

# From “Lender of Last Resort” to “Moral Hazard”: Central Bank Responses to International Banking Crises in Historical Perspective

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## Abstract

The article criticises the view that financial crisis management by technocratic monetary authorities in the age of financial globalisation stands for independent central banks guarding the public good of global financial stability. It compares two cases of central banks orchestrating bailouts of failing firms at the heart of international private finance: the 1890 Barings Crisis in Britain, with the Bank of England at the centre of the rescue, and the role of the New York Federal Reserve in the rescue of Long Term Capital Management (LTCM) in 1998. The paper combines a social constructivist approach with the policy network approach to decipher the political reality of the private-public nexus of monetary authorities and international investment banks. It argues that formally autonomous central banking is in practice politicised because of policymakers being inextricably part of the high finance network. Their policy responses to banking crises are not disinterested, but shaped by the world view of this insider community. Within this context, central banks are naturally inclined to accept a ‘too big to fail’ reasoning to legitimise massive bailouts of ailing firms without proper consideration of the moral hazard this creates. In addition, monetary authorities are unwilling to curtail speculative behaviour with regulatory responses which would threaten the oligopolistic financial elite at the heart of the network. Intertwined with private global finance, they are reluctant to address the problem of moral hazard effectively. As history shows, the consequence is a repeating pattern of speculative financial crises.

**Key Words:** global finance; financial crisis, central banks, lender of last resort, moral hazard, policy networks

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## 1. Introduction<sup>1</sup>

The global financial crisis (GFC) has resulted in the largest bailouts of the American banking sector by government in U.S. history. By the end of April 2008, about \$2.5 trillion had been spent by the government on bailing out, shoring up, and rebuilding the nation's financial system (Chinn and Frieden 2011: 128). This direct relief for U.S. banks was supplemented by the policy of Quantitative Easing (QE) by the U.S. Federal Reserve (Fed): massive asset buying programmes in an attempt to increase the money supply and bring down the interests rates faced by households and corporations. Over the last five years the Fed has created and spent over \$4 trillion on bond purchases, with little return in terms of boosting the American GDP. However, as a Andrew Huszar, who managed the Fed's mortgage-backed security purchase programme from 2009 to 2010, explains, QE constituted another massive subsidy to the U.S. banking sector: The banks not only benefited from QE because it lowered the costs of making loans, they also reaped huge capital gains on the rising value of their security holdings. As a result, Wall Street global finance, after facing bankruptcy of its major institutions in 2008, has been returned to profitability, with the collective share price of U.S. banks tripling since 2009.<sup>2</sup> This poses the question whether the cost of the bailouts was worth it. The answer of Chinn and Frieden, representing the orthodox view in the GFC literature, is an emphatic 'yes', since it safeguarded systemic stability:

'There are times when, in order to protect the innocent, society has to bail out the guilty, and this crisis was one of those times. Certainly it is galling that most of the financiers whose recklessness had made the disaster so severe were well treated throughout the crisis. Certainly there is little doubt that the principal direct beneficiaries of the bailouts were the bankers themselves. ... And yet by the time the government stepped in, the principal alternative to a bailout would have been an even greater economic catastrophe' (Chinn and Frieden 2011: 130-131).

This argument represents the mainstream view on the bailouts during the GFC: the U.S. government, and its independent monetary authority, the Fed, faced

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1. The author wishes to thank Adam Cleary, Chief Executive, Cavenham Capital Limited, London, who generously contributed invaluable research assistance on the history of merchant banking in the City of London.

2. Andrew Huszar, 'Confessions of a Quantitative Easer', *Wall Street Journal*, 11 November 2013.

exceptional circumstances of unique gravity. Failing banks posed a systemic risk, the risk of a collapse of the wider financial and economic system. In these extreme circumstances the neutral technocratic administrators of the financial system had no choice but to act as Lender of Last Resort (LLR), providing a public good by organising bailouts of private finance. However, this orthodox ‘public good’ interpretation of the bailouts has been challenged by heterodox views which see the actions of the Fed as an expression of ‘crony capitalism’. A typical example is the analysis of Anthony Randazzo, director of research of the Reason Foundation, an American libertarian think tank. Under the headline ‘Trillion Dollar Bailouts Equal Crony Capitalism: The Federal Reserve was supposed to be a lender of last resort, not an ATM for Wall Street’ he writes:

“The ultimate result [of the bailouts] was the Federal Reserve lending to unsound institutions, against poor collateral, and with no penalty—i.e., giving money away for free to the Fed’s closest friends. The Fed effectively put aside any concerns for moral hazard with its actions, and instead focused on short-term aims over long-term negative consequences. The result has been an outrageous carry trade, with some financial institutions taking in virtually free money, buying Treasuries that yield about 3 percent (lending it back to the government that just gave it to them), and banking the difference. Bloomberg estimates that banks have made about \$13 billion from this, which those banks have then used to pay large compensation packages. When the Occupy Wall Street crowd complains about illicit gains, this is the source of their anger. We have a crony capitalist system... .”<sup>3</sup>

Huszar, reflecting on the bailouts from his experience as a Fed insider, supports this view. Having, as he put it, ‘witnessed the institution [the Fed] deferring more and more to Wall Street’, he states: ‘The Fed has lost any remaining ability to think independently from Wall Street’.<sup>4</sup>

Taking a historical perspective, we investigate the claim that monetary authorities in reality do not act as neutral defenders of the public good, but as insiders of a network of vested interests at the heart of the financial industry.

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3. Randazzo, Anthony, ‘Trillion Dollar Bailouts Equal Crony Capitalism’, *reason.com*, 09 December 2011. <http://reason.com/archives/2011/12/09/trillion-dollar-bailouts-equal-crony-cap> (Accessed on 23 July 2012)

4. Andrew Huszar, ‘Confessions of a Quantitative Easer’, *Wall Street Journal*, 11 November 2013.

How 'systemic' is the risk posed by a looming failure of a major financial services institution? Are central banks and other government agencies, far from being neutral, in actuality not captured by the vested interests of the private financial sector, caught up in a network of high finance? What constitutes 'appropriate' action by central bankers in response to severe banking crises? How do central banks make practical sense of the crisis situation, and how do they respond? We will reconstruct the process of two major bailouts in financial history to answer these questions. Conceptually we will apply a social constructivist interpretation. We will use the policy network/policy community approach to explain these historically significant bailouts. A social constructivist reconstruction of historical cases in comparative analysis is useful to shed light on current bailouts for two reasons: firstly historical cases allow us to analyse the influence of the public-private nexus on monetary policy making in retrospect from a more disengaged and informed position. Financial crises and their consequences which lie back decades have been well researched and analysed. Secondly, as Goodhart and Delargy put it in their 1998 comparative analysis of the Asian emerging market crisis and the crises in the periphery of the pre-1914 classical gold standard: 'Plus ça Change, Plus c'est la Môme Chose': the more things change, the more they stay the same. By comparing the politics which led monetary authorities providing LLR functions to international banks in different historical contexts and institutional circumstances, we can identify underlying commonalities which are general features of the public-private interaction during financial crises. Identifying those patterns should assist a better analysis of the GFC.

We compare two banking crises and bailouts organised by central banks which were pivotal for the development of global finance in their respective epochs: the 1890 crisis of Barings Brothers shaking the City of London (with the Bank of England organising the banks rescue) and the 1998 near-collapse of Long Term Capital Management (LTCM) which upset Wall Street (with the Fed as organiser of a bailout). These two crises are epochal because they fundamentally changed the perception of risk by financial market participants, resulting in a new dimension of moral hazard. The Bank of England during the Barings crisis practiced for the first time LLR interventionism, representing a major break with the non-interventionist ethos of the classical gold standard. The bailout of LTCM was a turning point in the perception of risk by global investment firms in contemporary global financial markets, signalling to Wall Street that excessive speculative behaviour and financial innovation posed little actual risk, since even

a highly leveraged hedge fund could count on the Fed to step in if the financial bets undertaken went wrong. This signal to Wall Street high finance was highly consequential, arguably contributing to the build-up of the credit bubble which collapsed in 2008.

Despite the different types of financial institutions involved, the parallels between these two incidents are remarkable.<sup>5</sup> Barings Brothers of 1890 was a major merchant bank in the inner circle of the City of London *haute finance*. Long Term Capital Management (LTCM) of 1998 was a major hedge fund intricately intertwined with the highly leveraged financial institutions (HLFIs) centred in New York. In both cases a player in the centre of international finance specialising in speculative financial operations on a global scale faced collapse. In both cases the prospect of failure conjured up the nightmare of systemic risk: of a series of correlated defaults among major financial institutions on a national and international scale, a seizing up of credit markets and a meltdown in stock markets, generalised financial panic with unpredictable and potentially catastrophic consequences for the complex system of global finance and ultimately the world economy itself. In both cases the central bank used ‘moral suasion’ to persuade a consortium of major private financial institutions to recapitalise, i.e. bailout, the failing firms. Finally, in both cases the key central bank was portrayed as a stabiliser of the international financial system by facilitating a LLR operation to rescue de facto insolvent firms which were considered to be ‘too big to fail’.

Furthermore, the two crises exhibit striking similarities as far as their post mortem is concerned. In the theoretical evaluation of the two crises the orthodox view prevails that the bailout role of the central banks represented competent action in the general interest, providing for the public good of international financial stability (see Goodhart 1998: 353; Eichengreen 1996: 34-38; Bordo 2003: 29). The heterodox view that the two bailouts represent cases of regulatory capture of a public agency by private sector firms can be found only at the margins of the academic literature. However, regulatory capture was an important issue in the public debate of the two bailouts by contemporaries. In 1890 *The Economist* warned that it would not be to the public advantage if the resources of the Bank of England would, as a rule, be used to tide City merchant banks over their difficulties with as little loss as possible (*The Economist*, 22 November 1890,

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5. The parallels between these two crises were first alluded to by Kindleberger (2001: 154).

1465-1466). Equally, members of the House of Representatives Banking Committee, in the hearing on the LTCM rescue, voiced persistent concerns about the role played by the Fed as part of the Federal Government in the bailout.<sup>6</sup>

We will argue that even institutionally autonomous central banks are inextricably part of the global financial community, the informal public-private network of international high finance at the heart of senior financial centres. Consequently, in practice the response of monetary authorities to major financial and banking crises will be shaped by the world views and social practices which are constitutive for these networks. LLR action of major central banks has to be understood within the social logic of these financial elite networks: LLR action arises out of an intersubjective understanding within the network that the interest of the financial community in a bailout is identical with the public interest. This shared understanding of the situation is then reflected in the actions of the central banks, the orchestration of a bailout in close interaction with the major private actors of the network. The following section (section two) will introduce the policy network approach to understand central bank behaviour as part of social practice in the financial communities clustered in senior international financial centres. Section three and four will present the historical reconstruction of LLR action by the Bank of England and the Fed in the case of Barings and LTCM, in the context of the inner circles of London and New York high finance. Section five will conclude.

