



# Crisis, continuity and learning: The institutional origins of subprime management at the Federal Reserve

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## Abstract

This article examines the nature of the US central bank's relationship to financial markets amidst recent arguments that the subprime crisis marked a paradigmatic shift in the Federal Reserve's approach to financial management. It applies the concepts of institutional capacity and institutional learning from neo-institutionalist scholarship on policy development to examine the Federal Reserve's response and reaction to various financial failures following 1970. On this basis the paper argues that the Federal Reserve's response to the 2008 crisis drew on the institutional learning it garnered in previous periods.

## Keywords

Federal Reserve, financial crisis, institutional capacity, US dollar, failure management, institutional learning

## Introduction

There has been a great deal of confusion regarding the Federal Reserve's supervision of financial markets and the rebalancing of state intervention in the economy. With the start of the subprime financial crisis in 2007 and the Federal Reserve's historically unprecedented management of financial market risk and volatility, many scholars have noted the reversal of regulatory independence and the 'return of the state as a traditional public leviathan involved in financial regulation' (Datz, 2009: 660).<sup>1</sup> As Datz (2009: 665) concludes, the crisis has 'marked a new balance between the state and the market... and a reassertion of the state as a regulatory agent'. A similar argument is made by Bayne (2008) who suggests that the success of monetary policy in containing the effects of the economic crisis has given

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increased prominence to central banks as guardians of financial stability. For his part, Bayne is reluctant to see this trend as permanent, noting that the increased power of central banks is likely to be short-lived as politically responsive institutions at the national and international levels regain policy prominence. Nevertheless, he views the recent influence and institutional adaptiveness of central banks as marking a distinctly new moment in financial regulation.

Along these lines, Helleiner (2010) has argued that it is wrong to take too narrow an approach to the current evolution of US monetary policy and central banking, even though the type of radical transformative changes that appeared to be on the horizon after the election of Obama in 2008 have not completely materialized. In pointing out that the 1944 Bretton Woods agreement came out of four years of negotiation and remained only partially implemented until 1957, Helleiner (2010) argues that transformations in the financial architecture emerge slowly, often on the back of major periods of financial distress and instability. Again, the implication is that the policy ideas and ideologies that governed financial market relations before 2008 may in fact be slowly deteriorating in the face of crisis, bringing about a shift in the boundaries of acceptable discourse and policy formation. This suggests that the recent changes in the Federal Reserve's regulatory and monetary policy toolkit cannot be underestimated in terms of marking the starting point of a new set of state–society relations.

Therefore, it is argued that in terms of understanding the nature and development of US central banking and monetary policy, the transformation narrative, as presented by Bayne, Datz, and even Helleiner, poorly captures the complex institutional-level processes and relationships that gave shape to the Federal Reserve's management of financial markets during the subprime crisis. In particular, these explanations fail to recognize the considerable coherence between the Federal Reserve's crisis and pre-crisis approach to financial management and misrepresent the nature of the Federal Reserve's relationship to financial markets. In demonstrating that there has not been a paradigmatic shift in the Federal Reserve's approach to financial management, this article applies the concepts of institutional capacity and learning to the Federal Reserve's management of liberalized financial markets from the 1970s onwards. It argues, instead, that the Federal Reserve's response to the 2008 crisis drew on the institutional learning it garnered in previous periods.

This article is divided into three main sections. The first section explores the political and institutional foundations underpinning the Federal Reserve's capacity to protect financial market risk. This section sheds light on the type of learning that occurred at the US central bank following the liberalization of financial markets and explains, moreover, that many of the foundations that permitted the Federal Reserve to supervise financial markets were firmly in place throughout the post-war period. The second section shows that, in responding to various financial crises from the 1970s onwards, the Federal Reserve gradually learned how to manage financial risk and, more generally, how to exercise its institutional capacity. This section focuses on five major episodes as illustrations of institutional learning that laid the foundation for the Federal Reserve's reaction to the subprime crisis. The final section briefly reviews the Federal Reserve's response to the subprime crisis, showing that it was underpinned by the Federal Reserve's institutional knowledge and memory.

### **The political and institutional origins of Federal Reserve capacity**

Before exploring the institutional learning that informed the Federal Reserve's approach to the subprime crisis, it is important to look at the factors underpinning its institutional

capacity to manage financial markets. It would appear that what is being claimed by Datz (2009) and Bayne (2008) is that the Federal Reserve either did not have the capacity to manage financial risk prior to the crisis or, more likely, that it chose not to deploy this capacity. Both accounts are deeply problematic. The foundations underpinning the Federal Reserve's capacity were firmly in place throughout the post-war period but, even so, in the years leading up to the subprime crisis the Federal Reserve had to experiment with and discover the boundaries of this capacity as well as learn how it could be effectively marshaled.

