

Are Financial Regulators Competent?

Examining the Evidence

Kevin M. Capuder

Dept. of International Relations and European Studies
Metropolitan University Prague
Prague, Czech Republic
capuder@mup.cz

Abstract—Regulatory Capture in financial supervision does not receive enough attention, either academic or otherwise. This paper examines evidence concerning the knowledge base of regulators and their performance up to and including the changes implied by the Dodd-Frank and Basel III reforms. It concludes that, on balance, the competence of regulators is the key variable in the Regulatory Capture of financial supervision. Further, current regulatory reform efforts do little to address the issue. This conclusion supports the idea that hard limits on the size and risk profiles of financial firms are more likely than misplaced confidence in regulatory authorities to prevent a recurrence of 2007/8 events.

Keywords – regulatory capture in financial supervision; financial crisis; credit by instrument; political economy.

I. INTRODUCTION

When financial markets seized up and nearly collapsed in the fall of 2008, many breathed a sigh of relief that Ben Bernanke sat in the Chair of the U.S. Federal Reserve System. Having a chairman acknowledged to be a leading scholar of the financial causes of the Great Depression gave comfort. This is ironic, at best, in the sense that regulatory authorities [1] seemed to have missed the meaning of his and other academic work, for 20 years.

Was this willful due to Regulatory Capture either at the political level or at the regulatory level? In the U.S., the structure of the financial industry was dramatically changed during the 15 years previous to the crisis. The political power of the financial industry was amply demonstrated. Yet, the regulators themselves had direct and implied powers to impose prudential regulatory changes. In Europe, similar powers went unused as great risk was embedded with regulatory relief capital and myriad new financial instruments. A simple question is as yet unanswered: What were the regulators thinking? Further, what does this imply for the financial future and the health of the world economic system?

II. WHAT WAS MISSED

The Great Depression is the primary example for all scholars of financial crises. A stock market crash in New York could not, by itself, have produced such tragic consequences for much of the world. That required a preceding explosive growth in credit and a transmission mechanism capable of internationalizing the crisis. Credit extended to stock market investors financed a market boom,

which saw stock asset prices grow 400% in the U.S. while the economy grew 59%. [2] The credit boom was not limited to the U.S. but shared internationally. [3] Banking collapses (both U.S. and international) followed, caused by monetary mismanagement, and spread through a mismanaged gold standard system. [4] For the Asian Crises of 1997/8, prior portfolio capital flows induced an unsustainable credit expansion. The reversal of flows collapsed the structure, rapidly spreading the crisis to one country after another. [5]

Before the events of 2007/8 unfold, evidence of a similar preceding credit bubble and a new transmission mechanism was abundant and ignored by regulators. In the U.S., the ten years prior saw non-bank credit grow from \$773 billion to over \$2 trillion. Mortgage backed securities (MBS) issued grew from \$604 billion to \$2.1 trillion. Worldwide, in the previous 20 years, the over-the-counter (OTC) derivatives market in currency and interest rate swaps grew from \$865 billion to \$382 trillion, a number which was almost 8 times the size of world GDP. Collateralized debt obligations (CDOs) and credit default swaps (CDSs) were virtually non-existent before 2000. CDOs grew to \$520 billion issued in 2006. CDSs peaked at \$62 trillion outstanding in 2007, again a number larger than world GDP. [6] The growth rates of these credit derivatives were orders of magnitude higher than the growth rates for either nominal GDP or, for that matter, the growth rates in traditional bank lending. Each of these new types of securities or investment vehicles represented an “extension of credit by instrument”. [7] Financial regulators meanwhile kept a steady gaze on measures of bank credit and other indicators that did not reflect the increased credit extended or the risks.