## **2. Policy networks: central banks as insiders of the financial community**

What are the origins of the public good justification of the bailouts of failing international banks by monetary authorities? What is the social context within which the discourse of ‘too big to fail’ has become the accepted orthodox narrative? The lender of last resort argument was first advanced by Thornton and later more famously by Bagehot.<sup>7</sup> The argument has developed considerably since the late nineteenth century.<sup>8</sup> Bagehot’s narrow definition that the central bank should lend freely to illiquid but solvent financial institutions at a high rate of interest on

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6. see for example. U.S. House of Representatives (1998: 6).

7. See Thornton (1802), and Bagehot (1873).

8. For a description of the evolution of the historical argument see Goodhart & Illing (2002), Ch. 1, and Bordo (2003). The adoption of a modern LLR role by the Bank of England in the second half of the 19<sup>th</sup> Century is described by O’Brien (2003).

the basis of sound collateral to prevent bank panics and financial crisis has been broadened considerably over time. What really matters in practice for LLR action is not whether a bank is illiquid or insolvent, but whether a bank in trouble is ‘too big to fail’, that is whether its collapse would risk contagious systemic panic.<sup>9</sup> Essentially the ‘too big to fail’ principle states that the responsibility of the central bank as LLR lies with the stability of the financial system as a whole, and not the rescue of an individual bank (Capie 2002: 21). The counterpoint to the systemic stabilisation argument for LLR action is the moral hazard argument. It states that LLR action is problematic because it encourages further irresponsible risk taking by financial market agents. In the words of Goodhart: ‘The CB [by acting as a LLR] has to weigh the benefits of preventing panic now against the costs of inducing riskier activity later’ (Goodhart 1999: 353).

As Goodhart suggests (1998: 353), it is in practice impossible to unambiguously establish ex post what effect the default of an important financial firm would have for the wider financial system. Monetary authorities will in most cases be confronted with a situation of ambiguity and uncertainty as to systemic risk. Following rational choice accounts of agency capture, this situation makes the central bank liable to regulatory capture by the private sector interests of high finance. The officials of the public agency will compromise their public duty because the public agency is dependent on information from the private sector to judge the situation (information asymmetry), or simply because public officials want to maximise their self-interest by favouring large international banks (because of their private financial stakes, future job prospects, remuneration etc.).<sup>10</sup> Although the ambiguity of stabilisation and the risk of regulatory capture are evident in both the case of Barings and LTCM, rational choice interpretations falls short when it comes to explaining how central bank policy is formulated *in practice*.

Social constructivist interpretations of agency behaviour within social context suggest a more complex picture of central bank LLR policies beyond simple regulatory capture. From this perspective international financial markets are

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9. Although the ‘too big to fail’ doctrine was explicitly established only in the 1970s (see Bordo 2003: 27), it was in practice recognised since the 1860s, and evoked to justify the rescue of Barings in 1889 (see Capie 2002: 11-13).

10. For the concept of ‘regulatory capture’, see Stigler (1971). The capture literature is critically reviewed by Wilson (1984). A recent application to U.S. federal regulators is Woodard (2000).

socially and political embedded. Knorr Cetina and Bruegger describe these markets as ‘fields in which participants ... are, above all, oriented towards one another, ... bound together’ by global microstructures – that is, pattern of relatedness and coordination that are global in scope but microsocial in character’ (2002: 907). Similarly, Germain conceives the international financial community in terms of social networks located in principal financial centres, integrating an elite of international investment banks with the respective central bank. Consequently these networks constitute a nexus of authority between public and private monetary agents.<sup>11</sup> Whereas in the classical gold standard this public-private system at the core of international finance was essentially a product of the private nature of the pre-WWI international financial system, the public-private authority nexus has been reproduced in the contemporary world economy with the globalisation of private finance and the transformation of public governance since the 1970s.

In constructivist terms, central bank decision-making within this context will follow the ‘logic of appropriateness’ of the homo sociologicus, rather than the ‘logic of consequences’ of the homo economicus.<sup>12</sup> According to Bourdieu, appropriate action is in practice informed by a ‘practical sense’ of the social world, the schemata of perception and common sense understanding which structure social action within a specific ‘field’ or social network.<sup>13</sup> As Wendt points out, the ‘collective action problem’ is within the network not solved in game theoretical behavioural terms, as strategic interaction between egotists, but in cognitive terms, starting from shared understandings that define the structure of interest and identities (Wendt 1992: 417-418). This constructivist approach helps to make sense of ‘moral suasion’, the consensual strategy chosen by central banks to orchestrate cooperation of private-sector firms.

Concepts of ‘policy community’ and ‘policy network’, that is stable and non-hierarchical relationships between state actors and private groups, are particularly useful for a more precise understanding of the position and operation of public monetary and regulatory authorities within the high finance

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11. See Germain (1997: 16-27). He describes principle financial centres as cities were ‘the material and social aspects of credit are brought together to form a concentrated point of access connecting individuals, firms, and governments’ (1997: 21).

12. See March and Olson (1998).

13. See Bourdieu and Wacquant (1992: 120-121).



community.<sup>14</sup> Constructivist approaches emphasise the inter-subjective nature of networks which structure the interpretations and actions of their members which in turn reproduces the network through this socially structured interaction. In this view policy networks and communities institutionalise beliefs, shared values and ideology that help to define the boundaries of what is acceptable policy. Rather than setting out specific policies, they set out the broad policy agenda which frames specific decisions within the social sub-system (March and Smith 2000: 6). By working together as a group, a state agency (in our case: monetary authorities) and private actors (in our case: high finance) can increase each others autonomy by sealing off the policy process from other parts of the state and other private pressure groups (Smith 1993: 54).

Applied to the problem of agency capture, network approaches point at the wider problem of policymakers acting as insiders of the financial network. This challenges the public-private dichotomy which underlies the regulatory capture framework.<sup>15</sup> Following Hancher and Moran (1989), network analysis has to go beyond the concept of agency capture by investigating the process by which powerful insiders occupying a given ‘regulatory space’ interact, regardless of their formal status as ‘private’ or ‘public’ agents. Such an investigation has to focus on the characteristics which operate in that space, defining a community of insiders against outsiders: the shared cultural context, standard operating procedures, customary assumptions and routine applications of established practices (1989: 272-279).

For the purpose of our analysis of the central bank-high finance interaction,

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14. See March and Smith (2000). Policy network analysis comes in all shapes and guises. See Rhodes and Marsh (1992), Marsh (1998) and the overview article by Börzel (1998). Our constructivist interpretation draws mainly on the structurationist approach of March and Smith (2000) and the interpersonal, society centred approach of Wilks and Wright (1997), and Wright (1988). This excludes rational choice approaches, such as Dowding (1995) and the rationalist institutionalist approaches of the German ‘Max-Planck-School’ (see Börzel 1998: 260-265). The epistemic community approach (Hass 1992), although relevant, is less suited for an analysis of a public-private sectoral interest group networks because it emphasises homogeneity of scientific expert knowledge rather than mutual interests as constituting features of the group. Sabatier’s positivist ‘Advocacy Coalition Framework’ (see Sabatier and Jenkins-Smith 1999), although emphasising the role of policy ideas in elite networks, is uncritical about the social construction of these ideas. Policy network approaches have been applied to the IPE of financial services and state authority by Moran (1991), Coleman (1996) and Josselin (1996). Recent examples are Sinclair (2000) and King (2005).

15. See Hancher and Moran (1989: 276).

the approach of Wilks and Wright (1997) offers a useful framework. They locate policy communities at the sub-sectoral level, emphasising the close-knit, interpersonal dimension of the mutual relations of actors within a particular industry. Wright, in his analysis of the Takeover Panel and the corporate finance community in the City of London, which is a subset of the wider high finance community, describes key characteristics of the insider core group dominating the City, including the Bank of England and the major investment banks (1988: 397-405): Firstly membership of the community is restricted and exclusive. A core of self-selected 'insiders' with informal but close relationships interact on a regular and routine basis. Secondly, the relationships between members are regulated by unwritten 'rules of the game' which 'set approximate limits to their discretionary behaviour ... in the pursuit of a strategy appropriate to the circumstances of a particular issue, problem or event' (1988: 402). Thirdly policies are initiated pragmatically, with the policy community preferring 'satisficing' over optimising outcomes (1988: 404). Satisficing are those pragmatic solutions that serve two key mutual interests: maintaining the stability of the network and keeping it free from control or regulatory interference by outsiders. However, within this shared understanding of the mutually beneficial overall goals community members have particularistic values and self-interests, which differ between private banks and regulatory agencies (1988: 404). Fourth, the rules of the game are accepted by both private actors and the state authorities within the network. Both are willing to address problems through consultation, mutual accommodation and compromise. They practice informality and strict confidentiality and are averse to politicisation of the issues at stake. Crises are dealt with in a managerial, problem solving fashion within the functional logic of the network, clearly separated from wider 'public interest' implications. Finally, policymakers try to avoid governance of the private sector through directive or impositional strategies, instead preferring informal consultation, moral suasion and acquiescence with insider solutions suggested by the network. Policy responses are formulated not through tough bargaining between the central bank and investment banks, in a 'we and they' fashion. They are found through mutual understanding whereby the central bank acts as part of the 'we': it accepts solutions which are acceptable to other members of the community (1988: 399). The following section will demonstrate the explanatory power of the constructivist network approach via a detailed historical reconstruction of the public-private management of the Barings and LTCM crises.

### **3. The public-private nexus in the Baring Crisis**

In the late nineteenth century Baring Brothers was one of the City of London’s most important merchant banks. City merchant banks, the international investment banks of the gold standard age, operated without formal regulation or supervision. Barings became overextended after a speculative bubble in Latin America deflated.<sup>16</sup> Baring Brothers was the London bank specialising in underwriting Argentine loans and bond issues and, by the late 1880s, was uniquely exposed to Argentinean debt (Goodhart and Delargy 1998: 267). Like recent contemporary emerging market booms, the Argentine boom was unsustainable, inevitably ending in the balance of payments crisis of 1889/90. Given Barings’ huge exposure to Argentina, the country’s insolvency meant that Barings was de facto bankrupt. By late October 1890 the now desperate merchant bank made requests for advances to a number of City institutions. These were rejected and Barings was advised to apply to the Bank of England. This seemed to sound the death knell for the bank.