### *Institutional capacity and learning*

Coleman and Skogstad's (1990: 16) influential work on Canadian policy development defines state capacity as the 'ability of the state to draw on sufficient institutional resources both to design policies that will realize its policy objectives and to implement these policies'. In showing that state formations need to be disaggregated and that state power is neither static nor uniform across institutions, they argue that the policy-making and regulatory capacity of state institutions is 'more or less influenced by broader institutional macropolitical variables' (Coleman and Skogstad, 1990: 15–18). As Coleman and Skogstad (1990: 8, 17) note, the capacity of state actors significantly depends on the 'institutional parameters', politicized negotiations, and jurisdictional arrangements that influence their freedom and power to coordinate policy decisions. What this means is that the capacity of state institutions to carry out a particular agenda does not occur spontaneously, but is rather to be found in the complex political legacies that shape the institution's design as well as the agreements that give expression to these arrangements.

However, policy capability is not necessarily the same as institutional action – there is a break between having the capacity to draw on resources to design policy solutions and knowing how to utilize this capacity to achieve institutional objectives. Thus, if the seeds of the Federal Reserve's institutional capacity were planted by macro-political variables, it was through a process of institutional learning that this capacity was cultivated and given shape. As we will see, when financial markets became increasingly volatile in the 1970s the Federal Reserve had to learn both how to supervise financial markets in a way that was consistent with its mandate of preserving financial stability and how to effectively deploy its institutional capacity in the service of this goal, even if its 'willingness' to protect financial markets was conditioned in the last instance by the relativity of its autonomy from Wall Street and the nature of US informal imperialism in the post-war period (Panitch and Gindin, 2012). Therefore, apart from understanding how to manage new patterns of financial risk, Federal Reserve officials faced a number of institutional uncertainties regarding their capacity to support US financial markets/interests. These concerns related to how much political autonomy the Federal Reserve actually possessed to manage risk; the extent to which financial markets were willing to trade off dollar inflation for financial stability; and how far the Federal Reserve's connectivity to Wall Street could be massaged to limit financial failure.

### *Pivotal legislation*

Building from Coleman and Skogstad's (1990) framework, it can be argued that the Federal Reserve's policy-making capacity to manage financial market risk hinged, very significantly,

on two important political decisions: the 1935 Banking Act and the 1951 Federal Reserve Treasury Accord. Strongly contested by Wall Street for the way in which it made the decisions of regional boards of directors subject to a newly appointed institution in Washington, the 1935 Banking Act gave formal control over monetary policy to the newly established Federal Open Market Committee. This was very important in establishing the Federal Reserve's institutional autonomy and independence from the political establishment. The most salient part of the legislation was that it limited direct political influence over monetary policy by removing the Secretary of the Treasury and the Comptroller of the Currency from the Federal Reserve Board. Apart from giving the Federal Reserve a considerable range of institutional flexibility to direct state resources towards managing financial markets, this political insulation structured authority within a technocratic financial elite intimately connected to Wall Street. On this basis, the 1935 Banking Act also served to further implant financial rationalities within the Federal Reserve and laid the stable basis for the Federal Reserve's close relationship to Wall Street, including the personal associations that enabled it to respond more effectively to financial distress.

The 1951 Federal Reserve Treasury Accord served to further enhance the Federal Reserve's institutional and policy maneuverability. Even with the Treasury no longer overseeing the Federal Reserve's activities in a formal sense, it still exercised considerable influence over monetary policy, principally because it retained control over yields on government debt obligations. It was only after the Accord that the Federal Reserve restricted its intervention to correct distortions and equilibrate the market around target rates of short-term interest so that demand for government securities could reflect market fundamentals rather than political considerations (Panitch and Gindin, 2012). The Accord was, therefore, significant because it gave the Federal Reserve the autonomy to pursue price level stability, and enabled it to meaningfully support the development of a liquid free market in government securities. This was important in sustaining the credibility of the dollar and in creating the conditions whereby the Federal Reserve could work alongside and support financial markets. Equally important, in freeing up monetary policy for the pursuit of other national objectives, it finally created the institutional malleability the Federal Reserve would need to manage liberalized financial markets through the post-war period. It was this flexibility or autonomy that ultimately allowed the Federal Reserve to bailout Penn Central, Bear Stearns, and AIG, amongst other institutions, and to ensure the stability of the international payment system.

