

The Financial Crisis: Lessons from History

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Abstract

Financial crises have regularly afflicted economies throughout history and the United States has been no exception. This paper examines the Panic of 1907, the Crash of 1929 and the Great Depression and the Great Recession of 2007-08 and discusses the responses of the government and regulators. The short version of the story is that while the government response has varied in terms of monetary and fiscal policy, the regulatory response has remained essentially the same. The typical reactive regulation sounds good and gives the appearance of accomplishing something but, in fact, only serves to sow the seeds of future crises. The ineffective implementation of existing regulation has had a similar result. Indeed, several authors note that most financial innovation in recent years has its origins in circumventing new regulations. Likewise, government monetary and fiscal responses may or may not help the economy and often give the appearance of great arbitrariness. Our conclusion is that there will be unforeseen financial crises in the future, sweeping regulation and promises of recent politicians notwithstanding. Serious study of the unanticipated consequences of this regulation and the development of more robust risk management systems will help us mitigate the effects of future crises but will be of little assistance when it comes to avoiding them. Developing the analyses and risk management systems requires a detailed study of financial history keep both successes and failures fresh in our collective memory.

Keywords: *Economy, Great Depression, Recession, History, Risk Management*

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Background to the Study

The Financial Meltdown of 2007-2008 was the most severe financial crisis since the Great Depression. In the aftermath of a significant financial crisis, a great deal of attention is usually focused on preventing the future occurrence of any similar crisis by strengthening the regulation of the financial markets. For instance, after the Crash of 1929, numerous laws were enacted including the Glass-Steagall Act of 1933, the Securities Act of 1933, and the Securities Exchange Act of 1934. Many of these acts' provisions, such as the Securities and Exchange Commission, are still with us today. Others such as the separation of investment banking from commercial banking were repealed during a period of deregulation that began in the late 1970s and continued through the 1990s. Today, we are still in the implementation stages of the Dodd-Frank Wall Street Reform and Consumer Protection Act (Dodd-Frank hereafter), which was signed into law by President Barack Obama on July 21, 2010. Dodd-Frank has been described by the President as “the most comprehensive financial reform since the Great Depression.” (Obama (2010a)) The impact of this reform on the financial markets will be significant; whether that impact will be positive or negative is yet to be determined. Financial regulatory reform invariably leads to unintended consequences, and while we can't predict the future, we can look to the past for guidance.

There are several lessons we can learn from financial history that can provide guidance as we move past the financial meltdown and recovery and on into the future. The purpose of this study is to identify and discuss some of the more important lessons from history. These include: (1) Financial crises will continue to occur in the future. (2) Regulatory reform will follow each new financial crisis, and the results of those reforms will be mixed. (3) Any regulatory reform must focus on systemic risk. (4) Individuals should act prudently in the face of potential financial crises. (5) All market participants from investment bank CEOs to Wall Street regulators should be students of financial history and develop good long-term memories of past financial crises. We now examine Obama's optimism in 2010 concerning the new financial reforms.

It Will Happen Again

In Racine, Wisconsin on June 20, 2010, President Obama addressed those who had gathered for a town hall meeting with the following words: “As we speak, we're on the verge of passing the most comprehensive financial reform since the Great Depression – reform that will prevent a crisis like this from ever happening again... [Americans] expect their leaders in Washington to do whatever it takes to make sure a crisis like this never happens again. The Republican leader might want to maintain a status quo on Wall Street. But we want to move America forward.” (Obama (2010b)) President Obama twice made the claim that Dodd-Frank would prevent another financial crisis in the future. Can regulation prevent another financial crisis or is this just wishful thinking on the part of the president?

Franklin Roosevelt faced a far greater challenge during the Great Depression. He too was determined to impose regulatory reform on Wall Street, and he also understood the importance of gaining the approval of average Americans in his efforts to reform the financial markets. Wall Street was largely unregulated prior to 1929, and Roosevelt faced stiff

opposition from Wall Street's elite. Town hall meetings were out of the question for a president who had a difficult time getting around, but Roosevelt was an effective communicator who had mastered the medium of radio in his periodic fireside chats. Roosevelt initiated his fireside chats while he was governor of New York. His first fireside chat as president, entitled *On the Bank Crisis*, occurred on Sunday March 12, 1933. One of Roosevelt's first acts as president was to declare a bank holiday which effectively closed all of the banks in the country. The bank holiday put a halt to the month-long run-on U.S. banks and gave the administration time to try to straighten out the situation. The four-day holiday was extended for three additional days, and it was under these conditions that Roosevelt gave his first presidential fireside chat. (Silber (2009)) The chat, which lasted about fifteen minutes, was very reassuring as Roosevelt famously promised, "I can assure you that it is safer to keep your money in a reopened bank than under the mattress." (Roosevelt (1933a)) Roosevelt concluded with a challenge to the American people:

After all there is an element in the readjustment of our financial system more important than currency, more important than gold, and that is the confidence of the people. Confidence and courage are the essentials of success in carrying out our plan. You people must have faith; you must not be stampeded by rumors or guesses. Let us unite in banishing fear. We have provided the machinery to restore our financial system; it is up to you to support and make it work. (Roosevelt (1933a))

Roosevelt offers no promise that such a crisis would never happen again. Instead, he challenges the people to work together with the federal government to restore the financial system. The American people were responsible for making the banking system work again after significant regulatory measures were put in place to protect depositors.

