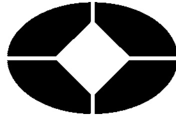

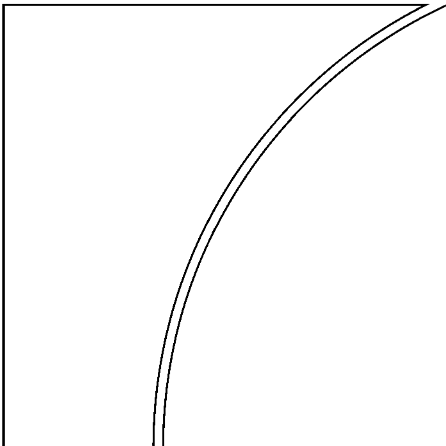

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The governance of financial regulation: reform lessons from the recent crisis

by Ross Levine

Monetary and Economic Department

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JEL classification: G20, G28, H1, E6

Keywords: financial institutions, regulation, policy, financial crisis

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Foreword

On 24–25 June 2010, the BIS held its Ninth Annual Conference, on “The future of central banking under post-crisis mandates” in Lucerne, Switzerland. The event brought together senior representatives of central banks and academic institutions who exchanged views on this topic. The papers presented at the conference and the discussants’ comments are released as BIS Working Papers 326 to 331. A forthcoming BIS Paper will contain the opening address of Stephen Cecchetti (Economic Adviser, BIS), a keynote address from Baron Alexandre Lamfalussy, and the contributions of the policy panel on “Do central bank governance arrangements need to be altered?”. The participants in the policy panel discussion, chaired by Jaime Caruana (General Manager, BIS), were Mark Carney (Bank of Canada), Andrew Crockett (JP Morgan Chase International), Stefan Ingves (Sveriges Riksbank), Lucas Papademos (Former Vice President, European Central Bank), and Duvvuri Subbarao (Reserve Bank of India).

Conference Programme

Thursday 24 June

Opening remarks	**Stephen Cecchetti (BIS)**
Session 1:	**The future role and mandate of central banks**
Paper title:	The changing roles of Central Banks
Chair:	Armando M Tetangco, Jr. (Bangko Sentral ng Pilipinas)
Author:	Charles Goodhart (London School of Economics)
Discussants:	Stanley Fischer (Bank of Israel) Randall Kroszner (University of Chicago)
Session 2:	**International governance**
Paper title:	Central banks: between internationalisation and domestic political control
Chair:	Henrique de Campos Meirelles (Central Bank of Brazil)
Author:	Harold James (Princeton University) Paper: Central Banks: Between Internationalization and Domestic Political Control
Discussants:	Gianni Toniolo (Duke University) Már Gudmundsson (Central Bank of Iceland)
Keynote lecture	
Speaker:	Alexandre Lamfalussy

Friday 25 June

Session 3:	**Lessons from history for future central bank design**
Paper title:	The Federal Reserve, the Bank of England, and the Rise of the Dollar as an International Currency, 1914-1939
Chair:	Ms Zeti Aziz (Central Bank of Malaysia)
Author:	Barry Eichengreen (University of California) (joint work with Marc Flandreau)
Discussant:	Robert Keohane (Princeton University) Leszek Balcerowicz (Warsaw School of Economics)
Session 4:	**Lessons from political economy for future central bank design**
Paper title:	The Governance of Financial Regulation: Reform Lessons from the Recent Crisis
Chair:	Christine Cumming (Federal Reserve Bank of New York)
Author:	Ross Levine (Brown University)
Discussants:	Gill Marcus (South African Reserve Bank) Howard Davies (London School of Economics)

Session 5:	**Central bank finances: Policy relevant? Politically relevant?**
Paper title:	Minimizing Monetary Policy
Chair:	Zdenek Tuma (Czech National Bank)
Presenting author:	Peter Stella (Consultant)
Discussants:	Marc Flandreau (Graduate Institute of international and Developmant Studies) José De Gregorio (Central Bank of Chile)
Session 6:	**Are central banks special?**
Paper title:	Central banks and competition authorities: institutional comparisons and new concerns
Chair:	Masaaki Shirakawa (Bank of Japan)
Presenting author:	John Vickers (All Souls College, Oxford)
Discussants:	Allan Bollard (Reserve Bank of New Zealand) Mario Monti (Universita Commerciale Luigi Bocconi)
Session 7:	**Panel discussion: "Do central bank governance arrangements need to be altered?"**
Chair:	Jaime Caruana (BIS)
Panellists:	Mark Carney (Bank of Canada) Andrew Crockett (JP Morgan Chase International) Stefan Ingves (Sveriges Riksbank) Lucas Papademos (Ex Vice President, European Central Bank) Duvvuri Subbarao (Reserve Bank of India)

The governance of financial regulation: reform lessons from the recent crisis

Ross Levine

Abstract

There was a systemic failure of financial regulation: senior policymakers repeatedly enacted and implemented policies that destabilised the global financial system. They maintained these policies even as they learned of the consequences of their policies during the decade before the crisis. The crisis does not primarily reflect an absence of regulatory power, unclear lines of regulatory authority, capital account imbalances, or a lack of information by regulators. Rather, it represents the unwillingness of the policy apparatus to adapt to a dynamic, innovating financial system. A new institution is proposed to improve the design, implementation and modification of financial regulations.

JEL classification numbers: G20, G28, H1, E6

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The governance of financial regulation: reform lessons from the recent crisis

Ross Levine[1]

1. Introduction

The first objective of this paper is to document that the collapse of the global financial system reflects a systemic failure of the governance of financial regulation – the system associated with designing, enacting, implementing and reforming financial policies. Senior policymakers repeatedly designed, implemented – and most importantly – maintained policies that destabilised the global financial system. They maintained these policies even as the regulatory authorities acquired information that their policies were increasing financial system fragility. Moreover, the authorities acquired this information during the decade before the crisis, when they had ample time to adjust their policies under relatively calm conditions. Yet, financial policymakers did not adjust, advertising weaknesses in the underlying governance of financial regulation.

In contrast to common narratives, my analyses, and those of Barth, Caprio, and Levine (2011), indicate that the crisis does not only reflect unsustainable global macroeconomic imbalances, the proliferation of toxic financial instruments, a lack of supervisory power, and unclear lines of regulatory authority. These factors played a role, but only a partial role. Rather, bad policy choices created perverse incentives that encouraged financial institutions to take excessive risk and divert society's savings toward unproductive ends. Failures in the governance of financial regulation helped cause the global financial crisis.

In documenting deficiencies in the financial regulatory system, I stress the fatal inconsistency between a dynamic financial sector and a regulatory system that failed to adapt appropriately to financial innovation. Financial innovations, such as securitisation, collateralised debt obligations, and credit default swaps, could have had primarily positive effects on the lives of most citizens. Yet, the inability, or unwillingness, of the governance apparatus overseeing financial regulation to adapt to changing conditions allowed these financial innovations to metastasise and ruin the financial system. A better functioning system for establishing financial policies could have captured the benefits, while avoiding the pain, associated with these new financial tools.

This conclusion – that systemic governance failures contributed to the crisis – has material implications for reforming financial regulation. There are several policy proposals to increase the power of financial regulatory agencies, reduce regulatory gaps, develop better crisis management tools, and consolidate the regulation of all systemically important institutions in the hands of a single entity. Yet, if technical glitches and regulatory gaps played only a partial role in fostering the crisis, then these proposed reforms represent only partial and thus incomplete steps in establishing a sound financial system. This is not an argument against

[1] James and Merryl Tisch Professor of Economics, Brown University, 64 Waterman Street, Providence RI, 02912, ross_levine@brown.edu. I thank James Barth, John Boyd, Gerard Caprio, Peter Howitt, Randall Kroszner, Glenn Loury, Yona Rubinstein, Andrei Shleifer, Joe Stiglitz, David Weil, and Ivo Welch for helpful conversations and communications. Seminar participants at the Bank for International Settlements, the Boston and Chicago Federal Reserve Banks, the IMF, World Bank, George Washington University, and Brown University provided insightful comments. I bear full responsibility for the views expressed in the paper.

the reforms that have been proposed and adopted. It is an argument for improving the governance of financial regulation. It is an argument for creating institutions that promote transparency, timely and informed debate, and hence the implementation of socially beneficial policies.

