as a whole.

¹³ The ten voting members of the FSOC (there are five non-voting members) are the Secretary of the Treasury, who chairs the Council, the Comptroller of the Currency, the chairs of the Federal Reserve, the Securities and Exchange Commission (SEC), the FDIC, the Commodity Futures Trading Commission (CFTC), and the National Credit Union Administration Board, and the Directors of the Bureau of Consumer Finance Protection and the Federal Housing Finance Agency, plus an independent member with insurance expertise.

¹⁴ The Treasury's "Green Book" report of 2009 describes SIFI's as "Tier 1 Financial Holding Companies" or FHC's, but the import is equivalent.

¹⁵ Title VIII of Dodd-Frank also called upon the Fed to supervise and regulate payments, clearance and settlement systems designated as systemically important (the so-called financial market utilities).

¹⁶ The three conditions required to observe a paradigm shift, following Hall's (1993) typology are, one, a change in day-to-day decision-making, two, changes in policy instruments, and three, a radical shift in discourse including a transformation of overall policy objectives, the hierarchy of goals and causal accounts of how the world works.

¹⁷ See Borio and Dhehmann (2009) on the lack of an agreed operational framework for MPP.

¹⁸ The broader literature on delegation and autonomy stresses both ex ante and ex post political control, with ex ante influence via the appointment of personnel and ex post control exercised through oversight that is costly to the agency and the potential for legislative override.

¹⁹ See Carpenter (2010) for a deep, qualitative account of the development of expertise at the FDA, and Kiewiet and McCubbins (1991) on different aspects of the delegation decision. Huber and McCarty (2004) and Gailmard and Patty (2007) consider the incentives for agencies to invest in expertise.

²⁰ Carpenter (2001, p. 5).

²¹ In the latter case, divided government increases the attractiveness of agency independence for Congress because it ensures that the Administration cannot directly control policy.

²² See canonical work by Stigler (1971) and Peltzman (1976).

²³ The primary legislative acts governing the Fed are the Federal Reserve Act of 1913 and the Banking Acts of 1933 and 1935, the last of which was particularly important for the composition of the Federal Open Market Committee.

²⁴ There is an extensive political science literature on political influences in Fed policy-making. See Mayer (1990) for references and Todd (2012) and Meltzer (2009b) for examples of different types of pressure.

²⁵ That the Volcker Chairmanship marked a distinct break in Fed policy is confirmed by econometric analyses of structural breaks in monetary policy, see Duffy and Engle-Warnick (2006) and references therein.

²⁶ The FOMC is the key decision-making body in the Fed and is composed of the seven members of the Federal Reserve Board of Governors (including the Chair) and all twelve Presidents of the Federal Reserve Banks. Only five of those Presidents have voting rights at any time, with the President of the FRBNY having one vote and the four remaining votes rotating among the other Presidents.

²⁷ Bailey and Schonhardt-Bailey (2008) and Silber (2012) separately describe how Volcker presented the switch in policy to FOMC members as an instance of “credible commitment” rather than as a monetarist approach per se.

²⁸ The Fed was, however, aided by a growing consensus within the economics discipline. Meltzer (2009) suggests that Modigliani’s presidential address at the 1976 AEA meetings set the scene for a more consensual adoption of monetarist approaches towards the control of inflation.

²⁹ The Fed had conducted “open market operations” since 1922, when it was first used as a means of maintaining asset levels at Reserve Banks (Timberlake, 1993, p. 261).

³⁰ That Volcker considered direct control of the System Account important is indicated by the fact that he invariably spoke on the phone with the Manager each day to guide operations (Axilrod, 2009).

³¹ These were the “Green Book” which compiled staff economic forecasts and the “Blue Book”, which set out different potential policy choices, (Axilrod, 2009, 41- 45).

³² See Woolley (1984, p. 104) on the political arguments for adopting the aggregates approach.

³³ The federal funds rate peaked at 20 percent in December 1980 and January 1981, Timberlake (1993, 353-4).