However, the Bank orchestrated a bailout involving its own capital, a government guarantee, and a ‘lifeboat operation’ of major commercial banks (Bordo 2003: 9-12). The acceptance of the LLR function by the Bank of England is generally described as an epochal event.<sup>17</sup> And indeed, by stabilising a key merchant bank, the Bank stabilised the City of London as the financial centre at the heart of the international gold standard system and arguably the classical gold standard itself. However, this ex post interpretation of the outcome of the Bank’s action neglects the murky policy process which led to the bailout of Barings.

In the second half of the 19<sup>th</sup> century the Bank of England was a private institution, competing with other banks, but tasked by the government in the 1844 Bank Charter Act with the monopoly of note issue within widely defined gold standard constraints. The Act also set out the Bank’s obligation to convert sterling into gold on demand.<sup>18</sup> In practice the Bank was highly autonomous from political control or accountability and operated as part of the City of London. De Cecco

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16. On the international dimension of the Barings crisis, see Eichengreen (1999).

17. See for example Eichengreen 1996: 35-38, and Bordo 2003: 12.

18. See Bank of England – History of the Bank: ‘From a National to a Central Bank’. <http://www.bankofengland.co.uk/natcentral.htm>. (Accessed on 28 March 2005).

speaks of an 'inner circle' of the financial community in the City, comprising the internationally oriented private merchant banks and the Bank of England, but excluding the new, but increasingly powerful, domestically oriented joint stock banks (De Cecco 1974: 99-104). Similarly Cassis speaks of an 'aristocracy of the city' (1991: 58). The inner circle was a highly informal and self-selective group, based on close interpersonal relations. It was constructed around a group of banking dynasties, firstly the prominent English merchant banks which dominated international *haute finance*, such as Barings Brothers, Hambros, and Morgan, Grenfell & Co, but integrating also old private banks, such as Glyn, Mills, Currie & Co (Cassis 1985: 219). These merchant bankers came from 'old families' closely interconnected through intermarriages. They had attended the same public schools and were members of the same elite clubs. The criterion of insider status was being represented on the Court of Directors of the Bank of England (Cassis 1985: 229). Thus, the Bank of England officials, appointed by the elite merchant banks, were as a rule 'one of us', with the bank de facto an institution representing *haute finance*.

In the critical period of 8 -14 November 1890 the Barings crisis was handled by the Bank through the informal consultative structures of the inner circle and in full secrecy towards the outside world. Barings involved the Bank of England through the mediation of another merchant bank, C J Hambro. On Saturday, 8 November, Hambro's director Everard Hambro, who was also on the board of the Bank of England, told the Governor of the Bank, William Lidderdale, that Barings' affairs were 'much involved'.<sup>19</sup> The same day Lord Revelstoke (formerly Edward Charles Baring), head of Baring Brothers and also a director of the Bank of England, and his brother Francis Baring met with the Governor and laid before him a statement of their affairs. Revelstoke was asked and duly promised to prepare a more detailed statement and present it to the Governor within two days.<sup>20</sup>

These events set in motion actions by the Bank which aimed at organising the bailout of Barings within the inner circle with a minimum of disturbance, formality, publicity or outside interference. Its policies reflected the two cardinal interests of the high finance community: maintaining the stability and smooth

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19. Bank of England Ref. G15/192 Folio 176 Statement by W. Lidderdale on the Barings crisis of 1890, written in February 1900.

20. Ibid.

operation of City *haute finance* and protecting the regime of informal self-governance by keeping outsiders at arms length. The insider approach of the Bank is evident in three key aspects of the Bank’s crisis management: the handling of the Barings audit, the negotiations with the Treasury and the orchestration of the consortium of banks for a life-boat operation.

First to the audit on Barings solvency: on Wednesday, 12 November, Barings presented a more detailed account of its affairs as Revelstoke had promised on the previous Saturday. This statement was later verified by Bertram Currie of the Glyn, Mills & Co, a private bank, and Benjamin Buck Greene, a former Bank of England Director, who had been acting as auditors. The audit was critical for the survival of Barings. Had it concluded that the firm was insolvent, a rescue would have been hard to justify to outsiders. Instead the audit suggested a mere liquidity crisis, coming to the conclusion that Barings assets exceeded its liabilities by almost £4 million. The Bank's statement reads: ‘They came to the conclusion, without confirming the figures, that there would be a substantial surplus.’<sup>21</sup> This conclusion is astonishing, since the default of Argentina meant that Baring was de facto insolvent. The auditors had attributed some surprisingly large valuations to the Argentine and Uruguayan securities which constituted no less than 47 percent of Barings securities portfolio, in spite of their total unsaleability at that time and the effective insolvency of the issuers.<sup>22</sup>

The fact that the audit presented the state of Barings in such a rosy light is not surprising since the auditors were members of the inner circle and were appointed by the inner circle. Glyn, Mills was one of Barings' closest associated firms and Currie had been intimately involved in its affairs. His firm had made huge advances to Barings and was listed as co-underwriter of Barings' Argentinean debt issues.<sup>23</sup> The informal and interpersonal connectedness between auditor and audited is emphasised in Currie's biography:

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21. Bank of England archive Ref: G15/189, Folio 15A.

22. Bank of England Ref: G15/248. The doubtful nature of Barings assets becomes manifest when examining the account of the Barings liquidation three years later: most of the Argentine and Uruguayan securities remained on the books, still distressed and unsaleable. See Bank of England Ref. G15/191 Statement of Assets 31 Dec 1893.

23. See Royal Bank of Scotland Group archives Ref. GM/1092/S London Repository: Glyn Mills and Co. Scrapbook Volume 2 Pages 110-115 *Mr B W Currie's account of the Baring Crisis* (November 1890), and Bank of England Ref: G15/189, Folio 1A.

‘I have already spoken of the feelings of respect with which I regarded Mr Thomas Baring, and of my close intimacy with Edward Baring who shortly before the crisis had changed his honoured name for that of Lord Revelstoke. I may add, that with H B Mildmay, another of his partners, I had lived, since we were boys at Eton together, on the closest terms of friendship and affection.’<sup>24</sup>

However, despite this obvious conflict of interest the Governor of the Bank proclaimed the auditors competence and independence.

The extent to which the Bank was caught up in the audit as an insider job becomes clear from comments by the second auditor, B. B. Greene. Firstly Greene points about that Currie did not act as a neutral auditor, but an advocate of Barings, concluding: ‘His only object being to keep the Barings going.’<sup>25</sup> Next Greene emphasises the collusion of Lidderdale. ‘[A]s the amount required [to tide over Barings] was so large ... I considered the shutters [of Baring Brothers] must go up soon after I reached the City, instead of which on delivery of the report to my surprise you [Lidderdale]<sup>26</sup> instantly said “they must be carried on”.’<sup>27</sup> Obviously Lidderdale was not only accommodating, but actively promoting the positive picture that the inner circle wished to present to outside parties.

The Bank’s negotiations with the Treasury, represented by George Goschen, the Chancellor of the Exchequer, indicate a clear divide between the two authorities concerned with the crisis. Lidderdale, acting from an insider perspective, was intent on obtaining official support to rescue Barings, protecting its associated creditors in the City inner circle, but keeping the Treasury at the sidelines of formulating policy responses. The Chancellor took more of an outsider public interest perspective. Although concerned to support the Bank of England and preserve the payments system, he was reluctant to follow the Banks policy of propping up a failed private bank.

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24. Royal Bank of Scotland archive, London Repository Ref: GM/911 (1:2) CL Currie (ed) *Bertram Wodehouse Currie 1827-96 Recollections, Letters and Journals* (privately printed, 1901), 88-93.

25. Bank of England Ref. G15/192 Folio 177 Statement by BB Greene on the Baring crisis of 1890.

26. The retrospective is written in the form of a letter to Lidderdale.

27. *Ibid.*

From the outset of the crisis Goschen was sceptical about the 'too big to fail' view of the crisis presented by the inner circle. When on Monday, 10 November, the day the crisis broke, the Chancellor visited the Bank and other inner circle members to get a picture of the situation, he was confronted with the classic 'too big to fail' understanding that the government had to support a rescue as a matter of systemic stability. Goschen's diary describes his visit as follows:

'Picture drawn of acceptances which would have to stop. All houses would tumble one after the other... I said the great houses and banks in London must come together and give the necessary guarantee. This was declared impossible if the Government didn't help... From Bank I went to \_\_\_\_ hoping to induce them to come forward... I found \_\_\_\_ in a blue funk, very much demoralised. \_\_\_\_ suggests that the Government should say that they would save Barings. Preposterous.'<sup>28</sup>

That Monday and at a further meeting on Tuesday, 11 November, the Chancellor refused to offer any overt assistance to Barings, offering instead a letter authorising the suspension of the Bank Charter Act of 1844.<sup>29</sup> A suspension would have freed the Bank from the duty to convert currency into gold and so protected it from the fall-out of the crisis. 'We said we would suspend the Bank Charter; and if necessary would do all in our power to increase their means.'<sup>30</sup> We would use all our influence; but we were quite firm in refusing absolutely help to Barings.'<sup>31</sup> Goschen reminded Lidderdale that any overt support would require the consent of Parliament and this would 'put the whole fat in the fire', perhaps intensifying the crisis by effectively associating HM Government with a failed bank.<sup>32</sup> Goschen set out his concerns again in a letter to Lord Salisbury, the Prime Minister, late on Tuesday after his meeting with Lidderdale: 'Tremendous pressure may be brought to bear on us to help, but I think it will be absolutely necessary for *la haute finance* to find its own salvation.'<sup>33</sup>

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28. Diary of Lord Goschen, Monday November 10th, 1890 quoted in A. Elliot, *Life of Lord Goschen 1831-1907*, (London, 1911), p.170. [ \_ ] indicate omissions of names in the original.