### *The dollar, the global economy, and US capitalism*

The Federal Reserve's capacity to act as the world's central bank rests, as well, on the credibility of the dollar and, in particular, on the political processes that have continuously sustained the substantive validity of US debt obligations. Just as the US state's recent management of financial volatility must be set in the context of a much broader history of US financial supervision, the Federal Reserve's unique relationship to global financial markets needs to be explained in terms of the post-war evolution of dollar credibility in the international bond market. The international value of the dollar has special enabling effects because it allows the Federal Reserve to create market liquidity in the service of financial stability without the sanctioning of market discipline. Above all, the dollar's value allows the Federal Reserve to be external to the control found within financial markets. If the Federal

Reserve's rescue strategies were met with real concern about the value of the dollar and led, in turn, to higher long-term interest rates and inflation, the Federal Reserve's capacity to protect domestic and international financial markets would be severely blunted. Thus instead of viewing the Federal Reserve's penetration into international financial markets abstractly, it only makes sense to think about the Federal Reserve's global role in terms of the governing conceptions of risk that permeate and determine the directionality of financial flows.

It is precisely for this reason that the supervisory and regulatory framework designed after the Second World War is so important for understanding the Federal Reserve's historic management of financial markets. Under the Bretton Woods international monetary system, the US dollar was established as the international monetary reference point or the global reserve asset. All other countries tied their currency to the dollar at fixed rates of convertibility and the US guaranteed dollar convertibility with gold at US\$35 per ounce. By linking US Treasury debt with gold, the new financial order effectively removed concern pertaining to the future value of American currency. As is commonly recognized, this generalized understanding of American asset value had its roots in the productive superiority of American capital and worked to deepen the tentacles of American structural power throughout the post-war period, while also setting the context for subsequent interactions.<sup>2</sup>

Despite the reform of monetary relations that followed 1971, neither the privatization of currency risk that occurred alongside the collapse of Bretton Woods nor the intensification of economic globalization disturbed these trends. Instead, the US's relationship to financial markets was merely revised in a way that continued to serve and in many ways reflect its imperial nature (Aquanno, 2008). This is especially because the American state took the lead in reconstituting global capitalism on the basis of market discipline and currency value following the collapse of international Keynesianism. The appointment of Paul Volcker as chair of the Federal Reserve Board in 1979 was an attempt to facilitate this restructuring in the home market. In conjunction with the domestic neoliberal package introduced by Reagan following his 1980 election, Volker's tight money policy created the social and economic conditions that facilitated a new wave of productive dynamism: the Volcker shock directly targeted labor through the wage-price spiral and amounted to a frontal assault on the capacity of the American working class to issue workplace demands relating to wages, job security, and workload. By confirming the US's intense commitment to dollar value, this helped to sustain the dollar's substantive financial validity throughout the neoliberal period.

### **Institutional learning in Federal Reserve policy: Managing liberalized finance**

Until the beginning of the 1970s, 'there was no tradition of central bank examination of banks' within the Federal Reserve system and, as a consequence, little institutional attention was placed on the foundations of macro-prudential risk (Mayer, 2001: 32). A 1972 report sponsored by the American Institute of Banking and approved by Federal Reserve officials found that as a regulator and supervisor of member banks the Federal Reserve's historic role has been relatively constrained, limited mainly to providing information 'helpful to the bank's management' (Mayer, 2001: 32). This changed, however, as the capital control programs put in place following the great depression and Second World War to protect against financial volatility gradually broke down during the late 1960s and early 1970s.

Ultimately, the Federal Reserve built up the knowledge required to exercise its institutional capacity and manage financial volatility through a long process of what Hall (1993) calls institutional or social learning.<sup>3</sup> In this sense, the Federal Reserve was both deploying its institutional capacity and learning how to use it as it comprehended how to manage financial risk following 1970. Federal Reserve policy makers continuously assimilated 'new information, including that based on past experience, and appl[ied] it to their subsequent actions... to adjust the goals or techniques of policy' while remaining committed to the overall objective, or third order goal, of managing liberalized financial market volatility (Hall, 1993: 278).<sup>4</sup> The Federal Reserve's learning in this regard, which ultimately gave form to its strategy of failure containment including its response to the subprime crisis, principally took shape through five different episodes of financial crisis management.

### *The failure of Penn Central (1970)*

The Federal Reserve's first major lesson in managing financial volatility occurred just prior to the collapse of the Bretton Woods system alongside the failure of Penn Central in 1970. At the time of its default, Penn Central had US\$82 million in commercial paper outstanding and was the sixth largest US nonfinancial corporation; as a result, its failure was seen as emblematic of the poor quality of many nonbank commercial paper obligations and immediately produced a run on corporate placements that tightened the supply of outstanding capital. For the Federal Reserve, the most important problem became contagion into the real economy: such a major run on commercial paper created a problem for corporate liquidity as financial markets were already by this time broadly linked to productive channels. Thus, as the Federal Reserve dealt with the Penn crisis it came face to face with the instability created by the growing penetration and interconnectivity of financial markets.