In the 2007/8 near collapse MBSs, CDOs and CDSs, in never ending varied combinations, were the transmission mechanism. At the time, Timothy Geithner, then President of the NY Federal Reserve Bank was something of an exception among regulators. In a May 2006 speech he warned of the inherent risk created by the new financial instruments. Yet, in the same speech [8] he termed the benefits of such instruments as “compelling”. Since worldwide financial losses would exceed \$2 trillion, that conclusion was incorrect. Mr. Geithner was parroting the view of the financial industry, which had claimed wide benefits of financial innovation since the early 1990s. The industry had compelling reasons to advertise alleged benefits as its profits soared. As the U.S. subprime lending machine began to unravel, Ben Bernanke offered his advice: “At this juncture, however, the impact on the broader economy and

financial markets of the problems in the subprime market seems likely to be contained.”[9] This statement came three months after major New York banks were forecasting losses totaling \$50 billion. The OECD was a bit more pessimistic than the industry. [10] Very premature conclusions were offered; one by the most influential financial regulator in the world.

Meanwhile, a longstanding program to sell regulatory relief to banks was set to collapse in London. Without the later bailout by the U.S. of AIG, European banks would be in a far worse position today. AIG did not have the resources to cover its guarantees to banks. [11] How was this risk overlooked? What did regulators think about regulatory relief programs that were specifically designed to lower capital requirements at a time of dramatically expanding credit? The European Commission has offered this view: “The financial crisis has brought over-the-counter (OTC) derivatives to the forefront of regulatory attention.... Within that market, regulators devoted particular attention to the role that credit default swaps (CDS) played during the crisis.” [12] Another way of stating this is that embedded risk was missed.

In the view of three members of the Monetary and Economic Department at the Bank for International Settlements (BIS): “As the financial crisis deepened in the 18 months from August 2007, it quickly became apparent that we were partially blind because of significant gaps in our statistics. In some cases, we weren’t collecting the right data, and, in others, we weren’t using effectively what we had.” [13]

The inescapable conclusion is that financial regulators did not understand risk in financial markets. The data were available. A market eight times the size of world GDP did not command regulatory attention. It took near collapse for minds to be focused.

III. REGULATORY CHANGES 2010

Regulatory changes enacted in the U.S. and Europe share many common principles. Under both the Dodd-Frank bill and the European Commission’s new regulatory regimes, improved data collection and oversight, and international coordination are strengthened. Proprietary trading by systemically important banks will be eliminated. Mandatory clearing of OTC derivatives will be part of the new future, but with many exemptions. Much of new regulation is to be specified by the same regulators who missed the risk built up over ten years in the financial system. The legislative side of European reforms will take some time, but they are expected to broadly match the U.S. reforms, which are already law. [14]

In addition, the Basel Committee of the BIS has now published its Basel III requirements for bank capital. Slowly increasing Tier 1 requirements will mean that banks will be required to hold capital equivalent to 10.5% of risk weighted assets in 2018 as a minimum international standard. [15] The U.S. requirement will be for core capital ratios to reach 8%, which also will be implemented over time. The tightening of core and Tier 1 capital definitions in both Dodd-Frank and Basel III will strengthen bank capital structures as time progresses. These changes are welcome, but are they enough

and do they address all the risk issues? Even if they do, years of risk remain as implementation takes place.

It is worth pointing out that Lehman Brothers was estimated to have Tier 1 Capital at 11% immediately before its bankruptcy in 2008. [16] In addition, Switzerland has already acknowledged that it needs higher standards in order to protect its own economy from its very large banks. [17]

The International Monetary Fund (IMF) has recently addressed risk and stability issues and pointed out some concerns. A second round of U.S. real estate asset declines could tip over the financial system again, a process that may be underway at this writing. Further, the IMF addresses potential problems associated with bank funding issues, sovereign debt exposure, and very increased portfolio capital inflows into emerging market economies. A shock from any of these areas could have dramatic negative consequences for the world’s financial system. In the case of capital inflows to emerging markets, the IMF comes remarkably close to recommending capital controls. The IMF’s concerns reflect part of the risk overhang remaining. [18] The expectation underlying all reforms and recommendations – Federal Reserve, European Commission, Basel Committee and the IMF – is that banks will rebuild their balance sheets by accumulating profits over the next five to eight years. A shock to the system that renders that expectation unreasonably optimistic also renders the reforms and recommendations inoperative. If recession returns or slow-growth stagnation is the new norm, problems are multiplied. The IMF is correct to be worried, though it expresses itself in its typically understated way.