The second objective of the paper is to propose a new institution, which I label the "Sentinel," to act as the public's sentry over financial policies and thereby improve the governance of financial regulation. Its sole power would be to demand any information necessary for evaluating the state of financial regulation. Its sole responsibility would be to continuously assess and comment on financial policies, delivering a formal report to the legislative and executive branches of government annually. Critically, and uniquely, the Sentinel would be both politically independent and independent of financial markets. Senior members would be appointed for staggered terms to limit political influence. To shield it from market influences, senior staff would be prohibited from receiving compensation from the financial sector after completing public services for a timely period. The goal is to create an institution in which the personal motives, ambitions, and prestige of its employees are inextricably connected to accurately assessing the impact of financial regulations on the public.

The Sentinel would improve the entire apparatus for writing, enacting, adapting and implementing financial regulations. As an extra group of informed, prying eyes, it would reduce the ability of regulators to obfuscate regulatory actions and would instead make regulators more accountable for the societal repercussions of their actions. As an additional group of experts reviewing and reporting on financial regulations, it would reduce the probability and costliness of regulatory mistakes and supervisory failures. As a prominent institution, the Sentinel's reports to legislators would help reduce the influence of special interests on the public's representatives. As an entity whose sole objective is to evaluate the state of financial regulation from the perspective of the public, it would help inform the public and thereby augment public influence over financial regulation.

Given the existing myriad of regulatory agencies, quasi-regulatory bodies, and other oversight entities, do we really need another regulatory institution? Yes. No other existing entity currently has the incentives, power, or capabilities to perform the role of a public sentry over the full constellation of financial sector policies.

First and foremost, unlike any existing institution, the Sentinel would be independent of both political and market influences. Incentives matter in regulation too. In capitals around the world, lobbyists shape legislation and the revolving door between industry and regulatory agencies spins rapidly. While there are good reasons for having highly skilled individuals with private sector expertise help in regulating the financial sector, there are equally good reasons for worrying about conflicts of interest.

Second, no existing entity has the prominence, information and expertise to challenge major regulatory agencies on financial policy matters. A monopoly on regulatory power and information is dangerous. Such a monopoly is particularly dangerous when it is housed in a central bank or other entity that is designed to be independent of the public and elected representatives. A monopoly on financial information, regulatory expertise, and regulatory power in the hands of publicly unaccountable officials breaks the democratic lines of influence running from the public to the design and execution of policies that determine the allocation of capital. The Sentinel would shine an illuminating, and potentially disinfecting, light on the financial system that would enhance the governance of financial regulation. Moreover, although the Sentinel would not set any policy, it would provide an objective, independent assessment of policy. This would have been enormously valuable during the decade-long series of policy gaffes that contributed to the current crisis.

While no panacea, the Sentinel would *improve* the regulatory apparatus. We face the complex, and consequential, challenge of creating a regulatory regime that adapts to incentivise financiers to provide the financial services necessary for economic growth. Incorporating the voice of a "Sentinel" would help.

2. Systemic policy failures

2.1 Introduction

In this section, I argue that the collapse of the global financial system was partially caused by a systemic failure of financial regulation. To make this case, I focus on four policy failures. Though these examples focus on the United States, they have clear international connections. It should be remembered that while the bulk of toxic assets were made in the USA, financial institutions around the world readily purchased them, abetted by systemic regulatory failures in their home countries. Moreover, although I choose four policies, there are many examples that illustrate how financial regulators, with frequent help from their political overseers, did not act in the long-term interests of the public. Barth, Caprio and Levine (2011) provide both more examples from the United States and from around the world in a book-length treatment of these themes. But, since the major objective of this paper is to recommend changes in the institutions associated with governing financial regulations, I keep this section brief.

2.2 The credit rating agencies

As a first example of how regulatory actions – and inaction – helped trigger the crisis, consider credit rating agencies, which were central participants in the global financial crisis. To appreciate their role, consider the securitisation of mortgages. Mortgage companies routinely provided loans to borrowers with little ability to repay those debts because (i) they earned fees for each loan and (ii) they could sell those loans to investment banks and other financial institutions. Investment banks and other financial institutions gobbled up those mortgages because (i) they earned fees for packaging the mortgages into new securities and (ii) they could sell those new mortgage-backed securities (MBS) to other financial institutions, including banks, insurance companies and pension funds, around the world. These other financial institutions bought the MBS because credit rating agencies said they were safe. By fuelling the demand for MBS and related securities, credit rating agencies encouraged a broad array of financial institutions to make the poor investments that ultimately toppled the global financial system. Thus, an informed post-mortem of the financial system requires a dissection of why financial institutions relied on the assessments of credit rating agencies.

How did credit rating agencies become so pivotal? Until the 1970s, credit rating agencies were insignificant institutions that sold their assessments of credit risk to subscribers. Now, it is virtually impossible for a firm to issue a security without first purchasing a rating.

In 1975, the US Securities and Exchange Commission created the Nationally Recognized Statistical Rating Organisation (NRSRO) designation, which it granted to the largest credit rating agencies. The SEC then relied on the NRSRO's credit risk assessment in establishing capital requirements on SEC-regulated financial institutions.

The creation of – and reliance on – NRSROs by the SEC triggered a global cascade of regulatory decisions that increased the demand for their credit ratings. Bank regulators, insurance regulators, federal, state, and local agencies, foundations, endowments and numerous entities around the world all started using NRSRO ratings to establish capital adequacy and portfolio guidelines. Furthermore, given the reliance by prominent regulatory agencies on NRSRO ratings, private endowments, foundations and mutual funds also used their ratings in setting asset allocation guidelines for their investment managers.

Unsurprisingly, NRSROs shifted from selling their credit ratings to subscribers to selling their ratings to the issuers of securities. Since regulators, official agencies, and private institutions around the world relied on NRSRO ratings, virtually every issuer of securities was compelled to purchase an NRSRO rating if it wanted a large market for its securities.

There are well known conflicts of interest associated with credit rating agencies selling their ratings to the issuers of securities. Issuers have an interest in paying rating agencies more for higher ratings since those ratings influence the demand for and hence the pricing of securities.

Nevertheless, credit rating agencies convinced regulators that reputational capital reduces the pernicious incentive to sell better ratings. If a rating agency does not provide sound, objective assessments of a security, the agency will experience damage to its reputation with consequential ramifications for its long-run profits. Purchasers of securities will reduce their reliance on this agency, which will reduce demand for *all* securities rated by the agency. As a result, issuers will reduce their demand for the services provided by that agency, reducing the agency's future profits. From this perspective, reputational capital is vital for the long-run profitability of credit rating agencies and will therefore contain any short-run conflicts of interest associated with "selling" a superior rating on any particular security.

Reputational capital will reduce conflicts of interest, however, only under particular conditions. First, the demand for securities must respond to poor rating agency performance, so that decision-makers at rating agencies are punished for issuing bloated ratings on even a few securities. Second, decision-makers at rating agencies must have a sufficiently long-run profit horizon, so that the long-run costs to the decision-maker from harming the agency's reputation outweigh the short-run benefits from selling a bloated rating.

These conditions do not hold, however. First, regulations weaken the degree to which a decline in the reputation of a credit rating agency reduced demand for its services. Specifically, regulations induce the vast majority of the buyers of securities to use NRSRO ratings in selecting assets. These regulations hold regardless of NRSRO performance, which moderates the degree to which poor ratings performance reduces the demand for NRSRO services. Such regulations mitigate the positive relation between rating agency performance and profitability. Second, financial innovation in the form of securitisation dramatically changed the incentives of decision makers at credit rating agencies, inducing them to sell bloated ratings at the expense of a loss in the long-run reputation of the agency.

The explosive growth of securitised and structured financial products from the late 1990s dramatically intensified the conflicts of interest problem. Securitisation and structuring involve the packaging and rating of trillions of dollars worth of new financial instruments. Huge fees associated with processing these securities flowed to banks and NRSROs. Impediments to this securitisation and structuring process, such as the issuance of low credit ratings on the securities, would have gummed up the system, reducing rating agency profits. In fact, the NRSROs started selling ancillary consulting services to facilitate the processing of securitised instruments, increasing NRSRO incentives to exaggerate ratings on structured products. Besides purchasing ratings from the NRSROs, the banks associated with creating structured financial products would first pay the rating agencies for guidance on how to package the securities to get high ratings and then pay the rating agencies to rate the resultant products.