The bailout package organized by the Federal Reserve focused on this problem of sustaining the flow of capital from banks to commercial corporations. To ensure that money was properly received, banks were told that 'as they made loans to enable their customers to pay off maturing commercial paper and thus needed more reserves, the Federal Reserve discount window would be available' (Schadrack and Breimyer, 1970: 289). In addition, the Federal Reserve's rescue package created a set of 'standby procedures' to supply capital to 'worthy borrowers facing unusual liquidity requirements' (Schadrack and Breimyer, 1970: 289). In the end, the Federal Reserve did not need to utilize these emergency lending channels to nonbank corporations (Schadrack and Breimyer, 1970: 289). Nonetheless, its willingness to provide liquidity in principle helped to stabilize financial markets. This was an important lesson in helping the Federal Reserve to understand that its credible commitment to action alone could impact financial activity.

In all the disarticulation and pressure created by the failure of Penn Central, the Federal Reserve also started to realize that it could expand its balance sheet to support financial firms without much, or any, resistance from foreign exchange markets, although the question of how much dollar liquidity markets were willing to accept remained partly unresolved until the syndicated loan failure. Beyond the acknowledgment of the Federal Reserve that it would intervene to manage crises, Penn Central was also a clear indication that liberalized financial markets had to be closely supervised. Further, it reflected the view that the protection of financial markets hinged, ultimately, on the ability of regulators to closely monitor the activity of important market segments and maintain strong relationships with Wall Street executives (Gowan, 1999; Schadrack and Breimyer, 1970).

### *The collapse of the Franklin (May–October 1974) and Herstatt (June 1974) banks*

The lessons the Federal Reserve acquired during the Penn Central collapse were, in many respects, buttressed in the mid-1970s in the face of separate banking failures. The first collapse involved Franklin Square National Bank, which had suffered catastrophic losses following an aggressive move into foreign exchange speculation in 1974. Given Franklin's penetration into international currency markets, its collapse jeopardized the smooth functioning of foreign exchange markets and threatened to cause an international liquidity crisis. It was indicative of how much the Federal Reserve had already learned about financial management and its own institutional capacity that it was able to quickly contain the crisis by temporarily propping-up Franklin with a US\$1.7 billion loan package (Spero, 1989). In fact, part of what made the Federal Reserve's rescue so successful was that it was closely monitoring Franklin before its collapse. This served to validate what it had learned during the Penn failure: that it needed to maintain close relationships with Wall Street firms in order to contain financial market risk.

The Franklin collapse also served to further expand the parameters of the Federal Reserve's institutional focus. As a result of its close connectivity to the international banking community, Franklin's failure forced the Federal Reserve to confront the system-wide vulnerabilities created by even a partial collapse of the international payment system.<sup>5</sup> In addressing this challenge, Federal Reserve regulators came to understand that any meaningful commitment to ensure domestic financial stability also included limiting systemic financial risk. It is precisely in this context that the Federal Reserve not only 'purchased securities on Franklin's behalf' but 'assured foreign creditors that they would be paid' (Panitch and Gindin, 2012: 153). As Kapstein (1994: 42) shows, the Federal Reserve's orderly unwinding of Franklin National amounted to an explicit commitment to provide 'lender-of-last resort assistance to banks operating in the Euromarkets'. Again, what was involved here was the Federal Reserve further experimenting with its institutional capability. It was one thing to provide capital to support domestic institutions, but quite another to guarantee the functionality of major global markets by promising huge injections of dollars.

Therefore, what especially distinguished the Federal Reserve's financial strategy after Franklin National was its growing focus on systemic financial risk and the international payments system. The collapse of Bankhaus Herstatt in June 1974 on the heels of the Franklin bailout served to stiffen the Federal Reserve's evolving institutional mandate. Herstatt's abrupt declaration of bankruptcy left a string of unsettled foreign exchange trades throughout the international banking community that caused a severe and very sudden liquidity squeeze for a host of major US and British banks and led to the virtual collapse of international foreign exchange flows (Spero, 1989: 127). In this way, the Herstatt collapse further demonstrated that private financial institutions, and US interests in particular, were deeply susceptible to the aggregate risk caused by a breakdown in global liquidity. As such, when the Federal Reserve reprimanded the Bundesbank for not providing assistance to Bankhaus Herstatt and pressured it to assume responsibility for paying off Herstatt's debt, it was not only acknowledging this lesson, but also deepening its institutional commitment to manage systemic risk.