Absent from the current regulatory response is any recognition of the biggest risk to the financial system. OTC credit derivative risk remains embedded in the modern system of finance created in the last twenty years. From painful experience regulators now recognize counterparty risk in derivatives and other structured investments, but do they understand this as a type of credit risk? Any counterparty on any derivative swap or other credit derivative represents a credit risk of one sort or another. The risk solution put forward in the advancing regulation is to move OTC derivatives trading onto exchanges, where possible, and for increased reporting where not. If accomplished, the credit risk will not have been eliminated, simply shifted to an exchange that would now be too-big-to-fail. Additionally, the financial industry has every incentive to resist this change as they can achieve higher profitability with more opaque OTC trading. [19] When a bank sells a credit derivative to a customer it must take the opposite side of the transaction in many, if not most, cases. In doing so it is taking market risk and counterparty risk. The definition of ‘where possible’ will determine the amount of trading moved onto exchanges, and it will be negotiated between regulators and the financial industry.

The OTC derivatives industry is dominated by fifteen broker/dealers. In the U.S. alone, one estimate is that, at the beginning of 2010, four banks had derivatives positions totaling \$205 trillion. [20] The BIS estimates that at the end of 2009 the OTC derivatives markets held \$615 trillion of total positions with a market value of \$21.6 trillion. Market

value is an estimate of the funds that would change hands today if all contracts were settled. Just who the winners and losers would be and for how much are the key questions. A failure by any of the fifteen dealer/banks could create a Lehman Brothers scenario all over again. The BIS estimate nets down the market value number to a gross credit risk number of \$3.5 trillion. [21] Regulators need to wonder who has the capital to absorb any significant portion of that risk. Or, if moved onto an exchange, how much capital can be put up to ensure the exchange's viability in the event of the failure of a single large exchange member.

Large financial market participants are fond of describing their role as market makers, claiming something near market neutrality. However, in the CDO and CDS meltdowns they demonstrated, with few exceptions, a complete inability to hedge their own positions. But, had they been successful in doing so losses would have been moved to other financial institutions, not reduced. Regulators can't rely on broker/dealers to hedge their credit derivative positions in the future. Collateral arrangements cover some risk, but do not cover enough to make systemic risk disappear. At the end of 2009, the BIS estimated collateral arrangements at \$3.2 trillion against a gross market value of \$21.6 trillion. As market value positions move, the amount of collateral needed can grow (or shrink) in an attempt to cover. The risk falls to each market participant and it is hoped that each has enough liquidity to produce the collateral. AIG, for one, in 2008 did not have enough. It matters exactly who holds what risk.

Markets can render judgments swiftly and brutally. The market went from issuing \$520 billion in CDOs in 2006 to a total of \$4 billion issued in 2009. While arriving late to understanding, markets eventually judged these vehicles to be too opaque and complex for virtually anyone to understand the risk. The CDS market is also indicative. At the point when at least some market players sense enormous risk, outstanding contracts jumped from \$34 trillion in 2006 to \$62 trillion in 2007. After the debacle in 2008, the market shrunk to \$30 trillion at year-end 2009. [22]

Apparently, the world must rely on the ability of financial regulators to micro-manage the risk of large positions in interest rate and exchange rate OTC derivatives to monitor that broker/dealers maintain matched books in the future. The world is still left with the \$3.5 trillion question.

IV. EVALUATION

In 1992, as the credit derivative swaps market began to take off, E. Gerald Corrigan, the President of the New York Federal Reserve Bank, publicly questioned the usefulness of these new financial products. He also doubted the sincerity of the industry's explanations and motivations. [23] Regulation appeared imminent. The industry was able to convince Corrigan, and later countless others, of the benefits of innovation and the industry's ability to regulate itself. It became a standard of regulation to leave it to the experts. The judgment of regulators was that the derivatives sellers had the ability to minimize systemic risk. Left unasked was whether or not private institutions cared about systemic risk.