By the early 2000s, it was well known that the boom in securitisation was encouraging credit rating agencies to inflate their ratings for huge profits. Moreover, regulators had seen the accounting debacle of 2001–02, when corporations paid accounting firms both to structure and then to audit financial statements. So, when banks started paying the NRSROs both to structure and then to rate securities, this should have been a grim – and familiar – warning. The short-run profits associated with greasing the flow of structured products with optimistic ratings were mind-bogglingly large and made the future losses from the inevitable loss of reputational capital irrelevant. For example, the operating margin at Moody's between 2000 and 2007 averaged 53%. This compares to operating margins of 36% and 30% at Microsoft and Google, or 17% at Exxon. It was good to be an NRSRO.

But the global regulatory community did not respond to these well publicised developments. Regulatory agencies around the world protected NRSROs by continuing to rely on their

ratings. While the global financial crisis does not have a single cause, the behaviour of the credit rating agencies is a defining characteristic, and it is difficult to imagine the behaviour of the credit rating agencies without the regulations that created and protected those agencies.

2.3 Credit default swaps and bank capital

Next, consider the role of complex derivative contracts, including credit default swaps. A credit default swap (CDS) is an insurance-like contract written on the performance of a security or bundle of securities. For example, purchaser A buys a CDS from issuer B on security C. If security C has a predefined "credit-related event," such as missing an interest payment, receiving a credit downgrade or filing for bankruptcy, then issuer B pays purchaser A. While having insurance-like qualities, CDS are not formally insurance contracts. Neither the purchaser nor the issuer of the CDS needs to hold the underlying security, leading to the frequently used analogy that CDS are like buying fire insurance on your neighbour's house. Moreover, since CDS are not insurance contracts, they are not regulated as tightly as insurance products. CDS are financial derivatives that are transacted in unregulated, over-the-counter (OTC) markets.

In principle, banks can use credit default swaps to reduce both their exposure to credit risk and the amount of capital held against potential losses. For example, if a bank purchases a CDS on a loan, this can reduce its credit risk: if the loan defaults, the counterparty to the CDS will compensate the bank for the loss. If the bank's regulator concludes that the counterparty to the CDS will actually pay the bank if the loan defaults, then the regulator typically allows the bank to reallocate capital to higher-expected return, higher-risk assets.

The Fed made a momentous decision in 1996: it permitted banks to use CDS to reduce capital reserves (Tett, 2009, p 49). Regulators treated securities guaranteed by a seller of CDS as having the risk level of the seller – or more accurately, the counterparty – of the CDS. For example, a bank purchasing full CDS protection from American International Group (AIG) on collateralised debt obligations (CDOs) linked to subprime loans would have those CDOs treated as AAA securities for capital regulatory purposes because AIG had an AAA rating from an NRSRO, ie from an SEC-approved credit rating agency.

In the light of this decision, banks used CDS to reduce capital and invest in more lucrative, albeit more risky, assets. For example, a bank with a typical portfolio of $10 billion of commercial loans could reduce its capital reserves against these assets from about $800 million to under $200 million by purchasing CDS for a small fee (Tett, 2009, p 64).

The CDS market boomed following the Fed decision. By 2007, the largest US commercial banks had purchased $7.9 trillion in CDS protection, and, at a broader level, the overall CDS market reached a notional value of $62 trillion in 2007 according to Barth et al (2009).

There were, however, serious problems associated with allowing banks to reduce their capital via CDS. Given the active trading of CDS, it was sometimes difficult to indentify the actual counterparty legally responsible for compensating a bank if an "insured" security failed. Furthermore, some bank counterparties developed massive exposures to CDS risk. For example, AIG had a notional exposure of about $500 billion to CDS (and related derivatives) in 2007, while having a capital base of about $100 billion to cover all its traditional insurance activities as well as its financial derivatives business. The growing exposure of AIG and other issuers of CDS should have – and did – raise concerns about their ability to satisfy their obligations in times of economic stress.

The Fed was aware of the growing danger to the safety and soundness of the banking system from CDS. For instance, Tett (2009, pp 157–163) recounts how Timothy Geithner, then President of the New York Federal Reserve Bank, became concerned in 2004 about the lack of information on CDS and the growing counterparty risk facing banks. Barth et al (2009) demonstrates through the use of internal Fed documents that it knew by 2004 of the growing problems associated with subprime mortgage-related assets, on which many CDS were

written. Indeed, the FBI publicly warned in 2004 of an epidemic of fraud in subprime lending. In terms of the sellers of CDS, detailed accounts by Lewis (2009) and McDonald (2009) illustrate the Fed's awareness by 2006 of AIG's growing fragility and the corresponding exposure of commercial banks to CDS counterparty risk.

Yet, even more momentously than the original decision allowing banks to reduce their capital reserves through the use of CDS, the Fed did not adjust its policies as it learned of the growing fragility of the banking system due to the mushrooming use of increasingly suspect CDS.

The key question is why the Fed *maintained* its capital regulations. Bank purchases of CDS boomed immediately after the 1996 regulatory decision allowing a reduction in bank capital from the purchase of CDS. Why didn't the Fed respond by demanding greater transparency before granting capital relief and conducting its own assessment of the counterparty risks facing the systemically important banks under its supervision? Why didn't the Fed adjust in 2004 as it learned of the opaque nature of the CDS market and as the FBI warned of the fraudulent practices associated with the issuance of the subprime mortgages underlying many CDS securities, or in 2006 as information became available about the fragility of AIG, or in 2007 when hedge funds warned the Fed, the Treasury and G8 delegates about the growing fragility of commercial banks (Tett, 2009, pp 160–3)? Why didn't the Fed prohibit banks from reducing regulatory capital via CDS until the Fed had confidence in the financial viability of those selling CDS to banks?

The Fed's decision to maintain its regulatory stance toward CDS was neither a failure of information nor a shortage of regulatory power. Based on a review of internal Fed documents, Barth et al (2009, p 184) note that "even if the top officials from these regulatory agencies did not appreciate or wish to act earlier on the information they had, their subordinates apparently fully understood and appreciated the growing magnitude of the problem." And, even in 2004, the Fed issued Interpretive Letter 998 that reiterated its capital regulatory policy with respect to CDS. To more comprehensively reform the financial regulatory system, we need to examine why these types of decisions were made and undertake institutional reforms to make these systemic mistakes less likely.

2.4 Transparency vs the FED, SEC and Treasury

As a third example, consider how powerful regulators and policymakers thwarted efforts to make the CDS market more transparent. The Fed (under Alan Greenspan), the Treasury (under Robert Rubin and then Larry Summers), and the SEC (under Arthur Levitt) squashed attempts at the end of the 1990s by Brooksley Born of the Commodity Future Trading Commission (CFTC) to shed light on the multi-trillion dollar OTC derivatives market, which included credit default swaps.

Incidents of fraud, manipulation and failure in the OTC derivatives market began as early as 1994, with the sensational bankruptcy of Orange County and court cases involving Gibson Greeting Cards and Procter & Gamble against Bankers Trust. Numerous problems, associated with bankers exploiting unsophisticated school districts and municipalities, plagued the market. Further, OTC derivatives played a dominant role in the dramatic failure of Long-Term Capital Management (LTCM) in the summer of 1998. Indeed, no regulatory agency had any warning of LTCM's demise, or the potential systemic implications of its failure, because it traded primarily in this opaque market.

In the light of these problems and the lack of information on the multi-hundred-trillion dollar OTC derivatives market, the CFTC issued a "concept release" report in 1998 calling for greater transparency of OTC derivatives. The CFTC sought greater information disclosure, improvements in record keeping, and controls on fraud. The CFTC did not call for draconian controls on the derivatives market; it called for more transparency.

The response by the Fed, Treasury and SEC was swift: they stopped the CFTC. First, they obtained a six-month moratorium on the CFTC's ability to implement the strategies outlined in its concept release. Second, the President's Working Group on Financial Markets, which consists of the Secretary of the Treasury, the Chairman of the Board of Governors of the Federal Reserve System, the Chairman of the SEC, and the Chairman of the CFTC, initiated a study of the OTC derivatives market. Finally, they helped convince Congress to pass the Commodity Futures Modernization Act of 2000, which exempted the OTC derivatives market – and hence the CDS market – from government oversight.

Senior regulators and policymakers lobbied hard to keep CDS and other derivatives in opaque markets. A comprehensive assessment of the causes of the crisis must evaluate why policymakers made choices like this. Indeed, Nick Timiraos and James R. Hagerty argued in *The Wall Street Journal* on 9 February 2010,

> "Nearly a year and half after the outbreak of the global economic crisis, many of the problems that contributed to it haven't been tamed. The U.S. has no system in place to tackle a failure of its largest financial institutions. Derivatives contracts of the kind that crippled American International Group Inc. still trade in the shadows. And investors remain heavily reliant on the same credit-ratings firms that gave AAA ratings to lousy mortgage securities."