In another fireside chat on October 22, 1933, Roosevelt addressed the financial recovery: How are we constructing the edifice of recovery -- the temple which, when completed, will no longer be a temple of money-changers or of beggars, but rather a temple dedicated to and maintained for a greater social justice, a greater welfare for America -- the habitation of a sound economic life? We are building, stone by stone, the columns which will support that habitation. Those columns are many in number and though, for a moment the progress of one column may disturb the progress on the pillar next to it, the work on all of them must proceed without let or hindrance. (Roosevelt (1933b))

Although Roosevelt effectively criticized Wall Street with his biblical allusion to money changers in the temple and hinted toward a better future, he was far too savvy a politician to ever promise that government regulation would prevent any further financial catastrophes. He concludes this particular fireside chat by reminding listeners of his previous promises: "I have told you tonight the story of our steady but sure work in building our common recovery. In my promises to you both before and after March 4th, I made two things plain: First, that I pledged no miracles and, second that I would do my best. I thank you for your patience and your faith. Our troubles will not be over tomorrow, but we are on our way, and we are headed in the right direction." (Roosevelt (1933b)) "Headed in the right direction" is a far cry from promising that financial crises are a thing of the past.

Likewise, after the Crash of 1987, President Ronald Reagan went to great lengths to assure the American people that the economy was sound and growing in spite of the huge market drop. In a presidential news conference shortly after the crash, he described it as “purely a stock market thing and that there are no indicators out there of recession or hard times at all.” In his opening comments, Reagan noted, “Over the past several days, though, we Americans have watched the stock market toss and turn. It's important that we understand what is happening and that a calm, sound response be the course we follow. While there were a couple days of gains after several days of losses, we shouldn't assume that the stock market's excess volatility is over. However, it does appear the system is working. So, while there remains cause for concern, there is also cause for action.” (Reagan (1987)) He then laid out the steps his administration planned to take to stabilize the situation, but he never assured the American people that such an event would never happen again.

Economist Alan S. Blinder acknowledges that “...there will be financial crises in the future.” And then asks “Will we handle them better because of what we've learned, both economically and politically? Or will we forget quickly? Many changes—both institutional and attitudinal—were, or were not, made. What are our remaining vulnerabilities? What future problems may we have accidentally created while fighting the various fires?” (Blinder (2013)) Financial economist Myron Scholes contends that since it is difficult to predict which financial innovations will succeed, “economic theory suggests that infrastructure to support financial innovations will, by and large, follow them, which increases the probability that controls will be insufficient at times to prevent breakdowns in governance mechanisms.” Scholes believes that it would be prohibitively expensive “to build all of the information links, legal rules, risk management controls, and so forth in advance of new product introductions,” and concludes that although failures are to be expected it does not follow “that reregulation will succeed in stemming future failures.” (Acharya *et al.* (2011b)) Regulators are not, Scholes argues, more effective at controlling markets in the face of market breakdowns because they are distant observers who see things very differently from those who are involved in the day-to-day operations of markets.

The astute politician would be wise to heed the words of Blinder and Scholes and refrain from promising regulatory reforms that will prevent markets from ever melting down again. This is an empty promise that results in lulling investors into complacency when they should be vigilant instead. Moreover, a close examination of the history of regulatory reform reveals the fallacy of depending on regulation alone to control markets. The tendency to legislate reactively instead of proactively in and of itself is enough to cast doubt on regulation as a cure-all for market malfunctions. Legislative reforms have also led to unintended consequences, such as the savings and loan crisis of the 1980s, that do more harm than good. Politicians should follow the example of Roosevelt and Reagan by not only taking legislative action but also reassuring the public that financial markets will be restored. Roosevelt and Reagan both understood that restoring financial markets was not the sole responsibility of the federal government. It can be accomplished only with the cooperation of the public. As Roosevelt said, “It is your problem no less than it is mine. Together we cannot fail.” (Roosevelt (1933a))

Regulatory Reform Comes After the Financial Storm

Most federal financial regulations in the United States were enacted after a panic, a crash, or some other form of financial meltdown. As such, they tend to be reactive rather than proactive laws, and politics necessarily plays a part in their formation. Financial economist Myron Scholes, in his forward to *Regulating Wall Street: The Dodd-Frank Act and the New Architecture of Global Finance*, expresses a hope that in the implementation of the Dodd-Frank Act “a sensible balance will arise that will neither cripple the financial system nor create a false sense that the new financial regulatory architecture will prevent failures in the future.” (Acharya *et al.* (2011b)) This hope for optimal financial regulation is a constant desire that was just as true after the Panic of 1907 or the Crash of 1929 as it is today. The process of finding such a balance is complex, and there are myriads of hazards and false starts along the way. Moreover, financial innovations constantly change the regulatory landscape. (Barth, Caprio and Levine (2012)) Even when a close approximation is achieved, there is great danger that subsequent modifications or relaxations of financial regulations will upset the balance and send financial markets into a tailspin. The difficult task of achieving optimum regulation has been described as “the art of balancing the immeasurable against the unknowable.” (Cooley and Walter (2011))

The Panic of 1907

The Panic of 1907 is little remembered today, but it stands as a watershed in the history of financial crises especially when it comes to how the federal government responds to market failures. Financial panics were part and parcel of the 19th century occurring in a somewhat regular fashion every ten years or so. For the most part, the federal government followed a hands-off policy and allowed the markets to self-regulate. Panics were managed by Wall Street insiders such as J.P. Morgan, and the Panic of 1907 was no exception. Although the Treasury participated by supplying an inadequate amount of liquidity to the markets, it was Morgan who negotiated the deals that set the markets aright. He famously locked several bank and trust officials in his library until they agreed to raise a \$25 million loan to save the Trust Company of America. Morgan, in the absence of a central bank, essentially took on the role of a central bank, but the Panic of 1907 disrupted markets so severely that many began to clamor for a new central bank for the United States. Congress created the National Monetary Committee in 1910 to study the matter. (Donaldson (1993)) Since the United States had operated without a central bank for decades, change did not come easily nor was the creation of a central bank in the form of the Federal Reserve System immune from political influence. The Federal Reserve Act was passed in 1913 and the system began operations in the fall of 1914. It was a grand experiment led by men who, for the most part, did not completely understand how a central bank should work. Benjamin Strong, the governor of the New York Federal Reserve Bank, became a leader of the fledgling institution because of his knowledge of financial markets and international banking and because of New York City's preeminent role in the financial markets. Strong wrote, “The men who are engaged in running the Federal Reserve System were handed this Act as a printed document... and told to open the Federal Reserve in sixteen days, and from that time on. With a great war raging, we were expected to construct out of thin air something that had not existed for over eighty years. And I am frank to say that we knew mighty little about it.” (Chandler (1958)) The establishment of an