The free market solution remained the dominant ideology through all of Alan Greenspan's tenure at the Federal Reserve. Regulators would rely on private market risk evaluation in what was accepted as a new and vibrant market. The Basel II regulations were built on a system of industry risk evaluation. Expert systems using such things as value-at-risk calculations were thought superior to anything regulators could come up with.

In essence, regulators had no other opinion on risk that they could offer. They were unable to judge the risks and the new financial products were nearly impossible to understand in view of their mathematical complexity. As demonstrated in sections II and III above, the changed risk profile of the financial system should not have been missed. It became practice, however, to swallow whole the industry's own evaluation. Private market opinion was taken as superior to regulatory opinion since private market actors had money at risk.

There is surprisingly little academic work on Regulatory Capture in Financial Supervision. One such study unhelpfully concludes: "Regulatory capture in banking is not entirely bad. The regulations favored by banks and other financial institutions may promote financial stability and thus largely coincide with what would promote overall welfare and efficiency". [24] The chain of logic that can produce such conclusions rested on the assumption that banks have an interest in financial stability. The compensation structure among large banks certainly should have put that assumption into question in the first decade of the 20th century. Beyond that, the private market knew that in the event of widespread losses and contagion, governments and central banks would have no choice but to come to their rescue. Low probability events were not a concern of the financial industry, even if it had the ability to estimate them. Yet, regulators went merrily along and trends were steadily upward until the moment they weren't. Financial regulators are the ones who must have an interest in systemic financial stability whatever the motivations of the industry.

The de-regulatory push in the 1990s in the U.S. evidenced the influence of the financial industry on the legislative side, but the leading trumpeters and enforcers of the cause were regulators such as Alan Greenspan, Robert Rubin and Larry Summers. [25] It set a pattern that was adopted in Europe.

This outcome was certainly not the result of corruption on the part of regulators. They were true believers in free market principles, but blind to market conditions. Put another way, they could not conduct a simple thought experiment: "What happens if...?" This failure was widely copied, as demonstrated in numerous examples from the last decade. Risk levels in everything from CDOs to Icelandic and Irish banks soared to astounding levels. In a very public embarrassment, the Securities and Exchange Commission in the U.S. could not even find evidence of a multi-year Ponzi scheme run by Bernie Madoff, after they were virtually led by the nose directly to it. The events described above are common knowledge today.

The Wall Street Journal hit the nail on the head with criticism of a recent U.S. administration report for "not even

addressing regulatory capture until the 29th page” and then burying it in a to-do list of future Treasury Department actions. Stated simply, no one is addressing the issue. [26] It is disheartening to wade through the regulatory reforms and recommendations and come to the conclusion that we are betting the future on the abilities of regulators who have demonstrably failed the competence test in the past.

Market participants often describe the events of 2007/8 as an unforeseen tsunami washing over the financial world. Few could get out of the way. They have tried to elicit some level of public sympathy with this approach. Their clear job, however, was to protect their own companies. That they could not do so is in itself an admission of incompetence (if \$2 trillion in financial losses were not enough evidence for it). That market regulators judged themselves to be less competent than private market players in measuring risk speaks volumes. It is easy to conclude, in this matter they were correct.

Regulators were captured by an industry that provided “expert” opinion to them. It came from friends and long known associates who appeared to be so successful that they must have known what they doing. The possibility that the “experts” were simply riding a market wave taking off in a bubble did not occur to the regulators who mattered. For this omission to have occurred, large swathes of financial history had to be ignored, and not just ancient history. Even after the blow up of Long Term Capital Management (LTCM) in 1998, which required a Federal Reserve orchestrated private-market bailout to prevent systemic contamination, the same regulators (and legislators) prevented regulatory interference in credit derivatives. By the standards of 2008, the LTCM blowup seems tiny, almost quaint. [27] In the ten years after that episode, embedded risks would multiply to levels that only governments and central banks could resolve. Some voices gave loud warnings. Nouriel Roubini and Warren Buffet, just to name two, famously spoke up. They were ignored. Regulatory incompetence provided the wedge through which capture was achieved. It is not clear that this can be reversed.