29. A. Elliot, *Life of Lord Goschen, 1831-1907* Vol. II, p.172

30. By increasing the government's account balance on deposit at the Bank of England

31. Diary of Lord Goschen, Tuesday November 11th, 1890, quoted in A. Elliot, *Life of Lord Goschen, 1831-1907* Vol. II, p.172

32. Ibid.

33. Letter from Lord Goschen to Lord Salisbury, Tuesday November 11th, 1890 quoted in A. Elliot, *Life of Lord Goschen, 1831-1907* Vol. II, p. 173

Despite the secrecy, by Friday, 14 November, Barings' troubles were becoming widely known, and their name was being freely mentioned in the market (Eichengreen 1999: 264). Barings' bills started to pour into the Bank of England for discount.<sup>34</sup> With the audit ostensibly in place, the Governor set out once again to convince the Treasury that official support was necessary. Goschen, the Chancellor, had to give a speech in Dundee and left London. But at a meeting of Lidderdale with William H. Smith, the First Lord of the Treasury, the Treasury again reiterated the government's offer to suspend the Bank Charter Act of 1844. Now the insider/outsider division between the Bank and the Treasury turned into an explicit conflict. Lidderdale was aware that suspending the convertibility of sterling guaranteed by the Act would be highly disruptive for the stability and smooth operations of London *haute finance*. As he put it, 'reliance on such letters was the cause of a great deal of bad banking in England'.<sup>35</sup> Edward Hamilton, a Treasury official, recounts in his diary that Lidderdale told him after the crisis that 'nothing would have induced him to break the Bank Act until he had exhausted every expedient... they might give him as many letters as they liked... but he should not avail himself of the authority'.<sup>36</sup>

Lidderdale was intent on getting his way. He combined this refusal to entertain suspension of the Bank Act with the threat that he would return to the Bank and throw out every further bill of Barings thus precipitating and intensifying the crisis.<sup>37</sup> Smith had been joined in his meeting with Lidderdale by the Prime Minister. In the absence of Goschen and faced with the threat of a general financial crisis, Salisbury chose to indemnify the Bank of England for half the losses they might face by continuing to accept Barings' bills between 2pm on Friday, 14 November, and 2pm on Saturday, 15 November, to enable the Governor to assemble a guarantee fund for Barings.<sup>38</sup> The government's participation and its backing of the Bank's policy was not so much a product of harmony and mutual cooperation

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34. Bank of England Ref. G15/192 Folio 179 Statement by W. Lidderdale responding to Mr Greene's account, February 1900.

35. Bank of England Ref. G15/192 Folio 179 Statement by W. Lidderdale responding to Mr Greene's account, February 1900.

36. Hamilton (1993: 134), diary entry for 8 January 1891.

37. Bank of England Ref. G15/192 Folio 179 Statement by W. Lidderdale responding to Mr Greene's account, February 1900.

38. Bank of England archive Ref: G15/189, Folio 15A & Bank of England Ref. G15/192 Folio 179 Statement by W. Lidderdale responding to Mr Greene's account, February 1900.



with the Bank, as portrayed in much of the literature.<sup>39</sup> Instead it was the outcome of tough and ultimately successful brinkmanship bargaining by the Bank’s Governor with the government. This strategic bargaining approach of the Bank towards the Treasury as an outsider institution contrasts with the consultative and accommodating approach it took towards fellow members of the inner circle.

Finally, the ease with which the Bank could orchestrate a consortium of private banks to rescue Barings would not have been possible without it being embedded within the web of the inner circle merchant banks. The Bank skilfully applied an approach differentiating between insiders and outsiders to solve the collective action problem of organising the lifeboat operation. First Lidderdale orchestrated a collective response by the inner core. Here he relied on moral suasion within the high finance community, leading by example and mobilizing peer pressure. Consensual action by the insider community was then used as leverage to get outsider firms, especially the important joint stock banks, to participate.

The critical meeting took place at 5p.m. on Friday, 14 November, bringing together representatives from all the main merchant banks of the City with the Governor of the Bank of England. At this meeting Lidderdale applied classic moral suasion politics. He emphasised the positive result of the audit of Barings and pointed out the government’s proposed underwriting of half the Bank of England’s losses. He then declared that the Bank of England would advance Barings’ funds as necessary to discharge their liabilities at maturity, but that a guarantee fund was necessary from the houses to indemnify the Bank from any losses arising from the liquidation.<sup>40</sup> Furthermore, the Bank would take the lead by putting its name at the top of the guarantee fund in the amount of £1 million, on condition that others guaranteed at least a further £3 million.<sup>41</sup> Bertram Currie of Glyn, Mills immediately responded to the Governor’s request by placing his firm’s name at the top of the list for a further amount of £500,000, declaring that it was a token of his faith in the audit he had conducted with Greene. However, he made it a condition that N.M. Rothschild & Sons should join the list as well for the same amount.

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39. E.g. Bordo (2003: 9-13).

40. Royal Bank of Scotland Group archives Ref. GM/1092/S London Repository: Glyn Mills and Co. Scrapbook Volume 2 Pages 110-115 *Mr BW Currie’s account of the Baring Crisis* (Nov 1890).

41. *Ibid.*

The participation of Lord Rothschild, head of N.M. Rothschild & Sons, the largest merchant bank of the City, was the Achilles heel of the Bank's bailout designs. N.M. Rothschild was one of the few firms not significantly engaged in business with Argentina and a major competitor of Barings.<sup>42</sup> Rothschild was thus the least exposed major banker of those present at the meeting and had commercially most to gain from Barings' downfall. However, it was clearly important for the credibility of the guarantee fund, especially towards the joint-stock banks, to bind Rothschilds into the compact.

Upon his arrival, subsequent to the start of the meeting, and only after some considerable peer pressure, Rothschild was persuaded to agree.<sup>43</sup> For Rothschild participation in the bailout was an opportunity to consolidate and advance the status of his rising firm within the inner circle of City high finance.<sup>44</sup> With N. M. Rothschild & Sons on board the other merchant banks fell in line without any significant differences, and the meeting soon raised a total of £3.25 million.

With this amount in hand the Governor had created an incentive structure which made it progressively less risky, and difficult to refuse, for the outsider joint stock banks to contribute to the guarantee fund. On Saturday, 15 November, the five largest joint stock banks pledged another £3.25 million, creating a momentum for the other houses and banks to join in. Within a week over £17million was raised for the fund, far exceeding the required amount.<sup>45</sup>

The collective action problem of the rescue was solved by the banks by differentiating between the different layers which constituted the wider financial community of the City. Within the inner circle of English merchant banks Lidderdale acted as insider, applying moral suasion based on personal interconnectedness, shared understandings and customary trust within the community of peers. Towards the second level acceptance as a community member was used as a bargaining chip. Common understandings and the implicit rules of the game of the inner circle mattered not just as part of a shared identity, but as an opportunity to prove belonging. Thirdly, we have the circle of outsiders, from

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42. See Eichengreen (1999: 264).

43. Royal Bank of Scotland Group archives Ref. GM/1092/S London Repository: Glyn Mills and Co. Scrapbook Volume 2 Pages 110-115 *Mr BW Currie's account of the Baring Crisis* (Nov 1890).

44. See Gutwein (1992: 118-124).

45. Bank of England Ref. G15/193 contains the full list of all guarantors.

the important joint stock banks down to less important firms. These institutions cooperated not so much because of Lidderdale’s appeal to common values and behavioural routines, but because they had to make a strategic choice within an incentive structure they did not control. Ultimately Lidderdale had leverage over firms outside the inner circle because he first had been able to lead the collective response within the inner circle as an acknowledged insider.

Once the crisis had been contained and the global position of City of London high finance had been secured, no public policy initiatives were undertaken to rein in the public-private nexus governing City *haute finance*. Frequent banking and financial crisis in the periphery of the Classical Gold Standard until its suspension in 1914 indicate that perpetuating this self-serving insider regime came at the prize of moral hazard, resulting in the increasing fragility of the liberal international economy preceding the First World War.<sup>46</sup> Certainly the interwar crisis has to be understood in the context of the social and political transformations brought about by the Great War. However, the erosion of the interwar gold exchange standard and its ultimate collapse has to be understood in the context of private international finance fuelling the international credit boom of the 1920s. Arguably, the Barings bailout of 1890 laid the foundation for later high risk behaviour. It was Barings which created the moral hazard problem in high finance, a problem which could only grow bigger with central banking becoming more interventionist in the interwar period.

#### **4. The public-private nexus in the LTCM rescue**

LTCM, a speculative hedge fund registered in the Cayman Islands, faced collapse in September 1998. Despite the huge range of currencies, markets and instruments LTCM was in essence making one simple but very big gamble: it was betting on the price of liquidity.<sup>47</sup> The fund engaged in what are known as ‘convergence trades’ or ‘relative value arbitrage’.<sup>48</sup> It aimed to arbitrage between the prices of two different but correlated instruments, in the expectation that the temporary difference between the prices of the two instruments would narrow or close, hence enabling them to make a small but apparently riskless profit.<sup>49</sup>

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46. See Goodhart and Delargy (1998).

47. Lowenstein (2001:134).

48. A good description of LTCM’s trading strategy is given by MacKenzie (2003).

49. Edwards (1999: 197).

Because these profits were small they needed to make these bets in very large size in order to generate huge returns. This implied extraordinary leverage to finance LTCM's huge positions. As Edwards notes, even for a speculative hedge fund vehicle, LTCM's leverage ratio was unusual and far beyond the realms of prudence (Edwards 1999: 198).

The flaw in LTCM's strategy was that its convergence plays proved to be spectacularly wrong, at precisely the point at which the hedge fund was most over-leveraged. As in the case of Barings, LTCM fell victim to the bursting of a speculative bubble in emerging markets. The LTCM partners failed to observe that in 1998 the financial distress arising from the Asian crisis in 1997 and the Russian default of 17 August 1998 led to risk aversion and a flight to safe assets. Against all expectations the liquid assets that LTCM had sold short rose in value as financial agents scrambled for safe, liquid instruments. Illiquid assets that they had bought declined in value.<sup>50</sup> At this moment LTCM was carrying a mass of illiquid securities it was unable to fund or roll over. The firm faced insolvency.

By mid-September the Federal Reserve Bank of New York (NY Fed) was advised about LTCM's difficulties. Within a period of frenetic activity from 18 to 23 September 1991 the NY Fed orchestrated the bailout of the Fund by a consortium of 14 major Wall Street banks. As in the case of Barings, the bailout was justified as an example of a responsible central bank adopting the LLR role by stabilising a firm which was 'too big to fail'. As one financial journalist put it: 'the world financial system owes a lot to ... the Fed for their willingness to meet the problem fair and square' (Shirreff, 10). Since most major international banks were heavily exposed to LTCM's operations, the stabilisers saw the possibility of a spill-over of panic to other major firms, risking systemic meltdown.<sup>51</sup> However, as the Fed itself (Meyer 1999: 317) and later investigations by the Bank for International Settlements (BIS) pointed out, the failure of LTCM would have not entailed the bankruptcy of any of the major Wall Street firms, nor would it have caused a general credit crunch for the real economy.<sup>52</sup> As in the case of Barings, the role of the central bank in the process which led to the rescue of LTCM deserves closer investigation.