### *The Syndicated Loan crisis (1982–1983)*

As the Federal Reserve dealt with financial instability and failure in the 1970s it learned that it had to concentrate on ensuring the smooth flow of global liquidity within key funding

markets (Greider, 1989: 437–443). This lesson was perhaps foremost assimilated during the syndicated loan crisis, where many US banks and other major global institutions got into difficulties as Third World governments defaulted or threatened to default on the massive loans they took out during the 1970s. In particular, the crisis reminded the Federal Reserve of the dangerous instability of international funding markets and the type of damage that could be caused by the collapse of interbank markets both within the financial system and more generally (Volcker and Gyohten, 1992). Beyond this realization, as the crisis unfolded the Federal Reserve recognized that financial markets were expecting it to assume responsibility for the collapse of US and global funding markets. As Pauly (2008: 74) notes, the dominant sentiment at the time was that ‘certainly with regard to Mexican debt, the largest and most prominent debtor country, everyone knew that the central bank. . . of the United States would have to play the role of [lender and investor of last resort] for its key money-center banks. . .’. In this sense the financial system had also learned from the Federal Reserve’s intervention in financial markets in the 1970s and now based current responses on past interventions and experience. This significantly strengthened the Federal Reserve’s prevailing view on the international payment system, because it ultimately meant that financial institutions and actors were ill prepared and even ill equipped to deal with the effects of financial contagion (Volcker and Gyohten, 1992). This understanding of financial market risk and volatility led the Federal Reserve, acting in concert with the Treasury, to launch a secret ‘rescue operation explicitly designed to bail out the banks that held Mexico’s debt’ and ‘conscript the British, Japanese and Swiss central banks into the operation’ (Panitch and Gindin, 2012: 179).

The Federal Reserve drew two additional lessons from the syndicated loan crisis. Firstly, it learned that its capacity to manage risk by printing currency and manipulating its balance sheet had not been weakened by the destabilization of the dollar in the 1970s and the renewal of dollar value alongside the Volcker shock: if anything it had been enhanced. That financial markets not only accepted but also anticipated the Federal Reserve’s bailout was a clear sign that they were prepared to approve a temporary expansion of dollar liquidity in exchange for financial tranquility. Secondly, with the crisis infecting not one but many US banks, the Federal Reserve came to see that the stability of the banking system could be enhanced if firms were allowed to diversify their portfolios beyond the narrow confines established in the 1930s (Federal Reserve Bank of New York, 1986; Nash, 1987). It was no surprise, in this context, that shortly after the crisis dissipated Federal Reserve officials authorized the Bank of America to purchase Charles Schwab, the largest US securities firm, and then adapted Section 20 of the Glass Steagall Act, which prevented money center banks from being ‘engaged principally’ in brokerage operations (Kwan, 1997). This reflected an understanding by the Federal Reserve that large diversified financial firms improved the stability of the financial system and were thus an effective component of financial management (Meltzer, 2010).

### *The 1987 crash and the savings and loan failure*

The October 1987 stock market crash confronted Federal Reserve officials with many of the same problems that it had already encountered in managing liberalized financial markets. Thus, as the Standard & Poor’s (S&P) and DOW dropped 20 percent on 19 October 1987 erasing US\$500 billion in capital and nearly one quarter of the exchange value of America’s leading multinational corporations, the Federal Reserve drew on nearly 20 years of



institutional learning and trial and error experimentation to combat the ‘... loss of confidence in the financial underpinnings of clearing and settlement systems...’ that now threatened US financial intermediation with systemic crisis (Spero, 1989: 125). Drawing, in particular, on the syndicated loan crisis, the Federal Reserve supported the payment system by lending directly to banks on a short-term basis through its discount window before it bought several hundred million US dollars on foreign exchange markets (Neely, 2004). Moreover, the crisis further taught the Federal Reserve that it could influence expectations and help settle financial distress simply by signaling its intention to protect against systemic volatility (Krippner, 2003: 151–154). As it turned out, the Federal Reserve’s success in combating the crisis was notably helped along by Greenspan’s public declaration that the Federal Reserve was ready ‘to serve as a source of liquidity to support the economic and financial [system]’ (Greenspan, 2008: 108).

Apart from reinforcing its existing stock of knowledge, the 1987 crisis gave the Federal Reserve an ability to gauge its institutional capacity. Part of what the Federal Reserve had to learn as it took on responsibility for managing financial volatility following 1970 was the extent to which it could intervene in private markets using public resources without drawing political backlash and threatening its own institutional autonomy (Krippner, 2011). In its response to the Penn Central, Franklin National, and the syndicated loan crises the Federal Reserve had seen that the political system was willing to give it latitude in servicing its institutional mandate. The stock crash in 1987 was quite different because the Federal Reserve took a public stance in combating the crisis from the onset. It is thus very significant that Greenspan’s handling of the crisis and the Federal Reserve’s swift and decisive action to protect markets was broadly praised both in Washington and by the general public. Two weeks following the crash, the *Washington Post* (Rowan, 1987) summarized the national mood in saying that ‘the Federal Reserve’s action represents the single biggest difference between the crisis of 1987 and the Great Crash of 1929’. In fact, as US equities recovered and began to turn strongly positive, Greenspan’s intervention in 1987 was credited for sparking a bull run in the US stock market. All of this told the Federal Reserve, more clearly than in the past, that it had a significant degree of political latitude to intervene in financial crises (Konings, 2011). As this message crystallized, the Federal Reserve came to acknowledge that its autonomy, while always somewhat spasmodic, was quite firmly grounded, at least to the extent that its actions had demonstratively positive impacts on the broader economy.