2.5 Investment bank capital, risk-taking and the SEC

As a final example, consider the SEC's oversight – or lack thereof – of the five major investment banks, all of which experienced major "transformations" in 2008. Only a few days after the SEC Chairman expressed confidence in the financial soundness of the investment banks, a failed Bear Stearns merged with the commercial bank JP Morgan Chase. Six months later, Lehman Brothers went bankrupt, and a few months later, at the brink of insolvency, Merrill Lynch merged with Bank of America. In the autumn of 2008, Goldman Sachs and Morgan Stanley were "pressured" into becoming bank holding companies by the Fed and arguably rescued from failure through an assortment of public programs.

The SEC's fingerprints are indelibly imprinted on this debacle, as reflected in three interrelated SEC decisions. First, the SEC in 2004 essentially exempted the broker-dealers of the five largest investment banks from using the traditional method for computing capital in satisfying the net capital rule, which was a 1975 rule for computing minimum capital standards at broker-dealers. The investment banks were permitted to use their own mathematical models of asset and portfolio risk to compute appropriate capital levels. The investment banks responded by issuing more debt to purchase more risky securities without putting commensurately more of their own capital at risk. Leverage ratios soared from their 2004 levels, as the bank's models indicated that they had sufficient capital cushions.

In a second, coordinated 2004 policy change, the SEC enacted a rule that induced the five investment banks to become "consolidated supervised entities" (CSEs): the SEC would oversee the entire financial firm. Specifically, the SEC now had responsibility for supervising the holding company, broker-dealer affiliates and all other affiliates on a consolidated basis. These other affiliates include other regulated entities, such as foreign-registered broker-dealers and banks, as well as unregulated entities such as derivatives dealers (Colby, 2007). The SEC was charged with evaluating the models employed by the broker-dealers in computing appropriate capital levels and assessing the overall stability of the consolidated investment bank. Given the size and complexity of these financial conglomerates, overseeing the CSEs was a systemically important and difficult responsibility.

Third, the SEC neutered its ability to conduct consolidated supervision of major investment banks. With the elimination of the net capital rule and the added complexity of consolidated supervision, the SEC's head of market regulation, Annette Nazareth, promised to hire highly skilled supervisors to assess the riskiness of investment banking activities. But the SEC

didn't. In fact, the SEC had only seven people to examine the parent companies of the investment banks, which controlled over $4 trillion in assets. Under Christopher Cox, who became chairman in 2005, the SEC eliminated the risk management office and failed to complete a single inspection of a major investment bank in the year and a half before the collapse of those banks (Labaton, 2008). Cox also weakened the Enforcement Division's freedom to impose fines on financial firms under its jurisdiction.

In easing the net capital rule, adopting a system of consolidated supervision, but failing to develop the capabilities to supervise large financial conglomerates, the SEC became wilfully blind to excessive risk-taking. The SEC purposely eliminated supervisory guardrails, while simultaneously arguing to Congress in 2007, and hence to global financial markets, that it had a "successful consolidated supervision program". (See the SEC Deputy Director's testimony before the US House of Representatives Financial Services Committee, 25 April 2007, http://www.sec.gov/news/testimony/2007/ts042507rc.htm.) This forceful statement by the SEC provided these major investment banks with an official stamp of approval, weakening market monitoring of these enormously complex and highly leveraged conglomerates. These policy choices point inexorably toward the SEC as an accomplice in causing the global financial crisis.

2.6 Final points on systemic policy failures

In example after example, the financial regulatory authorities:

(i) were aware of the problems associated with their policies,

(ii) had ample power to fix the problems, and

(iii) chose not to.

As noted by Senator Carl Levin, "The recent financial crisis was not a natural disaster; it was a man-made economic assault. It will happen again unless we change the rules."

3. The Financial Regulatory Commission: the "Sentinel"

3.1 Preamble

In the light of the evidence presented above, I sketch a proposal for a Sentinel to improve regulatory governance: the system for selecting, interpreting, and implementing and adapting regulations. One might accept the desirability of rethinking the governance of financial regulation and yet reject the specific Sentinel proposal. I simply offer the Sentinel as one potential strategy for improving the governance of financial regulation. Furthermore, in describing the Sentinel, I do not address a range of key questions, such as (i) which are the right regulations for achieving desirable outcomes, such as stability and growth and (ii) what are the right trade-offs among these potentially competing outcomes? Rather, the goal of the Sentinel is to improve the process through which these decisions are made. Finally, I sketch the Sentinel from the perspective of somebody most familiar with the institutional contours of the United States. While many of the general principles – such as transparency and checks and balances – translate to other political and cultural contexts, some elements will not. I emphasise key attributes of the Sentinel that are crucial to its proper functioning.

3.2 The Sentinel

The only power of the Sentinel would be to acquire any information that it deems necessary for evaluating the state of financial regulation over time, including the rules associated with the corporate governance of financial institutions. Any information collected by the Sentinel

would be made publicly available, potentially with some delay. Transparency is necessary; thus, the law establishing the Sentinel must clearly and unambiguously assert that the Sentinel should be granted immediate and unencumbered access to any information it deems appropriate from any and all regulatory authorities and financial institutions. Sentinel demands for information must trump the desires of regulatory agencies for discretion, secrecy and confidentiality. This "sunshine" regulatory approach has a long and promising history, as discussed in McCraw's (1984) impressive book. This approach is also fully consistent with the notion of checks and balances incorporated into the political philosophies of several countries. In other words, the basic power of the Sentinel is quite conventional, not radical.

The only responsibility of the Sentinel would be to deliver an annual report to the legislative and executive branches of government assessing the current and long-run impact on the public of financial regulatory and supervisory rules and practices. The Sentinel would have no official power over the central bank, the regulatory agencies, or financial markets and institutions. To emphasise this point, the Sentinel would not affect the power and responsibilities of the central bank or financial regulatory agencies. But, the Sentinel would have broad responsibilities for assessing the impact of the overall constellation of regulatory and supervisory practices on the financial system, not just the impact of a single regulatory agency. The Sentinel would look across all segments of the financial system, from banks and securities markets, to derivatives and rating agencies, to insurance companies and executive compensation etc, and produce a detailed evaluation of the functioning of the entire financial policy apparatus.

The major design challenges are to create a Sentinel that is (i) politically independent, (ii) independent of financial markets, and (iii) sufficiently staffed so that it can deliver a message to a nation's policymakers, with sufficient prominence and prestige to ensure that it is not ignored. These are the essential ingredients. While elected officials should ultimately set public policies, creating a Sentinel that is independent of narrow political and market influences would help in providing impartial, expert advice to politicians and the public. The goal is to create an institution in which the professional ambitions and personal goals of its staff are aligned with its mission of boosting the degree to which financial regulations reflect the public interest. Given this goal and the Sentinel's responsibility of examining the complete financial system, it must have the staff and resources to deliver on these ambitious goals and responsibilities. While the objectives are the same, the precise organisational mechanisms for achieving such a Sentinel will necessarily differ across countries.

Here are a few design suggestions, using the United States as a point of reference. First, the most senior members of the Sentinel would be appointed by the President and confirmed by the Senate for staggered and appropriately long terms. As with the Board of Governors of the Federal Reserve System, the goal is to limit the short-term influence of politics on the evaluations of the Sentinel. Second, the senior members of the Sentinel would also be prohibited from receiving compensation from the financial services industry, even after completing their tenure at the Sentinel. Third, Sentinel salaries would have to be market-based and the Sentinel would have to be large, including financial economists, lawyers, experts with supervisory experience, and – critically – senior professionals with private financial market experience. Since exactly those individuals with sufficient expertise to achieve the goals of the Sentinel would also have lucrative opportunities in the private sector, staffing the Sentinel with sufficiently talented, motivated individuals will require a different compensation schedule than currently contemplated in public sector jobs. While problematic, a more lucrative compensation plan is necessary for limiting conflicts of interest while attracting excellent people to the Sentinel. At the same time, the Sentinel would be a prominent entity. Those working for the Sentinel could achieve a wide-array of professional ambitions and attain considerable prestige and influence by accurately assessing financial regulations. The opportunity to improve financial sector policies and achieve these career aspirations would work to attract talented individuals to the Sentinel.