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50. Lowenstein (2001: 134-160).

51. See MacKenzie (2003: 366-367) and Bordo (2003: 29).

52. See Furfine (2001: 3) and Committee on the Global Financial System (1999: 9).

The private-public nexus at the centre of both the resolution of the Barings and the LTCM crisis displays considerable similarities. Firstly, a core group of about six major investment banks, the so-called ‘bulge bracket’, dominate the world of New York high finance.<sup>53</sup> These bulge bracket firms were the key counterparties of LTCM. As in the case of the City in 1890, the major banks that dominate Wall Street represent a microstructure of global character, an elite network of global players with strong interpersonal connectedness. These informal relations result from the permutation and circulation of top investment banking talent through the top firms and the personal and informal nature in which major deals are executed among the financial elite. Furthermore, elite bankers of global finance frequently share a common social background: they know each other from school or university, frequent the same clubs and restaurants, and share social activities.<sup>54</sup>

LTCM was very much an insider of this investment banking network. One of the largest players in international financial markets, it did not act primarily as a hedge fund for wealthy private clients, but as a hedge fund outlet for the top layer of global investment banks.<sup>55</sup> Bulge bracket firms scrambled to have a share in financing the hugely profitable fund. Furthermore, operating outside regulatory control, LTCM could absorb risk which the established banks did not want to carry on their books (Dunbar 2000: 174-178). Finally the elite investment banks copied LTCM's relative value strategies within their own proprietary trading departments. This imitation tied them to LTCM's fate when the crisis finally struck. (Dunbar 2000: 215). In this symbiotic relationship Wall Street banks behaved increasingly like hedge funds, whereas LTCM itself behaved and operated as an elite investment bank.(Dunbar 2000: 179-180).

LTCM was headed by John Meriwether, who created the fund in 1994 by drawing on key members of the celebrated arbitrage group of Salomon Brothers he had been heading until he was forced to resign over alleged fraudulent trading practices in 1991. From the beginning Meriwether and the other partners

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53. A list of the ‘bulge bracket’ is given in Germain (1997: 180-181).

54. Lowenstein (1998) and Dunbar (2002) provide rich illustrations of the personal interconnectedness among the Wall Street elite including partners of LTCM and officials of the New York Fed.

55. See Corzine (2002) and Dunbar (2002). Only 4 percent of LTCM's capital came from wealthy individuals, the remainder from large financial firms (MacKenzie 2003: 354).

(‘principals’) of LTCM built the fund by creating strategic relationships within the investment bank community, drawing on their close personal contacts with the international financial elite. By 1998 a close knit and exclusive insider network of bankers who engaged in LTCM-style relative value strategies had emerged within the wider high finance community of New York. MacKenzie calls this network an ‘arbitrage community’, a group whose members, although in fierce and jealous competition, were oriented towards one another through mutual awareness and susceptibility (MacKenzie 2003: 371).

LTCM’s reputation within Wall Street rested on the insider status, recognition and authoritative recognition of its ‘principles’. Not only had Meriwether two economist Nobel laureates on board, Robert Merton and Myron Scholes. Their widely admired economic theories backed the fund’s arbitrage strategy. He also brought in a top Federal Reserve official, David W. Mullins. Before joining LTCM Mullins had been Vice-Chairman of the Federal Reserve Board in Washington DC, with a close working relationship to Alan Greenspan (Dunbar 2000: 132-133). Mullins participation allowed the hedge fund unparalleled access to quasi-official investment accounts around the world. Probably even more important, it linked the fund in with the inner conclave of U.S. central bankers, providing it with first-hand insider knowledge of the Fed’s policies.<sup>56</sup> Through Mullins LTCM was at the heart of the public-private nexus of Wall Street international finance.

The Fed, although a public authority, in practice related as an insider to the inner circle of Wall Street firms. Formally the U.S. central bank had no authority over an offshore hedge fund like LTCM.<sup>57</sup> However, in practice the NY Fed, the regional central bank of the Fed system in charge of the New York banking system and ‘tacitly recognized’ as the key monetary authority by the Wall Street banking community, presented itself as the natural choice to handle the LTCM crisis (Lowenstein 2001: 186). Similar to the Bank of England in the City in 1890, the NY Fed is organisationally and socially embedded in the world of Wall Street high finance. However, it differed from the Bank of England because of its direct function as a supervisory agency.

Structurally the integration of the NY Fed into the web of Wall Street high

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56. See Lowenstein 2001: 37-38.

57. Hedge funds, although de facto unregulated, fall in the US regulatory under the authority of the Commodity Futures and Trading Commission (CFTC).

finance is explained by its position as the institutional link between the Federal Reserve Board in Washington DC and the large international banks clustered in New York, the financial centre of the U.S.. It implements the Fed’s monetary policy by operating the Fed’s trading desk in the New York financial markets.<sup>58</sup> Similar to the organisation of the Bank of England in the Belle Époque, the president of the NY Fed is elected by a board of directors in which the large banks located in New York control the majority of the seats.<sup>59</sup> The close interconnectedness of the regional central bank with New York’s international banking community is well described by William McDonough, the NY Fed president in 1998:

‘So we tend to be where the center of the action is, both in implementing monetary policy and then in problem resolving or accident fighting if anything should come along to disturb the tranquillity of the American capital markets. ... We keep our ear very much to the ground here [on Wall Street], because we operate ... in financial markets. We work very closely with major financial firms in New York ... and by this constant interaction with them we are very familiar with what's going on. ... My boss is the board of governors of the Central Reserve System, but in a real sense I have two bosses. One, Alan Greenspan, is the chairman of the board of governors and we also have our own board of directors at the Federal Reserve Bank of New York, nine members’. (McDonough 2001: 2).

This structural entanglement of the NY Fed in the web of Wall Street finance was reflected by the personal interrelatedness of McDonough, its president, and his executive vice-president Peter R. Fisher. McDonough, a close ally of Fed Chairman Greenspan, came from a long carrier in commercial banking and was known for his accommodating stance towards banking interests when it came to regulatory questions.<sup>60</sup> Fisher was the head of the NY Fed’s market group, overseeing its trading operations and was the frontline Fed insider in the web of New York high finance, acting as the Fed’s fixer in moments of banking trouble. His role is described in the Wall Street Journal as:

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58. See McDonough (2001: 1-2).

59. See Henning (1994: 107-8).

60. At the time of the crisis McDonough was Chairman of the Basle Committee on Banking Supervision, pushing the Committee to allow banks to use their own risk measurement methods in a new capital adequacy framework (Basel II). See Dunbar (2000: 217-220).

‘Mr. Fisher swaps intelligence and rumors with traders and dealers ... [he is] the Fed’s eyes and ears on the inner workings of stock, bond and currency markets and is given a wide degree of latitude about deciding when certain events pose broader risks.’<sup>61</sup>

The crisis of LTCM affected 16 major international financial firms, comprising virtually the whole Wall Street financial elite.<sup>62</sup> The bailout was formulated by an ad hoc insider group within this community, including Fisher and McDonough of the NY Fed and the four major players in Wall Street high finance most exposed to LTCM. These were the three bulge bracket investment banks Merrill Lynch, Goldman Sachs, JP Morgan, plus representatives from UBS, the Swiss international bank (The ‘Big Four’).<sup>63</sup> Lowenstein dubbed the core group the ‘roving Security Council’ of the wider Wall Street community. The other 14 banks (the ‘General Assembly’)<sup>64</sup> were only brought in at the final stage of the rescue. From the beginning of the critical phase of the rescue, Sunday, 20 September 1998, to the decisive, and now famous, meeting with the wider community on Wednesday, 23 September, the Fed orchestrated the bailout in close concert with the Big Four. Similar to the case of Barings, the problems of LTCM were widely known in the financial community and by the NY Fed. And, as attempted by Barings, Meriwether desperately tried to mobilise the network of international high finance in his support, by calling the top managers of the Wall Street elite personally known to him, asking for an injection of capital (Lowenstein 2001: 143-183). When these attempts failed, Meriwether turned to the Big Four and the NY Fed for help. The Fed had closely followed developments from the sidelines, but was actively brought into the loop on the initiative of Jon Corzine, Co-Chairman of Goldman Sachs, only on Friday, 18 September. Significantly, on Saturday Meriwether delegated the call to McDonough to Mullins, the former central banker now with LTCM. Mullins invited the Fed over to LTCM on Sunday, 20 September, to investigate its trading positions. McDonough decided to led the crisis be handled by Fisher, the NY Fed official closest to Wall Street. On Sunday

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61. Jacob M. Schlesinger, ‘Who’s News: Long-Term Capital bailout spotlights a Fed “Radical”’, *Wall Street Journal*, 2 November 1998, section B, page 1.

62. The following section draws on the account of the rescue by McDonough (1998), Lowenstein (2001: 183-208) and Dunbar (2000: 215-223).

63. Lowenstein (2001:198).

64. Lowenstein (2001: 202). The final consortium included Goldman Sachs, JP Morgan, Merrill Lynch, UBS, Morgan Stanley, Credit Suisse, Salomon Smith Barney, Bankers Trust, Deutsche Bank, Chase Manhattan, Barclays Capital, Société Generale, Lehman Brothers and Paribas (Dunbar 2000: 223).



at LTCM, Fisher met Mullins, and together with representatives from Merrill, Goldman and JP Morgan went through the books of the fund. Starting on Monday, 21 September, Fisher brought the Big Four together into an almost permanent sitting group managing the rescue. By late evening on Tuesday, 22 September, under Fisher's leadership, the core group had agreed on the consortium plan developed by Merrill Lynch, proposing the rescue of LTCM through a bailout by 16 major banks.

In parallel to the consortium plan one member of the Big Four, Corzine of Goldman Sachs, had secretly negotiated an alternative private response with an outsider, the legendary investor Warren Buffett. Goldman Sachs and Buffet, together with another outsider, the insurance group AIG, were willing to buy the bankrupt fund at a knockdown price of \$250 million and immediately invest \$3.75 billion to stabilise its operations. The Meriwether team would be fired and Goldman traders would take over (Lowenstein 2001: 202-3; Dunbar 2000: 222).