³⁴ See Vincent Reinhart, “Geithner and Bernanke are Wrong About the Fed,” March 31, 2010. *The American*. Available at http://www.american.com/archive/2010/march/geithner-and-bernanke-are-wrong-about-fed-power/article_print, accessed August 20th, 2012.

³⁵ One individual indicated that this was because a post at the Fed enabled a young economist to maintain the option of returning to academia whereas employment at other banking agencies generally precluded any such return.

³⁶ Ryan Grim, “Priceless: How the Federal Reserve Bought the Economics Profession,” Huffington Post, first posted October 23rd, 2009, accessed at http://www.huffingtonpost.com/2009/09/07/priceless-how-the-federal_n_278805.html on February 22nd 2013.

³⁷ Kettl (1986, 55) describes how Secretary Morgenthau attended a meeting of the FOMC and said, “Now I never threaten,” but added that he hoped the FOMC would “use the mechanisms which you have and give us an orderly market, or the government will and that’s the whole story.”

³⁸ See Schonhardt-Bailey with Bailey (forthcoming) who emphasizes that criticism of the Fed has been reflected in Congressional language about the *institutional* structure of the Fed and changes to it.

³⁹ See *Reuters*, “JP Morgan, Other Banks Scale Back Risk Models,” March 18, 2013 at <http://www.foxbusiness.com/industries/2013/03/18/jpmorgan-other-banks-scale-back-risk-models/>. By contrast, indicators like the “CoVaR” or “Covariance at Risk” models (which assess how much the equity values for different firms covary in response to outside shocks) can be estimated with publicly available data equity market data.

⁴⁰ The Basel Accords permit risk weighting as the risks to which a financial institution is exposed also affect the amount of capital it should hold.

⁴¹ The OFR was established specifically to collect and analyze data on the financial sector but has faced delays in its operation with its Director confirmed only in early 2013. Many interview subjects, however, spoke of the efforts to ensure consistency across institutions in the stress tests conducted under SCAP (the Supervisory Capital Assessment Program) and CCAR (the Comprehensive Capital Analysis and Review).

⁴² Anonymous interview. This was Patrick Parkinson, who was appointed in October 2009.

⁴³ For example, the Federal Financial Institutions Examination Council works to ensure that bank exams are consistent across the examining bodies.

⁴⁴ As a Fed “detailee” who had worked at the Treasury repeated to me, “the Treasury is not a regulatory agency.” However, the Treasury could use other regulatory agencies or hire lawyers and compliance officers.

⁴⁵ As just one example, Jeremiah Norton, a Republican Director at the FDIC has argued that the US should set more “robust” leverage ratio than that prescribed in the Basel Accords, see Shahien Nasiripour, “US Regulator Demands Stricter Bank Loan Ratio, *Financial Times*, February 5th, 2013.

⁴⁶ The forced break-up of the largest financial entities has also been suggested, including by Fed Governor Tarullo, and in the Brown-Kaufman bill, but was not taken-up in Dodd-Frank, see Skeel (2011) and Maxfield (2011).

⁴⁷ Lobbying was also seen from the American Bankers Association, the Securities Industry and Financial Markets Association (SIFMA) and the Financial Services Roundtable, see Jesse Hamilton, “Basel III Start Delayed as Bank Regulators Review Comments,” *Bloomberg*, November 9th 2012.

⁴⁸ See also analysis by Igan et al (2011) showing that mortgage lenders who lobbied engaged in more risky lending practices and Johnson and Kwak (2010) on financial industry influence more generally.

⁴⁹ The Fed became more transparent in the 1990’s, releasing a statement immediately after each FOMC meeting and reduced the waiting time until minutes were released in 2004.

⁵⁰ See http://www.federalreserve.gov/newsevents/reform_milestones.htm.

⁵¹ Mishkin (2011).

⁵² In the language of Kalt and Zupan (1984), will Members of Congress vote on ideological grounds rather than as pure representatives of concentrated, constituent interests or campaign contributors?

⁵³ Related to this, a former fed policymaker bemoaned that there has been little, public deliberation of the trade-off between risk and financial sector regulation and growth.