American central bank meant that the next great financial crisis would be dealt with not by private bankers playing the role of central banker, but by the Federal Reserve. Although the Federal Reserve System was to operate independently from the federal government, its creation and implementation was the beginning of a more active role for the federal government in the financial markets. That role would increase dramatically after the Crash of 1929 and the Great Depression.

The Crash of 1929 and the Great Depression

There was nothing special about the stock market crash in the fall of 1929 or so it seemed to the many so-called market experts. Economist Irving Fisher believed that the market was simply “shaking out the lunatic fringe,” and many others were convinced that the precipitous drop in stock prices was just a market correction; recovery was sure to follow quickly. (Sobel (1968)) Unfortunately, the Great Depression that followed in the wake of the Crash of 1929 was no minor correction. The depression was characterized by deflation, unemployment, low stock prices, and an overall feeling of dismay. A significant structural change had occurred in the economy that led many to believe that democracy itself was on the wane. Democrats in congress began introducing bills to regulate securities markets well before the election, but they were all thwarted by the Republican majority. Most of these bills focused on short-selling. As the economy continued to falter, Republican Senator Smith W. Brookhart introduced a bill that would imprison any investor engaged in short selling. (Seligman (1995)) The Hoover administration was slow to realize the extent of the problem and failed to act aggressively until 1931 when the Reconstruction Finance Corporation was created to provide credit to banks, railroads, and agriculture. The Emergency Relief Construction Act of 1932 earmarked \$2 billion for public works projects, but it was too little too late. (Olson (1975)) Although Hoover threatened and cajoled Wall Street bankers, he never initiated legislation to curb Wall Street excesses because he did not believe he had the constitutional authority to do so. His successor would have no such qualms. (Seligman (1995)) When Hoover lost his reelection bid in 1932 to Franklin Roosevelt, a new era in market regulation began.

Roosevelt was not afraid to use the full force of government to battle the depression. The Securities Act of 1933, the Banking Act of 1933, the Securities Exchange Act of 1934, the Public Utilities Holding Company Act of 1935, the Trust Indenture Act of 1939, the Investment Company Act of 1940, and the Investment Advisors Act of 1940 brought unprecedented regulation to the securities markets in an attempt to “stimulate the economy and restore confidence in the capitalist system.” (Keller and Gehlmann (1988)) Roosevelt has often been criticized for overreaching. Evidence of such overreach was apparent when the National Industrial Recovery Act of 1933 was declared unconstitutional in 1935. According to Seligman, “The Supreme Court's unanimous *Schechter* decision did more than end the NRA, the most heralded of Roosevelt's early recovery programs; it placed in question the constitutionality of a host of New Deal statutes, including the Securities Act of 1933 and the Securities Exchange Act of 1934.” The Supreme Court, however, upheld the constitutionality of the Securities Act of 1933 in April of 1936. (Seligman (1995)) Some have argued that Roosevelt's actions actually prolonged the depression. (Cole and Ohanian (2004)) Two events gave Roosevelt's reform agenda impetus after his election, the first was the public approval of

his handling of the banking crisis at the beginning of his first term, and the second was the Pecora hearings.

The Stock Exchange Practices Hearings were conducted by the Senate Banking Committee, which was chaired by Senator Peter Norbeck, a Republican from South Dakota who was in over his head as Chair of the Banking Committee. The hearings got off to an inauspicious start on April 11, 1932, when Richard Whitney, president of the New York Stock Exchange, took the stand and made his interrogators look like fools in two days of testimony. The hearings dragged on and were about to lose funding when Norbeck made a last ditch call in late January 1933 to New York lawyer Ferdinand Pecora who agreed to take over the faltering hearings. Not much was expected from Pecora, who resumed hearings on February 15th and subpoenaed the chairman of the board of National City Bank, Charles E. Mitchell, who had appeared before the committee previously and handled their inquiries with condescending dispatch. Pecora, however, did his homework once he was allowed access to City Bank's books and records on February 9th only twelve days before Mitchell was scheduled to testify. Pecora's questions, unlike his predecessors, were clear, detailed, and precise. His persistence and patience allowed him to eventually lead Mitchell to a discussion of the generous compensation practices of City Bank. He then was able to get Mitchell to admit that he had sold National City Bank stock in 1929 to his wife in order to evade taxes. (Perino (2010)) SEC historian Joel Seligman notes that, "On February 21, the seemingly indomitable Mitchell strode into the Banking Committee's hearing room flanked by a retinue of senior associates. Ten days later Pecora would spy Mitchell walking to Union Station alone carrying his own grip, a discomfited and beaten man." (Seligman (1995)) Pecora would go on in the hearings to excoriate J.P. Morgan, Jr, but the damage had already been done. Seligman contends that the Pecora hearings "were instrumental in transforming national political sentiment from a laissez-faire ideology symbolized by the views of President Coolidge to a regulatory-reform ideology associated with Roosevelt's New Deal."