On Wednesday, 23 September, 8:30 am, at the NY Fed, the consortium proposal was presented by the inner group of the Big Four and the NY Fed (the 'roving Security Council') to the 'General Assembly' of Wall Street banks comprising the elite of global finance. The meeting was chaired by McDonough. In advance (7 am) and parallel to the 'General Assembly' the 'Security Council' was meeting in an anteroom, with McDonough negotiating with Buffet by telephone about his private offer. The Buffet-Goldman initiative was resisted by the other members of the 'Security Council' and fell through at 12:30. Subsequently the 'General Assembly', which had reconvened at 1pm, was confronted by McDonough with the only option left: the consortium plan. It was, after some bargaining and horse-trading, finally accepted. At 5 pm it was announced that LTCM would be kept afloat through an injection of a total of \$3.625bn, financed by contributions from 14 of the 16 banks. Meriwether and his team would keep running LTCM, with its original capital of \$400 million intact, but with their stake in the fund reduced to 10 percent. Trading by the team would be supervised by the bailout consortium through an 'oversight committee' (Dunbar 2000: 223-224).

Similar to the Barings crisis, the entanglement of the central bank in the web of high finance is evident in the Fed's policy practice of moral suasion, its accommodation of Wall Street insider solutions to the crisis, its handling of the U.S. Treasury and finally the layered approach to orchestrating the rescue. The

Fed approached the crisis in a classic 'satisficing' fashion. When asked about how he judged the need for the NY Fed to coordinate a rescue, McDonough responded 'you start trusting your own instinct' (McDonough 2001: 13). Fisher, when getting involved, rather than losing time to ponder the wider problem of hedge fund speculation and the wider implications of a bailout in regards to moral hazard, had just one thought: 'How do we get to another weekend?' (Lowenstein 2001: 190).

What distinguishes the NY Fed's pragmatic behaviour is that its thinking of what constitutes an appropriate response to the crisis was framed within the web of New York high finance. Within this frame it was common sense to conflate the self-interest of the community to stabilise Wall Street with the public good. As Corzine put it: '[The Fed said] "in your own self-interest, you really ought to do some more talking." They did a great job of facilitating focus on the general good' (Corzine 2002: 17). When approaching the collective action problem the institution's identity was not that of a public authority governing the market, but more that of a counsellor of the financial community. Moral suasion meant strictly avoiding impositional strategies in favour of acquiescence with mutually acceptable solutions. As McDonough explains:

'There simply was no other substitute for the New York Fed. ... We do have the capability ... to have them [the bankers] look at the somewhat bigger picture. A very important part of it, I think, is no public official will ever get the head of a private-sector firm to do something that is not in that private-sector firm's best interests. ... [Bankers think] 'well, we're not dealing with somebody who doesn't understand how we think or what we can do.' I think that's helpful. .... [T]oo much of a government-dictated solution ... would to me be an anathema' (McDonough 2001:14-15).

The Fed's entanglement in the Wall Street web shaped its handling of the private solution offered by Buffett and Goldman Sachs. On the face of it the Buffett-Goldman initiative was too good for the NY Fed to be allowed to fall through.<sup>65</sup> It offered to McDonough a market solution to the problem without the need of any involvement of the Fed. The private takeover and refinancing would remove the fund as a risk factor to financial stability without a bailout and thus without creating moral hazard. However, to push the deal through, McDonough

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65. See Lowenstein (2001: 202).

would have had to confront the Wall Street elite who were not happy about Goldman Sachs breaking the ranks of the insider group by carving out a private deal with an outsider. The institutionalised group pressure, discouraging non-conformist behaviour, is drastically expressed in a comment by Jon Corzine of Goldman Sachs:

‘There was a private bid from Warren Buffett ... that was completely out of the realm of what people had been contemplating, and it almost broke apart the consensus that had come together with regard to a joint effort. ... I felt truly fearful about the unintended and unexpected possibilities of this break-up, as an institution, that just scared me to death’ (Corzine 2002: 20-21).

For the NY Fed President to impose the outsider solution on the insider community risked the reputation and recognition he and the NY Fed enjoyed in the Wall Street community. Instead McDonough accepted what was acceptable for the inner circle of the ‘Security Council’: the Buffett bid was turned down on technical details, and the Fed went on to propagate the consortium solution to the ‘General Assembly’ (Lowenstein 203-204). As Dunbar (2000: 222) rightly asserts, by retreating on the position that, as an umpire, it was not the role of the Fed to ‘force a solution’, McDonough revealed that de facto he was himself a player within Wall Street high finance. The Fed’s unforced and almost instinctive accommodating behaviour confirms Hancher’s and Moran’s (1989) suggestion that ‘agency capture’ has to be understood within the wider problem of central bank’s acting as part of the financial community. In the situational context McDonough was more sensitive to the possible damage forceful action might do to the NY Fed’s status as an insider rather than the reputational damage the bailout later did to the Fed’s image in the public eye.<sup>66</sup>

Similar to the case of the Bank of England, the Fed facilitated the insider solution to the crisis by keeping the other key government agency with a stake in the affair, the U.S. Treasury, at arm’s length. From the outset of the crisis the Treasury was more sceptical of the ‘too big to fail’ argument for a bailout.<sup>67</sup> In contrast to McDonough, Robert Rubin, the U.S. Treasury Secretary, thought that a

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66. This damage became visible in the Congressional hearing on the NY Fed’s role in the bailout (U.S. House of Representatives 1998).

67. See the differences between Gary Gensler, Assistant Secretary of the US Treasury, and Fisher after assessing the files of LTCM (Lowenstein 2001: 189).

failure of the fund, although serious, would not spell disaster for the national and international financial system.<sup>68</sup> Rubin, himself an experienced investment banker, based this view on information provided by the NY Fed and McDonough himself. Nevertheless, McDonough dismissed the difference in opinion as 'that can happen when one guy is right in the middle of something and somebody else isn't' (McDonough 2001: 10). The thought that Rubin's greater distance to the Wall Street community might be an asset when it came to ascertaining the best path for public policy did not seem to have occurred to the NY Fed President. Instead he understood what constitutes appropriate action within the public-private nexus of Wall Street. Similar to Lidderdale in 1890, McDonough in 1998 saw the role of the central bank first of all as stabiliser of the high finance network, protecting as much as possible the self-governance of the financial community and keeping regulatory interference by the Treasury at bay.

Finally, in parallel to the Bank of England's strategy in 1890, the smoothness of the NY Fed's orchestration of the LTCM rescue relied on a layered policy tactics. Firstly, Fisher, building on the shared understanding that LTCM had to be bailed out, established consensus in the core group for the consortium plan. This was achieved in a series of secret meetings and telephone conferences of an informal and confidential nature. Once the consortium plan had been fixed, it was presented by McDonough to the wider Wall Street community as an offer which was hard to refuse. The tougher strategic bargaining approach to the 'General Assembly' contrasted with the accommodating approach McDonough took within the 'Security Council' when it came to not accepting the Buffett offer. At the critical meeting at the NY Fed on Wednesday, 23 September, the two-layered policy was physically reflected by McDonough moving back and forth between the anteroom of the 'Security Council', and the conference room where the 'General Assembly' had convened. Lastly, in parallel to this meeting, McDonough's telephone negotiations with Buffett were undertaken in a tense, ad hoc and tangential fashion, in less than two hours and under the pressure of a tight deadline. Rather than establishing a common understanding between the Fed and the outside investor, this haphazard strategy left ample room for misunderstandings, almost asking for failure.<sup>69</sup> As in the case of the Bank of England, moral suasion in a constructivist sense, building on shared insider

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68. See McDonough (2001: 10).

69. See the account of Lowenstein (2001: 202-204).

understanding, formed the core of the Fed approach. On the one hand this approach secured its success in orchestrating Wall Street’s collective action. On the other hand it prevented it from taking the clean escape route from the crisis which had been offered by an outsider.

Clearly times had changed from the Barings crisis to the rescue of LTCM, with the central bank now a clear-cut public institution, the bankrupt private-sector firm now a hedge fund, and the network of high finance less closely-knit, characterised more by changing professional relations rather than stable family relations. However, the essence of central bank behaviour stayed the same. Both central banks, autonomous from the political system and entangled in the web of their respective financial centres, acted as insiders of the high finance network. Being caught up in the web meant that in their practical behaviour the two central banks habitually identified policies in support of the private good of the high finance community with the defence of the public good. As with Barings, in the case of LTCM the forbearance by monetary authorities of the speculative excesses of global finance in order keep the global financial network running smoothly came at a high price: moral hazard, or an open invitation to Wall Street to take on more risk by relying on the ‘Greenspan Put’, the Fed’s readiness to cover any potential downside.<sup>70</sup> It took until the 2008 ‘Lehman Shock’ for the bill to be presented, revealing the true costs of the Fed’s willing acceptance of the ‘too big to fail’ policy paradigm.

## 5. Conclusion

On 24 March 1999 Laurence H Meyer, member of the Board of Governors of the Federal Reserve System, told the House Committee on Banking and Financial Services:

“To be sure, the lessons stemming from this episode have not gone unlearned, and there is no lack of effort to identify and implement appropriate public policy responses to the potential risks posed by hedge funds’ (Meyer 1999: 312-313).

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70. The term ‘Greenspan Put’ in financial market lingo refers to the belief created by the Fed’s LTCM bailout that Alan Greenspan would manipulate monetary policy to sustain market valuations, thereby insuring against any potential downswing in markets. For a definition, see Investopedia ‘Greenspan Put’. <http://www.investopedia.com/terms/g/greenspanput.asp> (accessed on 5 November 2013).

Nine years later the subprime mortgage crisis, symbolised by the bankruptcy filing of Lehman Brothers on 15 September 2008, demonstrated that very little had been learned. On the contrary, the lesson taken from the LTCM debacle by Wall Street investment firms was that risk could be considered to be insured by the 'Greenspan Put'. On the public side, the only major policy initiative improving the regulation of hedge fund activities after LTCM and before the GFC was the requirement for those funds to register with the SEC as investment advisors, starting from 1 February 2006.<sup>71</sup> The wider regulatory framework of international banking, incorporated in the Basel II proposals, was moving further towards self-regulation of the financial industry.<sup>72</sup>

Why do monetary authorities learn so little from past experience when it comes to the risk-taking and crisis-prone behaviour of global finance? As Marsh and Smith explain, strategic learning of actors within policy networks is structured by the institutionalisation of values and beliefs within the network about the nature of the policy issue. Policy responses are path-dependent; they are shaped by the nature of the community and its tendency for self-reinforcement. The continuation of established policies is consequently seen as the only realistic option in response to external challenges (Marsh and Smith 2000: 17). This behavioural pattern became visible during the questioning of Greenspan and McDonough by the House of Representatives Banking Committee in the immediate aftermath of the LTCM rescue on 1 October 1998. When, in the light of the severity of the crisis, the members of the committee pressed Greenspan for a more aggressive attitude towards the regulation of hedge funds and their counterparties, the Fed Chairman denounced the need for substantive policy changes, insisting that the existing system of self-regulation by Wall Street insiders worked well:

'In my judgement, the most effective, indeed really the only significant, effective means that we have to make certain that they, that group of hedge funds, does not create a problem, is by making certain that the banks and others who lend them money have direct supervision themselves. ... Most of the time, the vast majority of time, they do an excellent job. ...I think it is important to make a judgment as to

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71. (Chan et al. 2005: 1, fn. 1).