3.3 Impact and desirability of the Sentinel

The Sentinel would materially enhance the governance of financial regulation along several dimensions. At the most general level, creating an independent Sentinel with an informed and expert staff would enhance the analysis and review of financial policies, improve the design and implementation of those policies, and increase the probability that governments would select financial policies that promote the interests of the public at large, not only the special interests of a few. While the Sentinel would neither eliminate crises nor perfect financial system operations, it would improve the functioning of financial markets, lower the likelihood of systemic crises, and reduce the severity of future crises. It would accomplish these goals in several ways.

First, the Sentinel would have the power to demand information, the expertise to evaluate that information, and both the prominence and independence to make its judgments heard. It would be difficult for policymakers and the public to ignore the Sentinel's views. While regulators and others could refute the Sentinel's analyses and persuade policymakers to reject its recommendations, the Sentinel would provoke an informed debate.

By breaking the monopoly that regulatory authorities too frequently have over information and expertise, the Sentinel would enhance the analysis – and hence the design – of financial policies. Just as monopoly breeds inefficiencies in production, a monopoly on financial market and regulatory information by regulatory agencies breeds inefficiencies in the governance of financial policies. If the public and its representatives do not have the information and expertise to assess and challenge the decisions of the regulatory agencies, then this will hinder the effective design, implementation and modification of financial sector policies. For example, while the Fed was aware of the destabilising effects of its capital policies many years before the onset of the crisis, the public, Congress and the Treasury would have found it difficult to obtain this information and discuss alternative policies with the Fed. A Sentinel would have reduced the probability that US regulatory authorities would make the types of systematic mistakes over many years that helped trigger the 2008 global financial crisis.

Critically, although the Sentinel would eliminate the monopoly by regulatory agencies on information and expertise, it would not limit the de jure power of these regulatory agencies. The Sentinel would force the regulators to defend their analyses, decisions and actions, but it would not create another agency with regulatory power. The Sentinel would promote transparency and informed debate, but it would not diminish the role or responsibilities of existing regulatory agencies in promoting the safety and soundness of the financial system.

Second, in creating an informed, expert institution that is both independent of short-run political forces and independent of the private profit motives of financial markets, the Sentinel would push the policy debate toward focusing on the general welfare of the public and away from the narrow interests of the powerful and wealthy.

This cannot be stressed enough. As emphasised by a vast literature, financial institutions pay virtually unlimited sums to shape financial policies, regulations and supervisory practices to serve their private interests. As emphasised by an equally vast literature, narrow political constituencies work tirelessly on tilting the financial rules of the game so as to collect a greater share of the economy's resources.

Thus, it is vitally important to have an independent, expert, capable and informed group to provide an objective assessment of financial policies. Such an institution does not exist in most countries, certainly not in the United States. While the Sentinel itself is imperfect, it is an improvement; it would help induce authorities to focus more on the public interest in selecting, implementing and reforming financial policies.

Third, the Sentinel would examine the entire financial system. It would look beyond the narrow confines of any particular regulatory agency's purview and assess how the full constellation of financial policies fits together in shaping the incentives provided to private

financial institutions. Again, no existing – or proposed – institution has both the independence and resources to perform this function effectively.

Fourth, the Sentinel would promote healthy financial innovation by continuously reassessing how regulatory and supervisory practices affect the incentives faced by the financial system. Since financial systems are dynamic, it is vital to relentlessly re-evaluate the incentives shaping the behaviour of financial market participants. As the latest crisis suggests, a regulatory system that worked well before structured financial products emerged did not work as well afterwards. By constantly assessing the impact of financial policies, the Sentinel would reduce the likelihood that financial policies become obsolete and thereby dangerously distort the incentives that shape financial market decisions.

Fifth, by (i) having responsibility for examining the entire financial system, (ii) being politically independent and independent of financial markets, and (iii) not having regulatory responsibilities, the Sentinel would be uniquely positioned to improve the performance of existing regulatory agencies. At the simplest level, knowing that the Sentinel is going to scrutinise its actions would increase the performance of regulatory agencies, reducing complacency. The mere existence of the Sentinel might have reduced the dubious actions and inactions of several regulatory bodies during the most recent crisis.

Furthermore, by having no official power over either the regulatory agencies or financial markets and institutions, the Sentinel would be less constrained in its assessments than an organisation with direct supervisory and regulatory responsibilities. For example, if a regulator gives the OK on a particular practice, the regulator might later find it difficult to reverse or adjust its decision as new information becomes available. The regulator might have the very human fear of losing credibility with the regulated entity. While a regulator might avoid taking actions against a regulated financial institution because such an ex post action implies an ex ante failure of regulation, the Sentinel would face fewer such conflicts. Thus, the Sentinel would make it more likely that bad policies are identified and changed. Similarly, while one regulatory agency (for example, the Fed) might steer clear of criticising another agency's actions (such as the SEC's) to avoid triggering cross-agency battles, the Sentinel would be less reticent. Indeed, it would have the responsibility of commenting on the performance and policies of all regulatory institutions, with positive implications for the governance of financial regulation.

4. Conclusions

The financial crisis was not simply the result of too little regulatory power, unclear lines of regulatory authority, or the unpredictable consequence of massive, unsustainable capital flows in conjunction with toxic financial innovations. All of these were contributing factors. But, they are incomplete explanations of the collapse of the global financial system.

A systemic failure of financial regulation contributed to the crisis. The major financial regulatory agencies repeatedly designed, implemented, and maintained policies that increased the fragility of the financial system and the inefficient allocation of capital. The financial policy apparatus maintained these policies even as they learned that their policies were distorting the flow of credit toward questionable ends. They had plenty of time to assess the impact of their policies and adapt, but they frequently failed to change their policies. Thus, the institutions responsible for maintaining the safety and soundness of the global financial system made systematic mistakes. Thus, a comprehensively effective financial reform package must address the systemic failure of the governance of financial regulation – the system associated with evaluating, enacting, and implementing financial policies.

The Sentinel is a suggestion for addressing this fundamental cause of the global financial crisis. Unlike existing institutions, the Sentinel would be independent of both political and market influence. Supervisory and regulatory officials in many countries move readily from

politically connected jobs, to lucrative jobs in the private sector, to senior positions in official financial supervisory agencies. While the vast majority of regulators surely act in the best interests of the public, it is nevertheless valuable to have an informed, expertly staffed institution – without potential conflicts of interest – assessing the performance of official agencies and the efficacy of financial policies. While existing regulatory agencies frequently have internal auditing departments, the Sentinel would play a much different role. These auditing departments assess whether the particular regulatory agency adhered to particular rules. Instead, the Sentinel would conduct an independent evaluation of the impact of the full array of financial regulations and supervisory practices on the economy.

Unlike existing institutions, the Sentinel would have the prominence, information and expertise to question existing regulatory agencies. It is anti-democratic, and economically dangerous, for a group of unelected regulatory officials to have a monopoly on the information and expertise necessary for making financial regulatory decisions. This gives to unelected, and potentially unaccountable, officials too much power over the rules governing the allocation of capital. The Sentinel would shine a cleaning light on the processes associated with making financial policy decisions, enhancing financial regulation. The Sentinel would provide an independent, expert assessment of financial sector policies that would inform the debate on these highly complex policy considerations. The absence of such an institution was clearly evident in the design, implementation and evolution of financial policies during the last decade.

Although not impervious to mistakes and corruption itself, the Sentinel would enhance the governance of financial regulation. It would increase the probability of creating a regulatory system that adapts to a dynamic, innovating economy and incentivises financiers to provide the financial services necessary for sustaining economic growth.

References

Barth, J, C Gerard Jr and R Levine (2006): *Rethinking Bank Regulation: Till Angels Govern*, Cambridge University Press.

—— (2011): *Guardians of Finance: How to Make them Work for Us*, MIT Press, forthcoming.

Barth, J, Li T, Lu W, Phumiwasana T and Yago G (2009): *The Rise and Fall of the US Mortgage and Credit Markets*, Wiley & Sons.

Cecchetti, S (2009): "Crisis and responses: the Federal Reserve in the early stages of the financial crisis", *Journal of Economic Perspectives*, 23, 51–75.

Colby, R (2007): Testimony Concerning the Consolidated Supervision of US Securities Firms and Affiliated Industrial Loan Corporations, The US House of Representatives Financial Services Committee, 25 April.

Labaton, S (2008): "Agency's '04 rule let banks pile up new debt", *New York Times*, 3 October.

Levine, R (2010a): "The Sentinel: improving the governance of financial policies", in *The International Financial Crisis: Have the Rules of Finance Changed?,* (eds) Demirgüç-Kunt A, D Evanoff and G Kaufman, World Scientific Publishing.