Wall Street underwent a radical transformation under the Roosevelt administration. The legislation enacted during the 1930s led to many positive developments for the financial markets including increased disclosure requirements, more uniform accounting procedures, reduction of fraudulent practices in the sale of securities, and market oversight by the Securities and Exchange Commission. At first glance, the decades following the 1930s regulatory reform of the securities markets appear to vindicate government intervention, and some argue that restoring many of those regulations would make markets safer today. (Walter (2010)) However, it is important to examine those reforms in a broader context:

Any evaluation of the success of the 1930s reforms in promoting a long period of financial stability needs to take into account the larger context of the United States in the world economy. In that light, it becomes apparent that a good bit of the seeming success of the 1930s reforms was less inherent in the reform legislation than a result of the unique position of economic strength that the United States enjoyed in the world of the 1940s through the 1960s. World War II damaged the economies of every other large nation, while it strengthened that of the United States. (Acharya et al. (2011a))

The Glass-Steagall Act was the part of the Banking Act of 1933 which separated commercial banking from investment banking. The immediate result of Glass-Steagall was the break-up of Wall Street banks such as J.P. Morgan into a commercial bank (the Morgan Bank) and an investment bank (Morgan Stanley). Investment banks no longer had access to the deposits of commercial banks, but they were also freed from competing with commercial banks for business and they grew dramatically in the post-World War II environment. Most of the rest of the world chose not to separate investment banking from commercial banking. This meant that institutions such as the Bank of England or the Deutsche Bundesbank were required to deal with the entire range of banking services while investment banks in the United States were allowed to specialize in raising capital. In the booming post-war economy, U.S. investment banks flourished and expanded rapidly into international markets. Commercial banking in the United States was also profitable after the war, but those banks could only look on from the sidelines as their investment banking cousins reaped huge profits. By the 1980s, commercial banks were clamoring to get in on the action and calling for the repeal of Glass-Steagall. The wall between investment banking and commercial banking slowly crumbled and was officially repealed by the Gramm-Leach-Bliley Financial Services Modernization Act of 1999. (Richardson, Smith and Walter (2011))

Deregulation

Deregulation can often be as dangerous as regulation. Effective regulation strives to balance costs against financial stabilization. Overregulation shuts down markets while under regulation provides the potential for market abuses to run unchecked towards disaster. The 1930s regulations implemented safeguards such as Federal Deposit Insurance for the customers of commercial banks. This insurance was effective in reducing bank runs in the United States and gave depositors confidence in the banking system. In the 1980s, however, many of the 1930s regulations were modified or eliminated without addressing some of the safeguards, such as deposit insurance, that were put in place assuming that commercial banking would be separated from investment banking. Once regulations were eased or eliminated, deposit insurance, which was originally intended as a protection for depositors, became a safety net for banks that chose to make risky investments that were out of line with traditional commercial banking. Any balance achieved in the initial regulation was suddenly thrown off kilter. The deregulatory environment of the 1980s encouraged nonfinancial institutions to perform traditional banking activities that had been restricted by regulation to banks and other financial institutions. This developed into what has come to be known as the “shadow banking system.” (Acharya *et al.* (2011b); McCulley (2007)) According to former Federal Reserve Chair Paul Volcker, by June 2008, the shadow banking system was “roughly the size of the traditional banking system.” (Volcker (2011)) Volcker also believes that the primary reason that the shadow banking system evolved was to “circumvent existing regulations.” (Acharya *et al.* (2011a))

The unintended consequences of the repeal of Glass-Steagall were mind boggling. Richardson, Smith and Walter write:

Within two years of deregulation, every major commercial bank that took full advantage of its new access to investment banking was involved in the most

serious spate of corporate scandals of modern times—including the collapse of Enron and WorldCom—resulting in large losses for the banks themselves and their investor clients, major fines and legal settlements, and a general erosion of confidence in financial markets...Moreover, less than a decade after deregulation, these same financial conglomerates were at the epicenter of the global financial crisis that began in 2007 as they chased market share in the securitization business and aggressively followed along as the action increasingly involved riskier credits ranging from subprime mortgages to leveraged loans. (Richardson, Smith and Walter (2011))

Enron, WorldCom, and Sarbanes-Oxley

Of course, the Public Company Accounting Reform and Investor Protection Act of 2002, popularly known as Sarbanes-Oxley was a direct result of the Enron, WorldCom, and Tyco International failures and the collapse of accounting firm Arthur Andersen. The act's primary goal was to tighten up auditing procedures, and it has been criticized as a “costly regulatory overreaction.” It was clear, however, that the auditing process had failed in many instances to identify or prevent fraud. Coates ((2007)) cites four pieces of evidence that “misstatements and fraud were in danger of becoming systemic.” They include (1) a general increase in accounting restatements; (2) a significant increase in earnings management from 1987 to 2001; (3) an overall decline in liquidity and investor confidence as measured by increasing bid-ask spreads; and (4) a significant increase in class action lawsuits alleging securities fraud. He also points out that there was an increase in the number of audit failures prior to Sarbanes-Oxley.

In his comments on signing Sarbanes-Oxley into law, President George W. Bush said, “And today I sign the most far-reaching reforms of American business practices since the time of Franklin Delano Roosevelt.” (Bush (2002)) One of the key features of the law is the establishment of the Public Company Accounting Oversight Board, which was established to “oversee the audits of public companies in order to protect the interests of investors and further the public interest in the preparation of informative, accurate and independent audit reports.” (Public Company Accounting Oversight Board (2014)) The five-member board consists of two auditors and three members who are not involved in the accounting profession. The board is funded through fees imposed on both auditing firms and public companies. Board staff members spend a great deal time at each of the “Big Four” accounting firms. In addition, spot-checks are performed on selected audits, and any deficiencies are reported to the Securities and Exchange Commission. The board can also impose fines for violations and in extreme cases deregister an auditing firm.