⁵⁴ The Fed pays particular attention to the smaller “state-chartered, member” banks that it regulates. “There’s a lot of care and feeding of the community banks” said one individual previously connected to the Fed. The state-chartered banks are also political influential because they are numerous and frequently in communication with their Member of Congress.

⁵⁵ A former Governor related that Bernanke had given up on achieving unanimity on the FOMC. On different viewpoints among Reserve Bank Presidents see Jon Hilsenrath and Victoria McGrane, “Fed Split over How Long to Keep Cash Spigot Open,” *Wall Street Journal*, February 20th 2013.

⁵⁶ Quoted in Binyamin Appelbaum, “As US Growth Lags, some press the Fed to do still more.” *New York Times*, February 1st, 2013.

⁵⁷ One indicator of the Fed’s interest in understanding the link between monetary policy and risk is the appointment of financial economist Jeremy Stein as one of the Governors of the Federal Reserve Board in May 2012. Stein also spoke, in February 2013, of the value of monetary policy in addressing risk because it “fills in all the cracks.”

REFERENCES

- Adrian, Tobias, and Hyun Song Shin. 2010. "Liquidity and Leverage." *Journal of Financial Intermediation*. 19:3, 418-437.
- Amel, Dean, Colleen Barnes, Fabio Panetta and Carmelo Salleo. 2004. "Consolidation and Efficiency in the Financial Sector: A Review of the International Evidence." *Journal of Banking and Finance*. 28:10, 2493-2519.
- Axilrod, Stephen H. 2009. *Inside the Fed: Monetary Policy and its Management, Martin through Greenspan to Bernanke*. Cambridge, MA: MIT Press.
- Bailey, Andrew J. and Cheryl Schonhardt-Bailey. 2008. "Does Deliberation Matter in FOMC Monetary Policymaking? The Volcker Revolution of 1979," *Political Analysis*. 16:4, 404-27.
- Cheryl Schonhardt-Bailey with Andrew J. Bailey. *Deliberating American Monetary Policy: A Textual Analysis*, forthcoming.
- Baker, Andrew. 2013. "The New Political Economy of the Macro-prudential Ideational Shift," *New Political Economy*. 18:1, 112-139.
- Bartel, Ann P. and Lacy Glenn Thomas. 1985. "Direct and Indirect Effects of Regulation: A New Look at OSHA's Impact." *Journal of Law and Economics*. 28:1, 1-25.
- Beck, Nathaniel. 1990. "Congress and the Fed: Why the Dog Does Not Bark in the Night." In *The Political Economy of American Monetary Policy*. Ed. Thomas Mayer. Cambridge: Cambridge University Press.
- Blinder, Alan. 1999. "Central Bank Credibility: Why do we Care? How do we Build it?" NBER Working Paper Number 7161.
- Blinder, Alan. 1998. *The Theory and Practice of Central Banking*. Cambridge, MIT Press.
- Blinder, Alan. 2010. "How Central should the Central Bank Be?" *Journal of Economic Literature*. 48:1, 123-133.
- Borio, Claudio E.V. and Mathias Drehmann. 2009. "Towards an Operational Framework for Financial Stability: 'Fuzzy' Measurement and Its Consequences." Bank for International Settlements. Working Paper No. 284.
- Borio, Claudio. 2011. "Implementing the Macro-prudential Approach to Financial Regulation and Supervision." In Christopher J. Green, et al, eds. *The Financial Crisis and the Regulation of Finance*. Cheltenham: Edward Elgar.
- Borio, Claudio and Haibin Zhu. 2012. "Capital Regulation, Risk-Taking and Monetary Policy: A Missing Link in the Transmission Mechanism?" *Journal of Financial Stability*. 8:4, 236-51.