72. See King and Sinclair (2003).

whether, in fact, regulation has worked. And I would say to you the answer is yes, it has; that is, we are looking at a single mistake here. ... How important is that for the overall issue of supervision and regulation of banks in the United States? Not very large’ (U.S. House of Representatives 1998: 67, 107).

The same determination to justify minimal regulatory interference can be found in the case of Barings, well expressed in a letter by Bertram Currie, member of the inner circle, to *The Times* early in 1891, rebuffing a proposal by Goschen, the Chancellor, that City banks should hold greater reserves to guard against future crises: ‘I would observe that the present banking system has gradually developed itself to meet the exigencies of business without State interference ... and the best service that the State can render in this and other matters is to interfere as little as possible.’<sup>73</sup>

This confidence by insiders of the high finance network in the self-regulating market in fact represents a loss of sense of reality, a loss typical for actors who form their world views within strongly self-focused communities. For the central bankers this became evident in Greenspan’s dramatic statement to the House Oversight Committee of 23 October 2008. After stating that he had made ‘a mistake’ in his hands-off regulatory philosophy, he continued ‘those of us who have looked to the self-interest of lending institutions to protect shareholder's equity (myself especially) are in a state of shocked disbelief.’<sup>74</sup>

Neither the stabiliser vs. moral hazard controversy nor the regulatory capture argument fully grasps the policy problem of the entanglement of central banks in the web of global finance. Central bankers in senior financial centres, caught up in the consensual world view of the money centre’s financial community, will in practice conform to the norms of the web. As Edwards explains: ‘Regulators have an obvious bias to intervene to prevent real or imagined crises on their watch, even if the long-term consequences pile up because of greater risk-taking’ (1999: 203). Furthermore, the identification of central banks with private high finance goes further than rational choice theories of regulatory capture imply. Neither the officials of Bank of England of 1890 nor those of the NY Fed of 1989 were simply civil servants representing the public interest, but were captured by vested

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73. *The Times*, May 1891, quoted in Fulford (1953: 213).

74. ‘Greenspan Admits Errors to Hostile House Panel’, *The Wall Street Journal*, 24 October 2008.

private interests because they wanted to maximise their individual utility or suffered from information asymmetries. At the core of the policy decisions by these officials lies the internalisation of the world view, socially constructed and reaffirmed within the financial community, that unregulated and even speculative global private finance is for the public good, that the public and private interest are essentially identical when it comes to high finance.

The recent bailouts by the Fed of Wall Street in response to the subprime mortgage crisis and the subsequent subsidies to the financial industry through QE should be interpreted in the light of these historical findings. Following the 'Plus ça Change, Plus c'est la Même Chose' pattern identified by Goodhart and Delargy in 1998, the Fed again reacted to the 2008 collapse of the speculative pyramid build up by Wall Street by bailing out the culprits. Again the bailouts were justified with 'too big to fail' and the public good of systemic stability. As Greenspan's successor, Fed Chairmen Ben Bernanke explained in a 6 December 2011 letter to the Committee on Financial Services of the House of Representatives:

'The Federal Reserve implemented these emergency lending programs to provide liquidity and to prevent the collapse of the financial system during a period of tremendous financial stress. ... Importantly, such lending helped support the continued flow of credit to American families and business.'<sup>75</sup>

Of course, the subprime mortgage crisis and the collapse of Lehman Brothers presented a challenge to systemic stability of a different calibre than LTCM. But, in the boarder light of history, was this time indeed different? Did the Fed this time act as a neutral defender of the public interest, as suggested by Bernanke? What we have seen so far is bailouts of an unprecedented size beyond the need of preventing generalised financial panic, the all-stops-pulled rescue of insolvent Wall Street firms, violating both Bagehot's rules of short-term assistance to only illiquid firms, and only at penalty rates. On top, the bailouts were followed by the massive QE programmes, providing cheap money to reinvigorate the Wall Street financial oligopoly. These Fed policies suggest that the pattern we established in our historical case study has not changed: despite high-minded statements, the Fed's actual policymaking remains shaped by the institution's personal and

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75. Federal Reserve Board (2011).



ideological entanglement in the network of high finance.

Equally worrying is the regulatory response by policymakers to the GFC so far. As in the two historical cases we studied, the GFC was followed by initiatives for comprehensive regulatory reform. But, despite major reform acts, the Fed and other regulatory authorities side-lined the ‘too big to fail’ problem at the heart of the financial network by a flood of complex regulatory changes. As Neil Ferguson wrote in 2012:

‘It is five years since the financial crisis began, but the central problems—excessive financial concentration and excessive financial leverage—have not been addressed. Today a mere 10 ‘too big to fail’ financial institutions are responsible for three quarters of total financial assets under management in the United States.’<sup>76</sup>

Barings was the first major international financial crisis managed by the public-private insider network to sustain a financial economy based on credit creation by *haute finance*. The rescue of LTCM in 1998 demonstrated that the same insider network relations were at work in the modern age of financial globalisation. The GFC, far from constituting a break with those practices, appears to follow the same well-established path. Again, the Fed, the world’s preeminent monetary authority, seems deeply implicated in the network of Wall Street, unable and unwilling to step outside the logic of high finance to take on the vested interests of the global financial services industry.

Those who think that the international financial system is a safer place because monetary authorities learned the lessons from the GFC should think again. In their 2012/13 Annual Report the BIS warns of the risks of central banks continuing with the liquidity support to the financial sector which has been adopted after the collapse of Lehman Brothers:

‘Originally forged as a description of central bank action to prevent financial collapse, the phrase “whatever it takes” has become a rallying cry for central banks to continue their extraordinary actions. What central bank action has done is to borrow time... but the time has not been well used. ... After all, cheap money makes it easier to borrow than to save, easier to remain the same than to change’ (BIS 2013: 5). ‘Prolonged low

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76. Neil Ferguson, ‘Why Barack Obama Needs to Go’, *Newsweek*, August 12, 2012. <http://www.newsweek.com/niall-ferguson-why-barack-obama-needs-go-64419> (Accessed on 12 July 2013).

policy rates tend to encourage aggressive risk-taking. These incentives have been sending the wrong signals to those financial institutions which have not gone far enough in recognising losses and increasing capital and have been evergreening loans' (BIS 2013:70).

Again moral hazard is being ignored by Fed policymakers and again warnings are voiced about perilous future consequences: 'Plus ça Change, Plus c'est la Même Chose'. The next speculative upheaval in global finance seems to be only a question of time. Most likely the shape and location will be different, with liquidity-fuelled excessive risk-taking having again moved back towards emerging markets.<sup>77</sup> But the institutional centre of moral hazard remains the same: the central bank-global finance nexus.

## References

- Bagehot, Walter (1873) *Lombard Street: A Description of the Money Market*, revised edition with a foreword of Peter Bernstein. New York: Wiley (1999).
- BIS (2013) *83rd Bank for International Settlements Annual Report 2012/2013*. Available at <http://www.bis.org/publ/arpdf/ar2013e.htm>
- Bordo, Michael D. (2003) 'Market Discipline and Financial Crisis Policy: An Historical Perspective' Paper prepared for the Contemporary Economic Policy Session: Market Discipline in Banking: Western economic association Meetings, Denver Colorado, July 13 2003.
- Börzel, Tanja A. (1998) 'Organizing Babylon – On the Different Conceptions of Policy Networks' *Public Administration* 76: 253-273.
- Capie, Forrest (2002) 'Learning to Avoid Financial Crisis: the Bank of England', City University Business School, <http://www.cf.ac.uk/carbs/econ/resources/seminars/archive/boellr.pdf> (accessed on 9 April 2005).
- Cassis, Youssef (1985) 'Bankers I English Society in the Late Nineteenth Century', *Economic History Review*, 2<sup>nd</sup> series, 38 (2): 210-229.
- Cassis, Youssef (1991) 'Financial Elites in Three European Centres: London, Paris, Berlin, 1880s-1930s', *Business History* 33 (3): 53-71.
- Chan, Nicholas, Getmansky, Mila, Haas, Shane M., and Lo, Andrew W. (2005) 'Systemic Risk and Hedge Funds', National Bureau of Economic Research, *NBER Working Paper* 11200.
- Chang, Ha-Joon (2000) 'The Hazard of Moral Hazard: Untangling the Asian crisis', *World Development* 28 (4): 775-788.
- Chinn, Menzie D, and Frieden, Jeffrey A. (2011) *Lost Decades: The Making of America's Debt Crisis and the Long Recovery*. New York, London: W.W. Norton & Co.
- Clapham, John (1944) *The Bank of England - A History*, Vol. II 1797-1914. Cambridge: Cambridge University Press.
- Coleman, William D. (1996) *Financial Services, Globalization, and Domestic Policy Change: a Comparison of North America and the European Union*. London: Macmillan.

---

77. See Martin Wolf, 'The emerging risks of ticking time bonds', *Financial Times*, 10 December 2013.

From "Lender of Last Resort" to "Moral Hazard": Central Bank Responses to International Banking Crises in Historical Perspective

Committee on the Global Financial System (1999) 'A Review of Financial Market Events in Autumn 1998'. Basel, Bank for International Settlements.

Corzine, Jon (2002) Interview with Public Broadcasting Service (PBS), 'Commanding Heights' program, [http://www.pbs.org/wgbh/commandingheights/lo/people/pe\\_name.html](http://www.pbs.org/wgbh/commandingheights/lo/people/pe_name.html) (accessed on 03 May 2005).

De Cecco, Marcello (1974) *Money and Empire: The International Gold Standard, 1890-1914*. Oxford: Blackwell.

De Goede, Marieke (2001) 'Discourses of Scientific Finance and the Failure of Long-Term Capital Management', *New Political Economy* 6 (2 ): 149-170.