It has been difficult to determine whether the benefits of Sarbanes-Oxley have outweighed its costs. Although Li, Pincus and Rego ((2008)) find significant positive abnormal stock returns around Sarbanes-Oxley legislative events, it only stands to reason that investors would expect an improvement in the quality of financial statements as a result of increased regulation. Coates ((2007)) concludes that many of the abuses prior to the passage of Sarbanes-Oxley have been mitigated. Some contend that if laws existing prior to Sarbanes-Oxley were simply

enforced, there would be no need for additional regulation. Others, however, note that corporate scandals prior to Sarbanes-Oxley “resulted not simply from a failure of laws and regulations, but also from a failure of behavior by corporate leaders and corporate attorneys...” (The Good, the Bad, and Their Corporate Codes of Ethics: Enron, Sarbanes-Oxley, and the Problems with Legislating Good Behavior, (2003)) There was an attempt to incorporate these failures into Sarbanes.

Oxley through the implementation of corporate codes of behavior and through an attempt to hold corporate executives individually responsible. Boatright ((2004)), however, contends that “the Sarbanes-Oxley Act does not appear to increase significantly the responsibility of individuals” since previous regulations already address the liability of executive officers. An overemphasis on individual responsibility, according to Boatright, is not fair to honest executives who are already under tremendous pressure. He also notes that too much emphasis on individual responsibility is not effective in highly complex organizational environments. Perhaps Coates ((2007)) is correct when he argues, “Rather than pushing for repeal of Sarbanes-Oxley, a more cost-effective approach is to push for the SEC and PCAOB to use their authority to exempt or curtail requirements or prohibitions that are unnecessarily costly.” The regulations of the 1930s moved the financial markets from a system of self-regulation to a system of government oversight. Sarbanes-Oxley did the same for the auditing industry and served as a precursor to how the federal government would react to the financial meltdown of 2007-2008 where the key piece of regulation passed in response to the meltdown was the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010.

The Great Recession

Blinder ((2013)) identifies seven factors that contributed to the most recent financial crisis. These include (1) inflated asset prices, especially in housing; (2) excessive leverage; (3) lax financial regulation; (4) “disgraceful banking practices in subprime and other mortgage lending”; (5) the largely unregulated securitization of mortgages; (6) the failure of ratings agencies such as Standard and Poor's; and (7) compensation systems that created adverse incentives for the leaders of financial institutions to take excessive risks. These factors combined to create the perfect financial storm.

As the crisis deepened both the Treasury Department and the Federal Reserve went to unprecedented lengths to stem the disaster. Indeed, the federal government found itself in the position of deciding which institutions survived (e.g. Bear Stearns) and which did not (e.g. Lehman Brothers). It is ironic that many look to the federal government, which helped to create some of the problems that led to the crisis with both explicit and implicit bailout guarantees for financial institutions that took excessive risks, and with its encouragement of dubious subprime lending practices, to restore financial stability, effectively monitor financial markets, and ensure that such a crisis never happens again. The role of regulatory agencies prior to the meltdown will be examined below. Our purpose here is to examine the federal government's response both during and after the crisis.

The federal government's role in the financial crisis of 2007-2008 was unprecedented. Market intervention began with the approval of the Troubled Assets Relief Program (TARP) under the Bush administration during the fall of 2008 and continued as the Federal Reserve worked in coordination with the Treasury Department to inject billions of dollars into the economy. The Federal Reserve used Section 13(3) of the Federal Reserve Act to expand its interventionist activities dramatically. Blinder ((2013)) describes the Fed's decision to use Section 13(3) in an unprecedented manner as “both stunning and monumental. It constituted crossing the Rubicon.” Section 13(3) states:

In unusual and exigent circumstances, the Board of Governors of the Federal Reserve System, by the affirmative vote of not less than five members, may authorize any Federal reserve bank, during such periods as the said board may determine, at rates established in accordance with the provisions of section 14, subdivision (d), of this Act, to discount for any participant in any program or facility with broad-based eligibility, notes, drafts, and bills of exchange when such notes, drafts, and bills of exchange are indorsed or otherwise secured to the satisfaction of the Federal Reserve bank: *Provided*, that before discounting any such note, draft, or bill of exchange, the Federal reserve bank shall obtain evidence that such participant in any program or facility with broad-based eligibility is unable to secure adequate credit accommodations from other banking institutions. All such discounts for any participant in any program or facility with broad-based eligibility shall be subject to such limitations, restrictions, and regulations as the Board of Governors of the Federal Reserve System may prescribe.

The Federal Reserve used this section of the Federal Reserve Act to arrange a \$13 billion loan from the Federal Reserve to Bear Stearns to keep it afloat over the weekend of March 14-16, 2008. What made this so unusual was that Bear Stearns was an investment bank, not a commercial bank. J.P. Morgan agreed to acquire Bear Stearns on the following Monday for \$2 a share, which according to Blinder was, “a price that valued the dying company at less than the value of its Madison Avenue headquarters building!” The Fed then later used Section 13(3) to extend an \$85 billion loan to AIG. It used the obscure section again to create the Commercial Paper Funding Facility, which was used to help out corporations such as General Motors. For a section of the Federal Reserve Act that hadn't been invoked since 1936, Section 13(3) certainly saw a great deal of action during the financial meltdown and invoked the ire of many. Its use or overuse or abuse would make it a subject ripe for regulatory reform when hearings on financial reform began in Congress. (Blinder (2013))

The major reform legislation enacted in the aftermath of the most recent financial crisis was the Dodd-Frank Act of 2010. The Act has been described as a “sweeping regulatory overhaul.” (Davidoff (2010)) Barth, Caprio and Levine ((2012)) point out that “At 2,319 pages, the law far exceeds the combined length of all major pieces of federal financial legislation over the past century.” In contrast, they note that the Federal Reserve Act of 1913 was a mere thirty-one pages, and in what now appears to be a common practice, most of the Congressional leaders didn't bother to read the bill before voting on it. (Barth, Caprio and Levine (2012)) Some of the highlights of Dodd-Frank includes the establishment of the