V. CONCLUSIONS

Regulators had implicit or explicit authority to prevent what turned out to be the second worst financial crisis of the 20th century. They could have insisted on increased authority in law if they had understood the risks. It is unlikely that legislators could have ignored a call for such increased powers. The political repercussions of a refusal by legislators would ensure that such a call would be acted upon. The call never came until it was too late.

At the time of writing, the world financial system will rely on future regulatory competence to assess and micro-manage risks in bizarrely complex financial products, and at enormous institutions that are too-big-to-fail. It is also certain that future financial innovation will evolve in reaction to regulation and without regard for the abilities of regulators to understand the implications. If the past is any sort of guide to future performance, the world should not be confident. The prospect of future micro-prudential regulation should worry all regulatory bodies, and should worry all governments. The

questions still remain: Does the world economic system actually need a credit derivatives market which today is ten times the size of world GDP? [28] What are the “compelling” benefits of twenty years of financial innovation that have not already been washed away? What are the long-term political implications of future regulatory failure?

The political equation has changed in the last two years in ways that will make dealing with any future crisis more difficult. No public support for a future government bailout in the U.S. can be contemplated. Europe is struggling with the difficulties of addressing sovereign credit risk, with great dissatisfaction among its voters. That dissatisfaction is likely to rise as fiscal austerity plans bite. Any future intervention to prevent systemic failure is likely to be accomplished by the use of Central Bank balance sheets. This, of course, brings its own increased risk of future inflation spiraling out of control. Market participants, not unreasonably, are unhappy with this prospect.

Unfortunately, international attempts at reform seem uninspiring. This will force the issue to the national level, as the example of Switzerland indicates. Can captured regulators respond in other countries? Failure to do so raises the spectre of 2007/8 being referred to as the previous financial crisis. Failure to achieve true international coordination would leave each country, as well as the Euro zone, to protect itself against contagion and failures in its home markets.

Recent research [29] has confirmed that recessions due to financial crisis are more harmful and last longer than business cycle recessions. The stakes could not be higher.

The too-big-to-fail problem has yet to be properly addressed in any regulatory forum. Many scholars have examined the issue. [30] The financial industry wants (and has achieved) an approximate continuation of the status quo. From a macro-prudential standpoint it might be better to move to a world of fully insured depository institutions engaged in traditional bank lending, and another separately capitalized set of institutions to engage in capital raising, plus hedge funds, limited in size and leverage, which are too small to rescue. Thus, innovation would continue at manageable risk levels. In any event, all large financial institutions will need capital cushions much larger than Basel III requirements if systemic risk is to be minimized. Any transition to such a financial system would have to be slow, but how much slower than the new Basel III capital requirements is not clear. Changes of the types suggested would seriously impair the ability of large banks to secure large profits. Perhaps they would be forced to improve their competence at traditional lending, in a search for the only profits available to large institutions. The financial industry would oppose such developments with a unified voice. It is time financial regulators stopped listening.

REFERENCE

- [1] This paper will not examine the mechanics of regulation. For its purposes Central Banks and Financial Authorities are considered regulators.
- [2] John Steele Gordon, *An Empire of Wealth.*, New York: HarperCollins, © 2004, pp. 312-316.