The Federal Reserve’s institutional learning during this period was likewise owing to the failure of savings and loan (S&L) companies, which had got into difficulties with the accumulation of junk bonds as they tried to compete with larger more internationally oriented financial institutions. The Federal Reserve’s management of the S&L crisis can be traced back to the 1970s as S&L associations experienced fierce competition for consumer savings from securities firms, emboldened because they could offer investors short-term market securities at money market rates of return (Gramlich, 2007: 14). When it became apparent that S&L businesses could no longer survive and that their continued operation threatened to cause havoc in international lending markets, particularly the wholesale funding markets that support the liquidity of large financial institutions, Federal Reserve regulators helped to set up and fund the Resolution Trust Company in order to take operational responsibility for all insolvent savings banks.

Most importantly, in dealing with the gradual collapse of the S&L industry the Federal Reserve further learned that the stability of the international payments system was not only compatible with but also enhanced by large diversified financial firms. What was clear as

regulators tried to help along the industry by setting up funding alternatives was that the S&L model, based on transitioning household savings into fixed-rate residential mortgages, did not provide nearly enough flexibility to respond to changes and innovations in capital financing; the liberalization of capital markets coupled with the growth of financial institutions globally rather required firms to hold a broad portfolio of liabilities and assets (D'Arista, 1994; Federal Reserve Bank of New York, 1992, 1994; Nash, 1987). It was in light of this point that the Federal Reserve's response to the crisis not only focused on liquidating the assets of insolvent S&L associations, but also aimed at fostering a pattern of concentration in the commercial banking sector (Berger et al., 1995: 66–67; Panitch and Gindin, 2012: 173–174).

### *The failure of the Long Term Capital Management hedge fund (1998)*

Finally, the Federal Reserve's approach to financial risk management during the subprime crisis corresponds to its experience containing the crisis of the Long Term Capital Management (LTCM) hedge fund. LTCM's collapse occurred gradually following Russia's default in 1998 when bond yields shifted abruptly and unexpectedly. The Federal Reserve monitored the situation closely and as LTCM's ability to meet its debt obligations faltered it arranged a private bailout package with a consortium of financial executives. That the Federal Reserve successfully managed the collapse without committing any public funds in no way undermines the institutional learning that took place as LTCM's capital position slowly deteriorated. Inside the Federal Reserve, the crisis helped to stimulate a certain uneasiness with specialized financial firms, and again made an issue of financial concentration and diversification (Gowan, 1999). There was at least some correspondence in this respect between the LTCM crisis and the Federal Reserve's endorsement of the *Gram Leach Bliley Bill* in 1999. Further to this, the particularities of LTCM's decline served as perhaps the clearest indication to date that financial management could be significantly improved by maintaining close supervisory relationships with financial firms (Blustein, 2001). On this basis, it was very important that the Federal Reserve's oversight of LTCM leading up to the crisis allowed it to anticipate the collapse and tranquilize systemic risk and also that the Federal Reserve was able to convince 14 of LTCM's major counterparties to provide nearly US\$4 billion to recapitalize the firm and hold its outstanding positions.

### **Subprime management as the application of institutional learning**

Therefore, from the perspective of institutional learning, there was every reason to believe, at the very start of the subprime crisis, that the Federal Reserve would go to great lengths to protect markets from the collapse of US structured and securitized debt obligations. However, the institutional lessons the Federal Reserve had learned in the previous four decades leading up to the subprime collapse influenced *how* it would respond to the crisis. As we have seen, the Federal Reserve's management of liberalized financial markets following 1970 taught it six primary lessons: (1) that financial markets could not effectively manage systemic financial risk; (2) that volatility in the international payments system in particular could have disastrous implications for US financial interests and had to be strictly contained; (3) that public declarations of support helped to calm financial markets; (4) that large financial institutions rather than small specialized firms stood a better chance of navigating liberalized markets and achieving financial stability; (5) that financial management could be

improved by coordinating with and monitoring Wall Street firms; and (6) that both international currency markets and domestic political interests would give the Federal Reserve significant license to manage financial distress.