Financial Stability Oversight Council (FSOC), whose primary purpose is to address systemic risk; the establishment of the Office of Financial Research, which will provide timely information to the FSOC; the establishment of the Bureau of Consumer Financial Protection to regulate financial products intended for the average American; the regulation of shadow banking; and a declaration that there will be no more taxpayer bailouts of financial institutions that have been deemed too big to fail. Instead, these firms will be required to make plans in advance for the orderly liquidation of the firm (dubbed “funeral plans”) should the Secretary of the Treasury determine that the firm should be liquidated. All of these provisions are encouraging, but even the most favorable assessments of the Act are laden with caution.

Former Clinton advisor Alan Blinder (Blinder (2013)) asks, “Will the Dodd-Frank Act make financial crisis a thing of the past?,” to which he replies, “Certainly not.” He then asks if the Act will make financial crises rarer, and replies, “Maybe; time will tell. But there are good reasons to believe it will reduce the severity and costs of future financial excesses ... *if we can keep it.*”

One of the most balanced treatments of Dodd-Frank is *Regulating Wall Street: The Dodd-Frank Act and the New Architecture of Global Finance*, which was published in 2010 and written by a group of financial economists from New York University's Stern School of Business. The study's general conclusion is that the Act “has its heart in the right place,” but falls flat in several important areas. It seeks to determine whether Dodd-Frank would have prevented some of the most egregious problems in the most recent financial crisis. The short answer from the authors of the study is that they “remain skeptical.” (Acharya *et al.* (2011a))

Finally, Barth, Caprio, and Levine ((2012)) are rather blunt in their assessment of the Act. They conclude that it: fails to introduce the truly meaningful reforms essential to significantly reducing the likelihood and severity of another financial crisis. Some of its reforms are clearly well intentioned and may be helpful. But far too often, with respect to the more serious issues, the law requires more studies rather than reform, or leaves too much discretion to regulatory authorities to determine the most appropriate interpretation of the intent of the law. We see little more than a continuation of a troubling historical pattern. In the wake of every financial crisis, the government, with great predictability, acts with great flourish to pass a new financial reform law, admittedly with some positive elements, but that is mainly only impressive in the sense [that it will, in the words of Charles Adams Jr., “impress the popular mind with the idea that a great deal is being done, when in reality, very little is intended to be done.”]

In short Barth, Caprio, and Levine ((2012)) contend that the federal government is responding to the latest financial crisis in the same way they have responded to crises in the past: more regulations, more regulatory bodies, and more power granted to federal regulators in spite of the fact that this approach has largely failed to eliminate or reduce the severity of financial crises. In fact, they argue that financial regulators have actually contributed to the length and severity of several financial crises by failing to enforce regulations and by ignoring important and obvious warning signs that occurred prior to the crisis.

As of this writing, Dodd-Frank is still in the implementation stage. According to the *CFO Journal*, as of April 1, 2014 “only 52% of the 398 rules mandated by the law have been completed.” The much vaunted Volcker Rule was only recently completed, but rules concerning the swaps market and rules governing the issuance of asset-backed securities are not yet completed. (Monga (2014)) Of course, Wall Street lobbyists are hard at work making sure that the regulations mandated by Dodd-Frank are as favorable as possible to the financial services industry. Lobbyist activism has been so intense that Act itself has been dubbed the “Financial Lobbyist Full Employment Act of 2010.” (Barth, Caprio and Levine (2012)) The manner in which this Act has been brought into existence raises serious doubts about its ability to prevent future financial crises or at least soften the blow. No doubt after the next crisis some will argue that the crisis occurred because Dodd-Frank was not implemented as originally intended while others will argue that the crisis was caused or worsened because of Dodd-Frank.

Whatever has happened—that's what will happen again; whatever has occurred—that's what will occur again.

There's nothing new under the sun” (Ecclesiastes 1:9, Common English Bible). According to Blinder ((2013)), “time will tell,” but it is very clear that one need not wait for time to pass to realize that Dodd-Frank is highly unlikely to make any significant difference in the next crisis.

Calomaris ((2010)), analyzing Depression-era banking reform, argues that the legislation was ill-conceived, was passed quickly, but took “a great deal of time to disappear.” He concludes that, “The overarching lesson is that the aftermath of crises are moments of high risk in public policy.” Reactive measures rife with political pressure and designed to gain public approval in the wake of financial crisis “will have adverse consequences.” The Dodd-Frank Act is eerily similar to its post-crisis regulatory ancestors, and it is doubtful that it will be succeed when time and time again regulations written after the storm has passed have failed.

It's Systemic Risk That Matters

Systemic risk has been defined as risk that “emerges when the financial sector as a whole has too little capital to cover its liabilities. This leads to the widespread failure of financial institutions and/or the freezing of capital markets, which greatly impairs financial intermediation, both in terms of the payments system and in terms of lending to corporations and households.” (Acharya *et al.* (2011c)) Systemically important financial institutions then are those institutions whose failure would lead to a breakdown of the entire financial system. These are the financial institutions that today have been deemed too big to fail.

During the Panic of 1907, the Knickerbocker Trust Company was a systemically important institution that failed and put the entire financial system at risk. Since there was no way for the federal government to effectively intervene at the time, there was no *too-big-to-fail* policy. While no investment banks failed in the Stock Market Crash of 1929, several mutual fund companies did, and thousands of banks failed during the Great Depression. Calomaris ((2010)) argues

that 1930s banking regulations were put in place to preserve an already fragile and fragmented unit banking system that limited competition, increased costs, and led to lower profitability. Such misguided policies were motivated primarily by political considerations, and, according to Calomiris, helped to intensify the severity of the Great Depression. The unit banks that failed could be classified as “too small to save,” and not systemically important. However, the failure of over 9,000 small banks from 1929 to 1933 approached risk of systemic proportions in the aggregate.