- [3] Barry Eichengreen and Kris Mitchener, "The Great Depression as a credit boom gone wrong", BIS Working Papers No. 137, Basel: The Bank for International Settlements, 2003, ISSN: 1682-7678.
- [4] Ben Bernanke and Harold James, "The Gold Standard, Deflation, and Financial Crisis in the Great Depression, an International Comparison", In Essays on the Great Depression, Ben Bernanke, New Jersey: Princeton University Press, © 2000, pp. 70-107.
- [5] IMF Staff, "Recovery from the Asia Crisis and the Role of the IMF", Washington D.C.: IMF Policy Brief, June 2000, Part II, www.imf.org, retrieved Oct. 26th, 2010.
- [6] Note on Data Sources: Unless otherwise indicated, all figures are derived from publicly available sources as follows: U.S. bank lending, non-bank financial credit are from the Federal Reserve Board, Statistics and Historical Data; Mortgage backed security and CDO data are from the Securities and Financial Markets Association, Research and Statistics; Collateral data, interest rate and currency swap data are from the International Swaps and Derivatives Association, Surveys and Market Data; GDP statistics are from the World Bank, World Development Indicators, all Oct. 2010.
- [7] The term is attributed to Michael Burry, a now famous short seller. See: Michael Lewis, "The Big Short, Inside the Doomsday Machine", New York: W.W. Norton and Co. © 2010, Chapter 3.
- [8] Timothy J. Geithner, "Implications of Growth in Credit Derivatives for Financial Stability", Federal Reserve Bank of New York, Remarks at the New York University Stern School of Business Third Credit Risk Conference New York, May 16th, 2006.
- [9] Ben Bernanke, "The Economic Outlook", Washington D.C.: The Board of Governors of the Federal Reserve System, Testimony before the U.S. Joint Economic Committee, March 28th, 2007.
- [10] Carter Daugherty, "U.S. Subprime Losses May Hit \$300 Billion, OECD Estimates", NY Times, Nov. 22nd 2007.
- [11] European Commission, "Proposal for a regulation of the European Parliament and of the Council on OTC derivatives, central counterparties and trade repositories", Brussels: European Commission, COM 2010) 484/5, p. 2.
- [12] See: Hugh Son, "AIG rescue spared European Banks from \$16 Billion Capital Raise", <http://www.businessweek.com/news/2010-06-14/aig-rescue-spared-european-banks-from-16-billion-capital-raise.html>
- [13] Stephen J. Cecchetti, Ingo Fender and Patrick MacGuire, "Toward a Global Risk Map", BIS Working Papers No. 309, Basel: The Bank for International Settlements, 2010, ISSN: 1682-7678.
- [14] Deutsche Bank Research, "US financial market reform, the economics of the Dodd-Frank Act", Frankfurt: Deutsche Bank AG, Sep. 28th, 2010, ISSN: 1612-0280.
- [15] Basel Committee on Banking Supervision, Press Release, Basel: The Bank for International Settlements, Sep. 12th 2010.
- [16] Dick Fuld, Testimony before the Financial Crisis Inquiry Commission, U.S. Congress, Sep. 1st, 2010.
- [17] Jack Ewing, "Switzerland Proposes Tougher Rules for its Biggest Banks", NY Times, Oct. 4th 2010.
- [18] IMF Global Financial Stability Report, "Sovereigns, Funding and Systemic Liquidity", Washington D.C.: IMF World Economic and Financial Surveys, Oct. 2010, Chapters 1-2.
- [19] Robert E. Litan, "The Derivatives Club and Derivatives Market Reform", Washington D.C.: Brookings Institution, © 2010.
- [20] "Banks are Still at the Derivatives Casino", Seeking Alpha, www.seekingalpha.com, retrieved Oct. 18th, 2010.
- [21] Quarterly Review, "International banking and financial market developments", Basel: The Bank for International Settlements, Sep. 2010, ISSN: 1683-013X, and Statistical Annex.
- [22] See note 6, above.
- [23] Gillian Tett, "Fools Gold", New York: Free Press, a Division of Simon and Schuster, Inc., © 2009, Chapter 2.
- [24] Danie C. Hardy, "Regulatory Capture in Banking" IMF Working Paper WP/06/34, © 2006.
- [25] Suppressing potential regulation in derivatives markets is a story that has been told in many places. See, for example, "The Warning" a Frontline PBS Documentary, broadcast Oct. 20th, 2009, see www.pbs.org/wgbh/pages/frontline/warning/
- [26] Opinion: On Regulatory Capture, The Wall Street Journal, June 24th, 2009. www.wsj.com, retrieved Oct. 20th 2010.
- [27] Roger Lowenstein, "When Genius Failed", London: Fourth Estate, Harper Collins, © 2001, pp. 161-236.
- [28] See note 6, above.
- [29] Carmen M. Reinhart and Kenneth S. Rogoff, "This Time is Different, Eight Centuries of Financial Folly", New Jersey: Princeton University Press, © 2009, Chapter 14.
- [30] For example, see: Simon Johnson and James Kwak, "13 Bankers", New York: Pantheon Books, © 2010, Chapters 6-7