It is from this understanding of the Federal Reserve's institutional knowledge that the coherence and formation of its response to the subprime crisis must be analyzed. We can thus see an expression of the Federal Reserve's institutional learning by assessing the major ways in which it sought to contain systemic risk during the crisis. It is very important, for example, that as the crisis became evident the Federal Reserve immediately took decisive action to contain volatility in the international payment chain. Firstly, this involved coordinating with major depository institutions to contain financial risk through discount window lending and declaring its intention to support financial functionality. Soon after publically reconfiguring borrowing rules in August 2007 to make the discount window more financially attractive, the Federal Reserve 'urged everyone to borrow' and worked directly with Citigroup, JP Morgan Chase, Bank of America, and Wachovia Group to organize YSS\$2 billion in 30-day funding (Barr and Nutting, 2007). When it became apparent that this strategy of private sector coordination and moral suasion would not, by itself, stabilize wholesale funding channels, the Federal Reserve openly and overtly announced its intention to act as 'a lender of only resort' to the financial system by immersing itself within the center of the banking network as both a seller and buyer of capital (Bernanke, 2008). This system of exchange created liquidity by taking capital out of the system at points where it was stockpiled and targeting credit offerings to institutions requiring credit assistance. This meant that the Federal Reserve reduced its portfolio of securities as it extended capital to financial institutions and thereby provided liquidity to the financial system without increasing total liquidity.

The Federal Reserve's crisis management approach also developed at once around the strategies of private sector penetration/connectivity and financial consolidation. For the Federal Reserve, the major lesson of the Bear Stearns failure was that more critical steps had to be taken to gain knowledge about the solvency of major financial institutions (Associated Press/CBS, 2008; Grynbaum, 2008). When the Federal Reserve announced the Primary Dealer Credit Facility (PDCF) alongside the Bear Stearns bailout package and privately committed to supervise Wall Street's remaining investment banks by placing a staff of analysts inside each institution, it was precisely acknowledging this point. The Federal Reserve defended its decision to place investment banks within its regulatory ambit on the basis of the extension of funding offered through the PDCF, but it was no less an attempt to draw on its institutional capacity to establish more effective advanced warning measures for containing financial volatility. It is thus not surprising that the Federal Reserve later expanded and consolidated this system of institutional penetration with the establishment of the Financial Institutions Supervisory Group in the spring of 2011 (Sooklal, 2012). The Large Financial Institution Supervisory Program involves expanding ongoing direct relations with Wall Street by sending dedicated teams into financial firms to be a part of their risk management operations (Sooklal, 2012).

In terms of financial diversification, the Federal Reserve's strategy appears most clearly if we look at the process of institutional reorganization that started with the management of the Bear Stearns crisis. Recognizing that the bankruptcy of Bear would have immediately 'touched off a chain reaction at other major financial institutions' that would be 'extremely difficult to contain' (Associated Press/CBS, 2008; Grynbaum, 2008), the Federal Reserve transferred the risk of systemic failure to a larger and more dynamic financial institution by

mediating the sale of Bear to JP Morgan. Following this course of action the Federal Reserve also pressured Bank of America to take control of Merrill Lynch and orchestrated the financial restructuring of Morgan Stanley and Goldman Sachs, turning both companies into bank holding organizations. At almost the same time, the Federal Reserve bailed out Citigroup in such a way that placed no onus on Citi to replace top-level executives or liquidate components of its business operations. In fact, even the Federal Reserve's temporary acquisition of AIG was organized to complete the orderly wind-down of its toxic assets and was not concerned to challenge AIG's basic operational design, let alone unravel the huge diversification that had taken place in the insurance industry.

By the end of the crisis, then, the Federal Reserve had not only protected the previous process of financial consolidation, but acted to create four new mega banks and organize the complete annihilation of Wall Street's stand alone securities firms. This is doubly important in that, as the regulator of national banks and holding companies, it significantly improved the Federal Reserve's capacity to supervise and maintain connections with the financial system. It is also apparent that in bailing out Wall Street firms and deciding, at the same time, not to support individual home owners, the Federal Reserve was acting with a broad definition or interpretation of its institutional autonomy and policy flexibility. It is not at all clear that the Federal Reserve's response would have taken on the same form had it condensed from a different institutional memory.