- Broz, Lawrence, 2012, "The Federal Reserve as Lender of Last Resort: 2007-2010." Paper prepared for the Annual Meetings of the International Political Economy Society.
- Callander, Steven. 2008. A Theory of Policy Expertise. *Quarterly Journal of Political Science*. 3:2, 139-169.
- Carpenter, Daniel P. 2001. *The Forging of Bureaucratic Autonomy: Reputations, Networks, and Policy Innovation in Executive Agencies, 1862-1928*. Princeton, NJ: Princeton University Press.
- Carpenter, Daniel P. 2010. *Reputation and Power: Organizational Image and Pharmaceutical Regulation at the FDA*. Princeton, NJ: Princeton University Press.
- Čihák, Martin. 2006. "How do Central Banks Write on Financial Stability?" IMF Working Paper 06/163.
- Duffy, John and Jim Engle-Warnick. 2006. "Multiple Regimes in U.S. Monetary Policy? A Nonparametric Approach," *Journal of Money, Credit and Banking*, 38:5, 1363-77.
- Epstein, David and Sharyn O'Halloran. 1999. *Delegating Powers: A Transaction-Cost Perspective on Policy Making Under Separate Powers*. New York: Cambridge University Press.
- Feldstein, Martin. 2010. "What Powers for the Federal Reserve?" *Journal of Economic Literature*. 48 (March): 134-145.
- Gailmard, Sean and John Patty. 2007. "Slackers and Zealots: Civil Service, Policy Discretion and Bureaucratic Expertise." *American Journal of Political Science*. 51:4, 873-89.
- Gilligan, Thomas W., and Krehbiel, Keith. 1987. "Collective Decision-Making and Standing Committees: An Informational Rationale for Restrictive Amendment Procedures," *Journal of Law, Economics and Organization*. 3:2, 287-.
- Goodhart, Charles Albert Eric. 2010. "Is a Less Pro-Cyclical Financial System and Achievable Goal?" *National Institute Economic Review*. 211:1, 81-90.
- Goodhart, Charles Albert Eric. 2012. "The Macro-Prudential Authority: Powers, Scope and Accountability." Mimeo.
- Haas, Peter M. 1992. "Epistemic Communities and International Policy Coordination." *International Organization*. 46:1, 1-35.
- Haldane, Andrew G. 2009. "Small Lessons from a Big Crisis." Remarks at the Federal Reserving Bank of Chicago 45th Annual Conference, Chicago, May 2009, see <http://www.bankofengland.co.uk/publications/Documents/speeches/2009/speech397.pdf>
- Hall, Peter A. 1993. "Policy Paradigms, Social Learning, and the State: The Case of Economic Policymaking in Britain." *Comparative Politics*. 25:3, 275-296.

Havrilesky, Thomas and Robert Schweitzer. 1990. "A Theory of FOMC Dissent Voting with Evidence from the Time Series. In *The Political Economy of American Monetary Policy*. Ed. Thomas Mayer. Cambridge: Cambridge University Press.

Huber, John and Nolan McCarty. 2004. "Bureaucratic Capacity, Delegation and Political Reform." *American Political Science Review*. 98:3, 481-94.

Igan, Deniz, Prachi Mishra and Thierry Tiesel. 2011. "A Fistful of Dollars: Lobbying and the Financial Crisis." NBER Working Paper No. 17076.

Johnson, Simon and James Kwak. 2010. *Thirteen Bankers: The Wall Street Takeover and the Next Financial Meltdown*. New York: Pantheon.

Kalt, Joseph P. and Mark A. Zupan. 1984. "Capture and Ideology in the Economic Theory of Politics," *American Economic Review*, 74:3, 279-300.

Kapstein, Ethan B., 1992, "Between Power and Purpose: Central Bankers and the Politics of Regulatory Convergence." *International Organization*. 46:1, 265-87.

Kettl, Donald. 1988. *Leadership at the Fed*. New Haven: Yale University Press.

Kiewiet, D. Roderick and Mathew D. McCubbins. 1991. *The Logic of Delegation: Congressional Parties and the Appropriations Process*. Chicago; University of Chicago Press.

Lim, Chen Hoon, S. Columba, A. Costa, P. Kongsamut, A. Otani, M. Sayid, T. Wezel and X. Wu. 2011. "Macro-Prudential Policy: What Instruments and How to Use Them – Lessons from Country Experience." IMF Working Paper No. 11/238.

Lindsey, David E., Athanasios Orphanides, and Robert H. Rasche. 2005. "The Reform of October 1979: How it Happened and Why." Finance and Economics Discussion Series Staff Paper 2005-2, Divisions of Research and Statistics and Monetary Affairs, Federal Reserve Board, Washington DC.