More recently, the failure of the Long-Term Capital Management (LTCM) hedge fund in the late 1990s and the financial meltdown that began in the fall of 2008 were both systemic events that threatened the viability of capital markets. These events provided the catalyst for regulators and researchers to concentrate their efforts on systemic risk. In fact, Dodd-Frank gives regulators the ability to break up or bury troubled financial institutions that are systemically important. However, according to Acharya et al (Acharya *et al.* (2011a)), “there remains substantial uncertainty that this is going to work well, if at all.”

Individuals are on Their Own

Individuals can learn a great deal from previous financial crises. The most important lesson is that individuals, be they investors, consumers, or homeowners, are not too big to fail. There is no government bailout for the individual, and it is highly likely that there will not be one in the future in spite of Dodd-Frank's creation of the Bureau of Consumer Financial Protection. The Bureau's primary focus is to educate consumers about financial products not to bail them out of the next financial crisis. Blinder ((2013)) cites the creation of the Home Owners' Loan Corporation (HOLC) in the 1930s as government intervention that helped over a million homeowners keep their homes as evidence of the federal government's ability to help out individuals who have been hurt in a financial crisis. According to Blinder, “...President Franklin Roosevelt and Congress reacted to the housing crisis with a burst of policy activism that put the governments of 2007–2010 to shame.” Nothing even close to the magnitude of the HOLC was enacted in the after- math of the most recent crisis. Most lawmakers were afraid that such action would simply cost too much in spite of the fact that when the HOLC, which over time held loans on about 10 percent of the nonfarm, owner-occupied houses in the United States, liquidated in 1951, it realized a slight profit. (Harriss (1951)) The HOLC appears to be the exception rather than the rule when it comes to bailing out individual homeowners or investors.

Regulators and Lawmakers Should Not Unthinkingly Rely on What Worked in the Past

In the aftermath of a financial crisis, there is a tendency to identify methods that either worked or appeared to work in the past and assume that the reintroduction of those methods would, if not solve, then greatly alleviate many of problems experienced in the aftermath of a financial meltdown. Returning to the gold standard and neo-Keynesian economics have both found a resurgence in popularity in the wake of the most recent financial meltdown.

Returning to the gold standard is currently being advocated by many right-wing politicians. The United States completely abandoned the gold standard in 1971. Since then, periods of

inflation, economic instability, the devaluation of the dollar, and financial crises have led many to call for a return of the gold standard. During World War I, the major economies in Europe were all forced to abandon the gold standard. After the war, the primary objective of the central bankers in France, England, and Germany was to return to the gold standard at prewar exchange rates. The only problem was that there were inadequate gold reserves in Europe because most of it had moved to the safety of the United States during the war. In the United States, Benjamin Strong tried to help out his counterparts in Europe by keeping interest rates low. The low rates, however, spurred speculation in US financial markets and helped contribute to the rising stock market, which was destined to crash spectacularly in 1929. In their rush to return to the past, Europe's central bankers failed to recognize that fundamental changes had taken place that not only made a return to the gold standard infeasible but helped to plunge the world into a severe economic depression. (Ahamed (2009))

Keynesian economics, at its most basic level, has been aptly described by economist Sylvia Nasar:

The only way to revive business confidence and get the private sector spending again was by cutting taxes and letting businesses and individuals keep more of their income so that they could spend it. Or, better yet, having the government spend more money directly, since that would guarantee that 100 percent of it would be spent rather than saved. If the private sector couldn't or wouldn't spend, then the government had to do it. For Keynes, the government had to be prepared to act as the spender of last resort, just as the central bank acted as the lender of last resort. (Nasar (2012))

Today, many on the left call for a return to Keynesian economics believing that our slow growing economy can best be stimulated by increased government spending. Indeed, the 2009 \$832 billion stimulus package was designed to do exactly what Keynes proposed. Unfortunately, the stimulus met with mixed results and failed to stimulate rapid economic growth. Some have argued that “Government spending worked, helping millions of people who never realized it. And it can work again, whenever lawmakers agree that putting people to work is more important than winning ideological fights.” (What the Stimulus Accomplished, (2014)) Others describe the stimulus as a failed “spending blowout.” (Freeman (2014)) Given the mixed results of the 2009 stimulus, any further attempts at stimulating the economy with government spending must be carefully planned and skillfully executed. The probability of such an occurrence is very low given the highly partisan political atmosphere in Washington D.C. The limits of deficit spending also need to be addressed in order to determine whether too much stimulus spending will actually hurt rather than help the economy. British MP Kwasi Kwarteng points out that Keynes “had never advocated deficit finance in times of economic prosperity. His theory was a 'countercyclical' one, in as much as government spending could be used to revitalize a national economy during a downturn. He anticipated that, as prosperity returned, spending would be curtailed.” (Kwarteng (2014)) In spite of this, deficit spending has continued in good times as well as bad. What are the limits? Where is the balance?