It bears emphasizing that in the aftermath of the collapse of Lehman Brothers, the fifth Wall Street brokerage firm, the Federal Reserve's focus on containing systemic risk led to a number of important monetary policy innovations. This was expressed in the development of new funding programs, both domestically and internationally, and subsequently the significant expansion of the Federal Reserve's balance sheet. Between 11 September 2008 and 16 October 2008, reserve bank credit increased from US\$906.8 billion to US\$1753.6 billion. At the same time, the portfolio of securities held by the Federal Reserve actually increased from US\$479.8 billion to US\$490.7 billion, meaning that the Federal Reserve had abandoned attempts to sterilize or offset this liquidity expansion by selling securities. Since then, bank claims held on reserve at the Federal Reserve have rocketed to more than US\$2.5 trillion and the asset side of the Federal Reserve's balance sheet has grown to approximately US\$3 trillion. If these interventions involved the use of a new basket of policy tools, including quantitative easing, it nonetheless remains important to acknowledge that they were all clearly aimed at protecting the international payment system.<sup>6</sup> What is more, they principally depended on the Federal Reserve's understanding that international currency markets would allow it to mobilize tremendous volumes of capital in support of international financial markets. As the crisis evolved, then, the Federal Reserve did not change course but attempted to broaden the application of its existing institutional knowledge, even if this meant testing the boundaries of its institutional capacity.

## Conclusions

In certain narrow respects, the 2008 financial crisis seems to have ushered in a stage of punctured equilibrium in financial management and regulation. In this context, the innovations in financial policy that have enhanced the Federal Reserve's penetration into capital markets and led to the adoption of new policy tools are particularly instructive (Aquanno, 2014). It must be understood, however, that the Federal Reserve's protection of financial markets and institutions during the subprime meltdown was distinctly driven and informed

by the web of policies and initiatives it employed during the Penn Central collapse, the syndicated loan crisis, the 1987 stock collapse, and the LTCM failure. Far from being a major policy departure, the Federal Reserve's protection against systemic risk and its attempt to preserve large financial institutions, both before and after the Lehman's collapse, rather entailed a very recognizable policy response, albeit one expanded to fit the gravity of the situation.

In this sense, it is remarkable just how much the Federal Reserve's intervention during the subprime collapse tapped into the institutional knowledge it had gained in the nearly 40 years leading up to the crisis as it grappled with the increasing fragility of international financial markets. Grasping this meshwork of institutional responses requires first understanding the Federal Reserve's unique institutional capacity and the way in which the autonomy of the Federal Reserve and the unique credibility of the dollar in particular give it the force to manage volatility. Further, it is also important to recognize the specific ways in which the Federal Reserve's special relationship to financial markets was accommodated and elaborated in the face of financial volatility. Key here is that following the collapse of Bretton Woods and the liberalization of financial markets in the early 1970s, the Federal Reserve gradually learnt how to manage the tensions and contradictions within US and global financial markets and how to deploy its institutional capacity while it continuously gained insights about its sovereignty in protecting financial markets. Thus, in assessing how the Federal Reserve's institutional parameters have been recalibrated in light of the subprime crisis it is necessary to start with the complex managerial networks and linkages, developed over the course of almost four decades of institutional learning and trial and error adaptation, that operate between the US central bank and liberalized financial markets. What is apparent, in this sense, is that the recent shifts and innovations in US monetary policy that have attracted so much scholarly attention represent changes within the Federal Reserve's managerial approach to global capitalism and do not in fact mark the birth of a new set of supervisory rationalities.

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### **Notes**

1. This position is also advanced, directly or indirectly, by scholars such as Wade (2008), Shiller (2000), Corder (2009), Posner (2009), Schwartz (2009), Gowan (2009), Chorev and Babb (2009), and Chwioroth (2010).
2. For a good review of the relationship between US dollar value and US power, see Strange (1988) or Gowan (1999).
3. Hall's concept of social or institutional learning also relates to and draws on the work of Hecló (1974), Etheredge (1981), Lindblom and Cohen (1979), and Lynn (1978). Sabatier (1988), Weiss (1977), and Rose (1988) have also made significant contributions to this literature.

4. As Hall (1993) notes, institutional learning occurs within the context of an overarching policy framework, paradigm, or approach and thus involves subtle adaptations rather than significant breaks in policy operation and organization. Moreover, policy learning is a distinctly bureaucratic process that entails trial and error experimentation and the acquisition of institutional knowledge (Hall, 1993).
5. The international payments system, or international interbank market, is 'a vast informal market where banks lend to each other' (Bank of International Settlements, 1983). More specifically, it can be described as a loosely integrated network of interbank payment and settlement systems that support financial access and liquidity internationally.
6. The Federal Reserve also experimented with direct financial guarantees in which it pledged to cover the losses of entire market segments. Furthermore, as it expanded global liquidity, the Federal Reserve adopted a new process of monetary control where it managed interest rates in the federal funds market not by adding or subtracting funds but by paying interest on excess financial holdings. This gave firms a monetary incentive to hold additional capital and helped to install a modicum of confidence into funding channels.

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