Mariathasan, Mike and Ouarda Merrouche. 2012. "The Manipulation of Basel Risk Weights: Evidence from 2007-10." University of Oxford, Department of Economics, Discussion Paper No. 621.

Mayer, Thomas, ed. 1990. *The Political Economy of American Monetary Policy*. Cambridge: Cambridge University Press.

Maxfield, Sylvia. 2011. "U.S. Financial Regulations circa 2010: The *Coup de Grace* of Dodd and Frank's Legislative Careers?" *European Political Science*. 10: 393-401.

- McCarty, Nolan. 2013. "Complexity, Capacity, and Capture." In Daniel Carpenter and David Moss, eds. *Preventing Regulatory Capture: Special Interest Influence and How to Limit It*. Cambridge: Cambridge University Press.
- McCubbins, Mathew D. and Thomas Schwartz. 1984. "Congressional Oversight Overlooked: Police Patrols versus Fire Alarms." *American Journal of Political Science*. 28:1, 165-179.
- Meltzer, Allan H. 2009a. *A History of the Federal Reserve, Volume 2, Book 1, 1951-1969*. Chicago, IL: University of Chicago Press.
- Meltzer, Allan H. 2009b. *A History of the Federal Reserve, Volume 2, Book 2, 1970-1985*. Chicago, IL: University of Chicago Press.
- Mian, Atif, Amir Sufi and Francesco Trebbi. 2008. "The Political Economy of the U.S. Mortgage Default Crisis." NBER Working Paper No. 14468.
- Mian, Atif, Amir Sufi and Francesco Trebbi. 2008. "The Political Economy of the Subprime Mortgage Credit Expansion." NBER Working Paper No. 16107.
- Mishkin, Frederic A. 2009. "The Financial Crisis and the Federal Reserve." Mimeo.
- Mishkin, Frederic, A. 2011. "Monetary Policy Strategy: Lessons from the Crisis." NBER Working Paper, No. 16755.
- Olson, Mancur. 1965. *The Logic of Collective Action: Public Goods and the Theory of Groups*. Cambridge: Harvard University Press.
- Peltzman, Sam. 1976. "Toward a More General Theory of Regulation," *Journal of Law and Economics*. 19:3, 211-40.
- Pierson, Paul. 2004, *Politics in Time: History, Institutions, and Social Analysis*, Princeton: Princeton University Press.
- Posen, Adam. 1995. "Declarations are Not Enough: Financial Sector Sources of Central Bank Independence." re-printed in *NBER Macro-Economic Annual*. 10, 253-74.
- Raghuram G. Rajan. 2010. *Faultlines: How Hidden Fractures Still Threaten the World Economy*. Princeton: Princeton University Press.
- Reinhart, Carmen M. and Kenneth S. Rogoff. 2013. "Shifting Mandates: The Federal Reserve's First Centennial." Paper prepared for the Annual Meeting of the American Economic Association.
- Roberts, Paul C. 1984. *The Supply-Side Revolution: An Insider's Account of Policymaking in Washington*. Cambridge: Harvard University Press.

Romer, Thomas and Barry R. Weingast. 1991. "Political Foundations of the Thrift Debacle." In Alberto Alesina and Geoffrey Carliner eds. *Politics and Economics in the Eighties*. Chicago, IL: University of Chicago Press.

Salisbury, Robert H. and Kenneth A. Shepsle. 1981. "US Congressman as Enterprise." *Legislative Studies Quarterly*. 6:4, 559-576.

Silber, William L. 2012. *Volcker: The Power of Persistence*. London: Bloomsbury Press.

Skeel, David. 2011. *The New Financial Deal: Understanding the Dodd-Frank Act and its (Unintended) Consequences*. Hoboken NJ: John Wiley and Sons.

Stigler, George J. 1971. "The Theory of Economic Regulation." *The Bell Journal of Economics and Management*. 2:1, 3-21.