—— (2010b): "An autopsy of the US financial system: accident, suicide, or negligent homicide?", *Journal of Financial Economic Policy,* forthcoming.

Lewis, M (2009): "The man who crashed the world", *Vanity Fair*, August.

Lowenstein, R (2008): "Triple-A failure", *New York Times*, April 27.

McDonald, L and P Robinson (2009): *A Colossal Failure of Common Sense: The Inside Story of the Collapse of Lehman Brothers*, Crown Publishing Company.

Tett, G (2009), *Fool's Gold*, Free Press.

Comments on Ross Levine's paper "The governance of financial regulation: reform lessons from the recent crisis"

Howard Davies[2]

I enjoyed reading Ross Levine's paper, for reasons of both substance and form. It is very clearly and persuasively written, something which one cannot always say of papers from academic economists!

It also raises some important issues that have become a little submerged in public debate recently. In the United States, in particular, the focus is all on the Senate and House bills yet, as I shall suggest, they do not include remedies for a number of the most important regulatory failings revealed in the crisis. I am particularly conscious of this dislocation, having recently completed a review of the causes of the crisis, which will be published shortly under the title "The financial crisis: who's to blame?" (Davies (2010).

In that book I identify 38 different arguments presented for the crisis, not all of them wholly convincing. (I am pleased to note that the issues covered by Ross Levine in his paper are all included).

We should begin by noting that there were failings other than regulatory lapses that were also highly influential. Levine refers briefly to global imbalances, weak monetary policy and the like as part of the context in which, he argues, regulation failed to do its job. I also attach importance to the influence of monetary policy, and indeed some other government interventions in financial markets that had an impact on financial conditions, often a malign impact. But we cannot deny that regulation did fail in a number of areas, and Levine invites us to concentrate on them. I do so, therefore, against the background of an awareness that this is not the full story.

Levine's argument is that regulators were aware of many of the emerging problems, but did not act on them, in good part for reasons that we often call regulatory capture. In order to avoid a recurrence he wants to see establishment of a new institution "The Sentinel", heavily insulated from political influence and influence from financial firms, which will be charged with keeping the regulatory system under review and identifying the need for change where it emerges.

I am invited to comment as a (lapsed) policymaker, rather than from an academic perspective. It is appropriate to point out, therefore, that I was a practising regulator until 2003 – for part of the period when the roots of the crisis were growing, but perhaps not in the years in which the dangerous trends accelerated. So, for example, when I left the UK's Financial Services Authority in 2003, the total volume of credit default swaps outstanding was roughly $3 trillion, while by the end of 2006 it was more than $60 trillion. I say this not to attempt to join the "I told you so" club. I did not forecast the crisis of 2007, though in my last major speech as FSA Chairman I did draw attention to new instruments of risk transfer and suggested that they should be monitored very closely (Davies (2003)). I argued then that we needed "to know more about how these derivatives are used, and where credit risk has ended up as a result. In particular, we need to know whether regulatory arbitrage is one of

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the causes – whether risk is migrating to sectors with inadequate capital requirements for this sort of risk".

I have reflected on why the regulatory system was not more effective in slowing down these, in retrospect, remarkable trends, and how we can attempt to make regulators more responsive, more self-confident and perhaps braver in the future. So I begin with that issue, before commenting on the specific cases which Levine discusses, and then on his Sentinel proposal.

My own analysis of the reasons for the regulatory mindset which Levine describes would give less weight to the "conspiracy" elements in his narrative. I would begin with the observation that there was in the regulatory community a strong element of "groupthink", which was shared by central bankers and indeed by politicians. There was a widespread belief that markets were self-correcting. A heavy burden of proof was placed on regulators who wished to question the rationality of market transactions and market prices. The same philosophy that led central bankers to conclude that it was impossible for them to know that a bubble was inflating induced regulators to believe that even the most exotic price movements must have an underlying rationale. Furthermore, they believed that the managements of financial firms were best placed to judge what made sense for them and that it was not for regulators to second-guess their decisions. Of course, in Congressional testimony in 2008, Alan Greenspan offered a limited "recantation", noting that he had been shocked at the inability of management and shareholders to understand what was in their own interest.

This mindset was built on what seemed like sound intellectual foundations. It is not the place here for an extensive critique of the rational expectations models which underlay much economic analysis. The efficient market hypothesis, albeit amended over time, remained the intellectual underpinning of most financial theory. That also pointed towards a hands-off approach by the regulatory community.

So if new instruments were developed, and credit default swaps are the example set out in Ross Levine's paper, with willing buyers and willing sellers, then why should they not be allowed to develop? If they facilitated trading of claims in a more sophisticated, fine-grained, disaggregated way that made markets more complete, this must generally be a "good thing". Who were regulators to question these developments? It may be argued that the technology of product innovation ran well ahead of the technology of risk management. I certainly take that view today, but regulators did not on the whole regard it as their business to ask whether firms understood the business they were in.

Let us also be clear about the political climate in which regulators were operating. It was highly unfavourable to tight regulation. In the United States, this is often seen as the result of the lobbying clout of financial firms. I an unsure about that in the United Kingdom. On the whole, banks did not have to lobby politicians, largely because politicians argued the case for them without obvious inducement. The same is true of the media, for the most part. When the Financial Services Authority was established, and its legislation was going though Parliament, there was a vanishingly small constituency for tough powers for the regulator. The FSA was always characterised as an "over-mighty regulator", as "judge and jury" in its own cause. These phrases were on the word processors of every financial journalist in London, and I would not claim that they were venal or corrupt. That was what they honestly thought. One is reminded of the celebrated epigram by Humbert Wolfe (1885–1940):

> You cannot hope to bribe or twist,
> Thank God, the British journalist
> But seeing what the man will do
> Unbribed, there's no occasion to.

There was a casual denigration of regulators in political and media discourse. They were bound to be behind the markets. They were nitpicking, red tape-spinning gnomes, who stood in the way of the animal spirits of the wealth creators in the financial centre. On every occasion that I appeared in Parliament as the Chairman of the FSA I was attacked for over-

intrusive regulation. In the UK, the City of London was seen as a goose that lays golden eggs, which should on no account be frightened into flapping its wings and flying away.

All this was linked, of course, to a degree of hubris among politicians and financial folk. Gordon Brown talked famously of having put an end to boom and bust. The credit-fuelled boom was creating a feel-good factor which benefited incumbents. Inflation targeting seemed to offer the "end of history" in monetary policy terms.

Everything changed dramatically in 2007, but we should not forget that this was the climate in which regulators operated before then.

These are general problems which apply to some degree all over the world, but the phenomenon was more extreme in the United States and the United Kingdom than elsewhere. The United States also has a particular problem in that regulators there are poorly paid. Levin refers to that himself quite correctly and argues that the Sentinel staff must be very well remunerated. (I have prepared my own job application.) But before addressing the details of the Sentinel, I will offer a few comments on the regulatory cases he describes in support of his proposition.

On credit rating agencies, his analysis is acute. There are conflicts of interest inherent in the business model of the credit rating agencies, though it is fair to say that nobody has found a convenient way of correcting those conflicts of interest, and it may well be that if we abolished the rating agencies as they stand, we would need quite soon to reinvent something rather similar. So my own inclination is to think that one has to accept the existence of credit rating agencies, but one should not be scattering regulatory holy water on them and thereby sanctifying their output. I strongly agree about the unwisdom of the Nationally Recognized Statistical Rating Organization (NRSRO) regime operated by SEC in the past. This, indeed, was a point I made when at the FSA. Other countries did not offer regulatory blessing to the agencies – though the European Union has now passed a directive imposing a new, and quite possibly unwise, regulatory regime in response to the crisis. The NRSRO regime was the worst of all possible worlds. It apparently offered some regulatory comfort about the operation of the agencies, but in fact did not do so. It was responsibility without power, the most dangerous form of regulatory oversight.

In addition, ratings were hard-wired into a number of elements of the regulatory regimes, notably Basel II. Partly for that reason, investors began to use ratings as a substitute for thought. This combination of apparent but not real regulation and excess reliance by the market was a combustible mixture.

His second case, the development of the credit default swap market, is an example of the point I made about financial innovation. This market grew remarkably rapidly, as I have said, without clear understanding of the risks involved. The AIG debacle also demonstrated a poor understanding by the regulatory community overall of just how these risks were being insured.