DeLong, J. Bradford (1999). 'Financial Crises in the 1880s and 1990s: Must History Repeat?' *Brookings Papers on Economic Activity*, 2, 253-294.

Dowding, Keith (1995) 'Model of Metaphor? A Critical review if the Policy Network Approach', *Political Studies* 43: 136-158.

Dunbar, Nicholas (2001) *Inventing Money: The Story of Long-Term Capital Management and the Legends Behind It*. New York: John Wiley.

Edward Walter Hamilton, Edward W. (1993) *The Diary of Sir Edward Walter Hamilton 1885-1906*, edited by D. W. R. Bahlman. Hull: University of Hull Press.

Edwards, Franklin R. (1999) 'Hedge Funds and the Collapse of Long-Term Capital Management', *The Journal of Economic Perspectives*, 13 (2 ): 189-210.

Eichengreen, Barry (1996) *Globalizing Capital: A History of the International Monetary System*. Princeton, N.J.: Princeton University Press.

Eichengreen, Barry (1999) 'The Baring Crisis in a Mexican Mirror', *International Political Science Review*, 20 (3): 249-270.

Eichengreen, Barry, and Bordo, Michael D. (2002) 'Crises Now and Then: What Lessons from the Last Era of Globalization?' National Bureau of Economic Research, *NBER Working Paper* 8716.

Fearon, James and Wendt, Alexander (2002) 'Rationalism v. Constructivism : A Skeptical View', in Walter Carlsnaes, Thomas Risse, and Beth A. Simmons, (eds.), *Handbook of International Relations*, 52-72. London : Sage Publications.

Federal Reserve Board (2011) *Letters by Ben Bernanke to Congress, December 6, 2011*. Available at <http://www.federalreserve.gov/generalinfo/foia/emergency-lending-financial-crisis-20111206.pdf>.

Fulford, Roger (1953) *Glyn's 1753-1953, Six Generations in Lombard Street*. London: Macmillan.

Furfine, Craig (2001) 'The costs and benefits of moral suasion: evidence from the rescue of Long-Term Capital Management', Bank for International Settlements, *BIS Working Paper* 103 (August).

Germain, Randall D. (1997) *The International Organization of Credit*. Cambridge: Cambridge University Press.

Goodhart, Charles A. E. (1999) 'Myths about the Lender of Last Resort', *International Finance*, 2 (3): 339-360.

Goodhart, Charles A. E. and Delargy, P. J. R. (1998) 'Pus ca Change, plus c'est l Meme Chose', *International Finance* (1) 2: 261-287.

Goodhart, Charles A. E., and Illing, Gerhard (2002) *Financial Crises, Contagion and the Lender of Last Resort*. Cambridge: Cambridge University Press.

Greenspan, Alan (1998) *Private-sector refinancing of the large hedge fund, Long-Term Capital Management*. Testimony of Chairman Alan Greenspan before the Committee on Banking and Financial Services, U.S. House of Representatives. October 1. <http://www.federalreserve.gov/boarddocs/testimony/1998/19981001.htm> (accessed 5 May 2005)

Greenspan, Alan (1998) Statement before the Committee on Banking and Financial Services, US House of Representatives, 1 October 1998, *Federal Reserve Bulletin*, December: 1046-50.

- Gutwein, Daniel (1992) *The Divided Elite, Economics, Politics and Anglo-Jewry 1882-1917*. Leiden, New York: E.J. Brill.
- Hancher, Leigh and Moran, Michael (1989) 'Organizing Regulatory Space', in: L. Hancher and M. Moran (eds) *Capitalism, Culture, and Economic Regulation*. Oxford: Clarendon Press, 271-300.
- Hass, Peter (1992) 'Introduction: Epistemic Communities and International Policy Coordination', *International Organization* 46 (1): 1-25.
- Josselin, Daphne (1996) 'Domestic Policy Networks and European Negotiations: Evidence from British and French Financial Services', *Journal of European Public Policy* 3 (3): 291-317.
- Kho, Bong-Chan, Lee, Dong, and Stulz, René M. (2000) 'US Banks, Crises and Bailouts: from Mexico to LTCM', National Bureau of Economic Research, *NBER Working Paper* 7529.
- Kindleberger, Charles P. (2000), 4th edition, *Manias, Panics and Crashes: A History of Financial Crises*. Basingstoke: Palgrave.
- King, Michael R. (2005) 'Epistemic Communities and the Diffusion of Ideas: Central Bank Reform in the United Kingdom', *West European Politics* 28 (1): 94-123.
- King, Michael R., and Sinclair, Timothy J. (2003) 'Private Actors and Public Policy: A Requiem for a New Basel Capital', *International Political Science Review* 24 (3): 345-362.
- King, Wilfred T. C. (1972) [1932] *History of the London Discount Market*. London: Frank Cass.
- Knorr Cetina, Karin, and Bruegger, Urs (2002) 'Global Microstructures: The Virtual Societies of Financial Markets', *American Journal of Sociology* 107 (4): 905-950.
- Lowenstein, Roger (2001) *When Genius Failed: The Rise and Fall of Long-Term Capital Management*. London: Fourth Estate.
- MacKenzie, Donald (2003) 'Long-Term Capital Management and the Sociology of Arbitrage', *Economy and Society* 32 (3): 349-380.
- March, David, and Smith, Martin J. (2000) 'Understanding Policy Networks: towards a Dialectical Approach', *Political Studies* 48: 4-21.
- March, James and Olson, Johan (1998), 'The Institutional Dynamics of International Political Orders', *International Organization* 54 (4): 943-970.
- Marsh, David (1998) 'The Development of the Policy Network approach', in: D. Marsh (ed.) *Comparing Policy Networks*. Buckingham: Open University Press.
- McDonough, William (1998) Statement before the Committee on Banking and Financial Services, U.S. House of Representatives, 1 October 1998, *Federal Reserve Bulletin*, December: 1050- 1054.
- McDonough, William (2001) Interview with Public Broadcasting Service (PBS), 'Commanding Heights' program, 17 April 2001, [http://www.pbs.org/wgbh/commandingheights/lo/people/people\\_name.html](http://www.pbs.org/wgbh/commandingheights/lo/people/people_name.html) (accessed on 5 May 2005).
- Meyer, Laurence H. (1999) Statement before the Committee on Banking and Financial Services, US House of Representatives, 24 March 1999, *Federal Reserve Bulletin*, May: 312-18.
- Meyer, Laurence H. (1999) *Hedge Funds*. Testimony of Governor Laurence H. Meyer before the Subcommittee on Financial Institutions and Consumer Credit, Committee on Banking and Financial Services, U.S. House of Representatives. March 24. <http://www.federalreserve.gov/boarddocs/testimony/1999/19990324.htm> (accessed on 5 May 2005)
- Moran, Michael (1991) *The Politics of the Financial Services Revolution*. London: Macmillan
- Olson, Mancur (1965) *The Logic of Collective Action: Public Goods and the Theory of Groups*. Cambridge, Mass.: Harvard University Press.
- Orbell, John (1985) *Baring Brothers & Co., Limited. A History to 1939*. Baring Brothers & Co. Limited: London.
- Rhodes, Rod A. W., and Marsh, David (1992) 'Policy Networks in British Politics: A Critique of existing Approaches', in: D. Marsh and R. A. W. Rhodes (eds) *Policy Networks in British Government*. Oxford: Clarendon Press.

From “Lender of Last Resort” to “Moral Hazard”: Central Bank Responses to International Banking Crises in Historical Perspective

- Sabatier, Paul A., and Jenkins-Smith, Hank C. (1999) ‘The Advocacy Coalition Framework: an Assessment’, in: P.A. Sabatier (ed.) *Theories of the Policy Process*. Boulder, Col.: Westview Press, 117-168.
- Shirreff, David ‘Lessons from the Collapse of Hedge Fund, Long-Term Capital Management’ International Financial Risk Institute, Case Studies. <http://riskinstitute.ch/146480.htm> (accessed on 15 March 2005)
- Sinclair, Timothy J. (2000) ‘Reinventing Authority: Embedded Knowledge Networks and the New Global Finance’, *Environment and Planning C* 18 (4): 487-502.
- Smith, Martin J. (1993) *Pressure Power and Policy: State Autonomy and Policy Networks in Britain and the United States*. Hemel Hempsted: Harvester Wheatsheaf.
- Stigler, George J. (1971) ‘The Theory of Economic Regulation’, *The Bell Journal of Economics and Management Science* 2 (1): 3-21
- Stockman, David A. (2013) *The Great Deformation: The Corruption of Capitalism in America*. New York: Public Affairs.
- Strange, Susan (1986) *Casino Capitalism*. Oxford : Basil Blackwell.
- Thornton, Henry (1802) *An Enquiry into the Nature and Effects of the Paper Credit of Great Britain*. London: Hatchard.
- U.S. House of Representatives (1998) Committee on Banking and Financial Services, Hearing *Hedge Fund Operations*, Washington, DC., 1 October 1998 [http://commdocs.house.gov/committees/bank/hba51526.000/hba51526\\_of.htm](http://commdocs.house.gov/committees/bank/hba51526.000/hba51526_of.htm) (accessed on 28 April 2005)
- Wendt, Alexander (1992) ‘Anarchy is what States Make of it: The Social Construction of Power Politics’, *International Organization* 46 (2): 391-425.
- Wilks, Stephen, and Wright, Maurice (1997) ‘Conclusion. Comparing Government-Industry Relations: States, Sectors, and Networks’, in: S. Wilks and M. Wright (eds) *Comparative Government-Industry Relations*. Oxford: Clarendon Press.
- Wilson, Graham (1984) ‘Social Regulation and Explanations of Regulatory Failure’, *Political Studies* 32: 203-25.
- Woodward, Susan E. (2000) ‘Regulatory Capture at the U.S. Securities and Exchange Commission’, in: J. Barth, D. Brumbaugh and G. Yago (eds) *Restructuring Regulation and Financial Institutions*. Santa Monica, CA.: Milken Institute. <http://www.sandhillecon.com/pdf/RegulatoryCapture.pdf#search='Woodward%2C%20Susan%20E.%20%282000%29%20%E2%80%98Regulatory%20Capture%20at%20the%20U.S.%20Securities%20and%20Exchange%20Commission%E2%80%99'> (accessed on 16 March 2005)
- Wright, Maurice (1998) ‘City Rules OK? Policy Community, Policy Network and Takeover Bids’, *Public Administration* 66: 389-410.