Timberlake, Richard H. 1993. *Monetary Policy in the United States: An Intellectual and Institutional History*. Chicago and London: University of Chicago Press.

Todd, Tim. 2012. *The Balance of Power: The Political Fight for an Independent Central Bank, 1790 – Present*. Kansas City: Federal Reserve Bank of Kansas City.

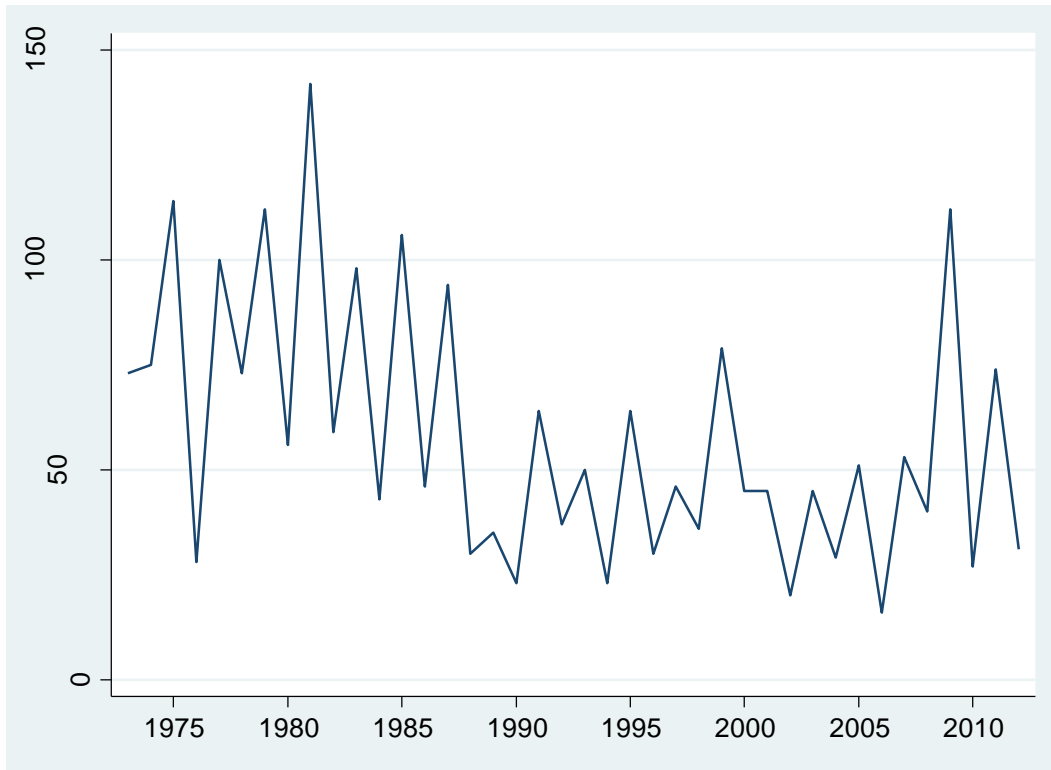
Woolley, John T. 1984. *Monetary Politics: The Federal Reserve and the Politics of Monetary Policy*. Cambridge: Cambridge University Press.

U.S. Department of Treasury. 2009. "Financial Regulatory Reform: A New Foundation." Mimeo.

Yergin, Daniel and Joseph Stanislaw. 1998. *The Commanding Heights: The Battle for the World Economy*. New York: Simon and Schuster.

FIGURES

Figure One: Bills Introduced in Congress on the Federal Reserve 1973-2012



NB: Number of Bills introduced in Congress by year downloaded from Thomas.gov using search for term “Federal Reserve” in summary or title of bill.

Figure Two: Comparison of Autonomy and Specialization in Monetary Policy and MPP

Monetary Policy	
<i>Policy Inputs</i>	Specialized \longleftrightarrow General
Data	Sourced from clearing house functions & public, macro data Monetary economists Open market operations
Labor	
Tools	

Macro-prudential Policy	
<i>Policy Inputs</i>	Specialized \longleftrightarrow General
Data	Sourced from firms and public, financial data Bank regulators Regulation of bank capital
Labor	
Tools	