I believe that Levine's characterisation of the dispute between Brooksley Born of the Commodity Futures Trading Commission (CFTC) and Greenspan, Summers, Rubin and Levitt is broadly correct. In retrospect, Brooksley Born looks to have had by far the better of the argument. Of course, we cannot know what would have happened had derivatives been put under the CFTC when she recommended it. The CFTC itself has changed character several times in the last decades with new political appointees. It has gone from Gramm to Born and back (ideologically). But she was clearly onto something important, and the administration and congress have now recognised that.

Levine's section on the failings of the SEC's oversight of the investment banks is excellent. The point has been too little made in the public debate. But he does not mention the origins of the consolidated supervisory oversight (CSE) regime. Regulators around the world had long taken the view that these large complex financial institutions must have a consolidated supervisor. That argument was rejected by successive US administrations. This led to

considerable frustration in Europe and, eventually, to the passage of the Financial Groups Directive, which required any financial group operating in the European single financial market to have a consolidated supervisor at the parent level, or to sub-consolidate in Europe. The latter would have had some capital disadvantages for the investment banks, which would have had to hold more capital in their consolidated European subsidiaries as a result. They therefore pressed the US regulators to provide some kind of consolidated supervision that would meet the terms of the Financial Groups Directive. Surprisingly, the Office of Thrift Supervision (OTS) put in a bid to carry out this role. The Federal Reserve was unwilling to do so. Eventually, the SEC was prevailed upon to do it. They had no appetite for the job. The culture of the SEC is the culture of a pure markets and investor protection regulator. In the jargon, they are cops not doctors. So, as Levine accurately describes, their regime was half-hearted and ineffective. There were only five firms under their care and three of them effectively failed. To paraphrase Oscar Wilde, to lose one of five might be misfortune, to lose two suggests carelessness, while to lose three does begin to hint at a systemic failure.

How far does the legislation now in prospect in the United States deal with these problems? Only in part, would be my answer. In that context it is instructive to look back at the so-called Paulson Blueprint published in March 2008, following the US Treasury's assessment of the failings of the regulatory regime then in operation. It was a remarkably self-critical document. I will not go into detail here, but it made two particular recommendations relevant to the problems which Levine describes, which have not been carried through in the legislation. Paulson recommended, for example, that the SEC and the CFTC should be merged. Many of the problems of regulatory oversight of derivatives in the United States arise from the split regulation of securities markets. The United States is the only country in the world which seeks to regulate cash securities and derivatives in different ways, through different authorities. Relationships between the SEC and the CFTC have been dysfunctional for decades. The Brooksley Born arguments described by Levine are just one example of the consequences of that dysfunction. It is highly unfortunate that the problem has not been resolved, in spite of the stark lessons of the crisis.

Also, the Paulson Blueprint recommended the introduction of an optional Federal Charter for insurance companies and therefore the creation of a federal insurance regulator. Many large insurers would opt into such a regime and have come out in favour of it. It would undoubtedly have helped greatly in the case of AIG, where a Federal insurance regulator would have taken its consolidated supervision responsibilities seriously and would surely have identified the risks being run by AIG through its financial products subsidiary. It would have communicated more effectively with the Federal Reserve. So, once again, the opportunity presented by the crisis to achieve a more rational regulatory regime in the United States has been missed.

Levine believes that many of these gaps can be plugged by the creation of a new authority charged with keeping the regulatory regime under review and staffed by highly expert, well paid professionals, entirely insulated from short-term political pressures on the one hand, and from persuasive lobbying by the financial community, with the promise of well paid jobs in due course, on the other.

One of the arguments he advances is that "a monopoly on regulatory power and information is dangerous. Such a monopoly is particularly dangerous when it is housed in a central bank or other entity that is designed to be independent of the public or its representatives". This is an important point. Central banks are now generally constructed as highly independent entities, certainly in developed countries, largely because we have reached the view that politicians can't be trusted with the interest rate weapon, particularly when elections are in the offing. Many democratically elected representatives have therefore reached the conclusion that it makes good sense to take this instrument out of their hands and to have it administered by an independent institution. But it is not clear that this argument extends to the exercise of regulatory power, especially where that power – as it often does – effectively influences the distribution of property rights. But this may not be a wholly persuasive general

argument for a new body. It may tell us, instead, that we must be careful about the extent to which we put regulatory authority in the hands of central banks. Of course in principle it is possible to devise separate accountability arrangements for regulatory power, from those which apply in the case of the short-term interest rate. Indeed this will have to be done in the United Kingdom under the arrangement now proposed by the new coalition government. But it is complex, and the risk of what we might call accountability contagion from one set of responsibilities to another is high.

In the European Monetary Union, where national central banks do not set interest rates, the problem is not so severe, and there it may well make sense to use the national central bank in a regulatory role.

Levine is also rather dismissive of internal audit arrangements in regulators. He notes that some do have internal assessment functions but that they have not been effective in holding them to account. This is, I think, rather an American perspective. Clearly it was highly unfortunate that the SEC Inspector General's report on the Madoff affair came out on the same day as the accusations of fraud against Goldman Sachs, which significantly reduced its public impact. In the case of the FSA in the UK there have been two occasions, in relation to Equitable Life Assurance Society and to Northern Rock, where the publication of an internal audit report has been embarrassing for the FSA and has certainly brought about changes in regulatory practice. Typically, central banks do not have such an internal audit function with the right to "publish and be damned". So there has been no internal audit report about the Bank of England's role in the Northern Rock collapse. It will be interesting to see whether, when prudential regulation is in a Bank of England subsidiary, the power to issue internal audit reports remains and, if so, whether it is effectively used.

These arguments suggest to me that there might be other ways of strengthening the accountability of the regulatory authorities without necessarily setting up a new institution on the lines Ross Levine recommends.

So, finally, how do I assess his proposal?

There are some good things about it which need to be said. First, there is certainly value to be had from published objective assessments of the state of the regulatory regime, and indeed of potential imbalances in the financial system. It is hard for regulators and central banks to do this, without the temptation to pull their punches. There is a serious risk of generating a self-fulfilling prophecy if they forecast trouble ahead. And it is rather difficult for an agency to say publicly "we are doing a bad job". If we look back at the build-up to the crisis we can see very rapid growth in the number of financial stability reviews published by central banks, and indeed in some cases by non-central bank regulators. Yet they were often rather partial in coverage, did not draw attention to some of the most dangerous trends, and do not seem to have had much influence on market behaviour. Whether through the Sentinel route, or some other means, we certainly need to find a way of improving our early warning systems.

Another point in Levine's favour is that we cannot necessarily rely on politicians to remain focused on financial regulation. Over the last three years it has been a topic of great interest in many jurisdictions, but that is unusual. From one decade to the next, Congress and the British parliament hope not to have to engage in the complex process of regulatory reform. So some kind of agency keeping the system under review has that to commend it.

But I see some considerable difficulties in the way of the proposal that is formulated in Ross Levine's paper. Perhaps the most fundamental is that he assumes it will be possible for a group of well intentioned people, supported by information and analysis, to determine "the degree to which financial regulations reflect the public interest". This presupposes that there is a particular definition of what the public interest might be, which the Sentinel's staff can determine. That strikes me as being a heroic assumption. After all, there were many who believed that the subprime mortgage market was very much in the public interest, given that it provided poor families normally excluded from the credit markets with access to owner

occupied housing. In this view, the subprime market broadened owner occupation, with positive implications for the stability of society and the American economy.

It is misleading to suggest that these judgements do not have a strong political dimension to them. They cannot be put on autopilot, or entrusted to a group of disinterested “wise men”.

The second potentially fatal flaw is that the Sentinel would be a public sector body, yet deliberately constructed so as to have minimal political accountability and be outside the normal controls on pay in the public service. It is a nice idea, but I wonder whether it is practically possible to create such an institution. Politicians are highly unlikely to be prepared to spend money on a body which does not have the normal accountability mechanisms in place.

Which leads me to my final point. Could we not envisage a Sentinel in the private sector? There are some models around. There are shadow monetary policy committees in the UK and in Europe, staffed by economists who monitor and mimic the actions of the real monetary authority. There is now a committee on global financial regulation, of which I am a member, which is attempting to do something similar in relation to regulation at the global level. The latter is philanthropically funded (to a very modest degree).

Could we not imagine a public interest foundation establishing a Sentinel-like body to monitor the behavior of financial regulators in the light of evolving market conditions? It could not be set up directly by the financial industry itself, but one could imagine donors who would not seem to put its independence at risk. Perhaps the “Buffet Sentinel” could be envisaged, for example? Though, if it were established in Omaha, Nebraska, I would withdraw my job application.

References

Davies, H (2010): *The financial crisis: who’s to blame?*, Polity Press.

—— (2003): “Is the global regulatory system fit for purpose in the 21st century?”, Monetary Authority of Singapore lecture, 20 May.

Comments on Ross Levine's paper "The governance of financial regulation: reform lessons from the recent crisis"

Gill Marcus[3]

Ross Levine has presented a stimulating paper which highlights the role that failures in the governance of financial regulation played in the global financial crisis. His analysis of these failures in the United States makes for compelling reading. However, as I will argue below, it does not follow that the solution lies in the creation of further layers in the regulatory environment.

In the aftermath of the crisis there has been a rush to reform institutions and regulations. This has created challenges for the relationship between governments, regulators and central banks, the banking and non-banking system, and society in general. I shall comment on the changing focus of central banks and the implications for their relationship with government, and then discuss general issues relating to regulatory relationships and some of the dangers inherent in the reform process.

Central banks and financial stability

It is clear that the core focus of central banks has changed. It is no longer the case that monetary policy can be conducted in a vacuum, and there has to be a focus on financial stability issues. The challenge here is to determine how best this is done. One has to determine what are central bank measures and what are not, and to ensure that the core responsibilities of the central banks are not overwhelmed. Things will have to be done differently; central banks need to create better levels of knowledge and skill, perhaps collect different data, or change the way that they look at data.

There is still no general agreement on what the role of the central bank should be with respect to financial stability or, indeed, what financial stability actually means. But the discussions raise some important questions about the changes in the design of central banks, and possible changes in the relationship between the central bank and government. There needs to be an understanding of who is responsible for financial stability and how it should be executed. Clear parameters need to be set and formalised arrangements made.

There can be little doubt that the central bank should play a role in financial stability. In fact, most central banks already have an explicit or implicit responsibility in this regard. The question is, however, should this be the sole prerogative of the central bank? During times of crisis, it is usually the case that the first port of call of banks that are in trouble is the central bank. This is the case even if the bank supervision function is not located inside the central bank. The central bank has a role of lender of last resort, it generally oversees the payments system, it has the ability to inject liquidity into the markets in general or into specific dysfunctional sectors of the markets and, in many instances, it is responsible for the micro

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[3] Governor, South African Reserve Bank.

supervision of banks. But it does not necessarily follow from this that the macroprudential oversight or the financial stability mandate should be located solely within the central bank.

Financial stability requires a national response influenced by political priorities. During the crisis, the fiscal authorities in a number of countries made large capital injections into ailing banks and also provided government guarantees. Furthermore, any lender-of-last-resort activities have fiscal implications, even if they are initiated by the central bank.

Finally, there are other supervisory agencies and competition authorities that have an impact on financial stability. In South Africa, for example, a National Credit Regulator was established, whose main objective is to promote responsible and efficient borrowing and lending practices in South Africa. One of its other objectives is to prevent reckless credit extension. In addition, there is the Financial Services Board that regulates the markets and the activities of the insurance industry. The bottom line is that it would be difficult to define a financial stability objective for the central bank alone, and it would be difficult for the central bank to carry out the financial stability functions on its own. This points to a shared responsibility for financial stability.

Therefore, a way needs to be found to coordinate with government, as many of the policy options and their funding blur the boundaries between the central bank and the fiscal authorities. Financial stability decisions are generally more political, and require more interaction with government.

The South African Reserve Bank's suggestion, at this stage, is that while the compilation of data and analysis would primarily be the responsibility of the central bank, a financial stability committee co-chaired by the Governor of the South African Reserve Bank and the Minister of Finance could be considered. However, such a joint body raises a number of governance issues: What should the relationship be between the Monetary Policy Committee (MPC) and the Financial Stability Committee (FSC)? What happens when there are conflicts between matters relating to monetary policy and to financial stability? Does this give government a potential influence on monetary policy, thereby undermining independence?

I am not sure that I have the definitive answers to these questions. However, I would suggest that problems with coordination could be reduced or mitigated to some extent by having overlapping membership of the two committees. At the very least, the Governor would chair (or co-chair in the case of the FSC), which would help to ensure coherence of policy. While conflicts between the two policies could arise, this is unlikely to be the norm. Monetary policy actions are likely to be far more frequent than those of the FSC, and in many instances are likely to be in the same direction, particularly if MPC mandates are broadened to be mindful of financial stability issues as well.

Decisions relating to interest rates will still be made by the central bank without government pressure or interference, but it may be inevitable that there could be some encroachment on monetary policy independence at the margin if financial stability decisions reinforce or contradict the direction of monetary policy. However, it is not always easy to disentangle the financial stability and price stability objectives, as they are not always independent of each other. Nevertheless, there will have to be clear specifications of the roles and responsibilities of the different bodies to ensure appropriate clarity of responsibility and accountability, and at the same time preserve monetary policy independence. Monetary policy independence is also not absolute. The central bank has independence in decision-making with respect to monetary policy, but it is not independent of the political economy.

General regulatory political economy issues

The global financial crisis has spurred a review of banking regulations, but there are dangers inherent in this approach that should be highlighted. There is the danger that the crisis will

result or has resulted in excessive politicisation of regulatory issues in a quest to ensure that someone is seen to be responsible for the crisis. This has the potential to create a new moral hazard by giving the impression that the system is safe. Yet the regulators do not run the institutions and there are no guarantees of safety. However, if things do implode, it will be the regulator that is seen to be responsible.

There is also the danger that there has been too much of a focus on banks, rather than on the broader financial system. Over-regulation of banks could not only reduce lending, but it could result in more disintermediation, thus preparing the ground for the next crisis. What the recent crisis has shown is the inventiveness of financial markets to come up with products or institutions that will circumvent existing regulations.

The robustness of the regulatory environment and the financial system – including the payments system, the exchanges and banks – needs to be enhanced and individual failure managed in such a way that it does not pose the risk of systemic failure. Furthermore, monetary policy and regulatory practice themselves must not become sources of financial instability. For example, keeping interest rates too low for too long could generate asset price bubbles, and "light touch" regulation or supervision could encourage risky lending practices.

In reforming the regulatory environment, it is not clear that the solution to the problem is the creation of additional layers in the regulatory and supervisory process. Should the endeavour not be to try to improve the existing regulatory framework, and make the existing structures more responsive or accountable and responsible for doing their jobs? Was the problem not that there was a lack of appropriate implementation; that regulators and governments had the powers but did not use them?

I am therefore not convinced that the solution is to create an additional regulatory body such as the Sentinel, as proposed by Levine. It is also not easy to create a purely technocratic or politically independent regulatory body. Supervisory agencies, which are supposed to provide an independent check on the decision-making of financial institutions, are in fact subject to the same collective euphoria and myopia that characterise periods of excessive optimism. There is no reason to believe that new regulatory agencies will not be any less subject to such influences.

Furthermore, supervisory agencies are also operating in a particular ideological climate. In the lead-up to the crisis, the climate at the time favoured free-market solutions and strategies, and tended to downplay the role of intrusive regulation. There is no doubt, however, that the pendulum has shifted in this respect (perhaps even too far), and that the predominant mood may have swung to one of over-regulation and excessive supervision. So, in reforming institutions, the prevailing political environment, as well as political relationships that exist, should be borne in mind.

The relationship between regulators and complex banks is also impacted by the relative skills capacity in the supervisory and regulatory bodies. This could impede these bodies and prevent them from being adequately equipped to assess the implications of financial innovation and new products. The financial markets are therefore generally ahead of the regulators in this respect. What is needed is a partnership without regulatory capture. The danger here is one of regulatory capture if banks or other financial institutions have the expertise, and influence the regulator to the degree that they determine their own environment. Therefore, the more effective the parameters set and sound regulatory framework created with the regulators having the authority and ability to enforce and act, the more likely is a sound banking system. Central banks and regulators are there for the system, not only for the individual institutions.

Finally, societal pressures on banks cannot be underestimated. Society's general reaction to the crisis is also important. There has been a breakdown of trust between society and banks, the government and regulators. Ordinary people are being asked to bear the brunt of the austerity adjustments to the crisis, through loss of jobs or significant cuts in income which, in

some cases, could stretch the fabric of society. The question and challenge is how to rebuild trust and confidence.

There are risks that the political dynamics could be so overwhelming that the regulatory relationships become dysfunctional, resulting in central banks getting caught up in all of these conflicts and the decline in levels of trust extending to central banks as well. This then undermines the credibility of the central bank, which is supposed to be a bastion of stability in the economy.