Economists Carmen Reinhart and Kenneth Rogoff argue that excessive debt accumulated in strong economies inevitably leads to unacceptable risks when the economy weakens. All too often “players in the global financial system often dig a debt hole far larger than they can reasonably expect to escape from, most famously the United States and its financial system in the late 2000s.” Their analysis of eight centuries of financial crises led them to conclude the “most expensive investment advice ever given in the boom just before a financial crisis stems from the perception that 'this time is different.'” (Reinhart and Rogoff (2009))

The Trouble with Regulation

In *Flash Boys: A Wall Street Revolt*, author Michael Lewis describes Royal Bank of Canada (RBC) product manager John Schall's research into the origins of front-running in the United States. Schall found that the primary motivation behind front-running arose from the unintended consequences of well-meaning securities regulations. He came to the conclusion that:

Every systemic market injustice arose from some loophole in a regulation created to correct some prior injustice. “No matter what the regulators did, some other intermediary found a way to react, so there would be another form of front-running,” (Lewis (2014))

Schall then shared what he had learned with his colleagues at RBC:

First, ... the U.S. financial markets had always been either corrupt or about to be corrupted. Second, there was zero chance that the problem would be solved by financial regulators; or, rather, the regulators might solve the narrow problem of front-running in the stock market by high-frequency traders, but whatever they did to solve the problem would create yet another opportunity for financial intermediaries to make money at the expense of investors. (Lewis (2014))

John Schall's discovery that new regulations can never solve the problem of front-running has wider application to the financial markets. His conclusions are reminiscent of Merton Miller's assertion that, “The major impulses to successful financial innovation over the past twenty years have come, I am saddened to have to say, from regulation and taxes.” He admitted that the U.S. government has a role to play in the development of new financial instruments but concedes that its role “in producing the pearls of financial innovation ... has been essentially that of a grain of sand in the oyster.” (Miller (1986)). While Miller saw the government's role in the financial markets as an irritant that provokes innovation, Barth, Caprio, and Levine hold that the latest financial meltdown was the direct result of “the colossal failure of financial regulation.” (Barth, Caprio and Levine (2012)) Reinhart and Rogoff agree:

Technology has changed, the height of humans has changed, and fashions have changed. Yet the ability of governments and investors to delude themselves, giving rise to periodic bouts of euphoria that usually end in tears, seems to have remained a constant. No careful reader of Friedman and Schwartz will be surprised by this lesson about the ability of governments to mismanage financial markets, a key theme of their analysis. (Reinhart and Rogoff (2009))

Barth, Caprio, and Levine argue that financial regulation has never worked well claiming that whenever a financial crisis hits, the government's response is all too predictable: more regulation and more powers to the regulators. This has led to what they describe as “an elaborate Rube-Goldberg-style financial regulatory regime,” which “would be fine if it worked, But it doesn't.” (Barth, Caprio and Levine (2012)) Although government agencies were originally developed with the idea of providing expertise and guidance where congress and the executive branch were lacking, the agency system has grown into what has been described as the “fourth branch” of the federal government. (Seligman (1995)) In the financial arena, agency expertise is lacking at times. According to Cooley and Walter:

Finally, there is the critical issue of regulatory execution, which is almost always done by high-minded and overworked civil servants standing against the best and the brightest on the payrolls of those they are supposed to be regulating. Plenty of examples attest to the inequality of this battle, with well-intentioned regulation undermined by regulatory arbitrage that distorts its purpose and implementation. (Cooley and Walter (2011)). The biggest mismatch in regulatory oversight was probably the regulation of AIG's Financial Products subsidiary by the Office of Thrift Supervision (OTS). This came about because AIG had acquired some small savings banks. Blinder writes: The badly overmatched OTS had, shall we say, limited expertise in the complex world of modern derivatives. Very limited. To the financial wizards at AIG FP, this must have looked like playing three-card monte without a cop on the beat. And they proceeded to play for stupefyingly high stakes. (Blinder (2013)). There is also the issue of the revolving door problem between government agencies and financial institutions where “people move from private institutions to regulatory positions and back again.” (Barth, Caprio and Levine (2012)) Many of these revolving door participants also end up working as lobbyists in Washington D.C. This close relationship between all of the aforementioned parties means that the regulatory system suffers and fails to work in the best interests of the country.

Regulators Were Asleep At the Wheel

In nearly every financial crisis, regulators have been caught off guard. The Federal Reserve System was unprepared to deal with the run-on banks during the Great Depression, the federal deposit insurance system failed to prevent the savings and loan crisis in the 1980s, and there are a number of agencies that are culpable in the latest crisis including the FDIC. In analyzing the failures at the FDIC, Barth, Caprio and Levine found:

A dynamic, innovating financial system and a static, un-adapting regulatory regime created an environment in which the old supervisory rules no longer maintained a safe and sound banking system. While financial institutions developed new products and exposed themselves to new risks, the regulatory regime was unwilling to adapt to these changing conditions to maintain a secure, well-functioning financial sector. The FDIC did not adapt, even though it correctly identified problems and even though it had the power and obligation to respond. The Guardians of Finance effectively stood by and watched as the system steadily headed into collapse. (Barth, Caprio and Levine (2012))

Sheila Bair was the Chairperson of the FDIC during the latest financial crisis. In her book *Bull by The Horns: Fighting to Save Main Street from Wall Street and Wall Street from Itself*, she describes the mood at the FDIC when she took over the helm of that institution:

The groupthink was that technological innovation, coupled with the Fed's seeming mastery of maintaining an easy monetary policy without inflation, meant an end to the economic cycles of good times and bad that had characterized our financial system in the past. The golden age of banking was here and would last forever. We didn't need regulation anymore. That kind of thinking had not only led to significant downsizing but had also severely damaged FDIC employees' morale, and—as I would later discover—led to the adoption of hands-off regulatory philosophies at all of the financial regulatory agencies that would prove to be difficult to change once the subprime crisis started to unfold. (Bair (2013))

A static, unresponsive government agency was relying on self-correcting markets to do its job! And, as Bair notes, it wasn't just the FDIC. Nearly every other government agency had adopted the same attitude whether it was the SEC under Christopher Cox or the Federal Reserve under Alan Greenspan and Ben Bernanke.

How Easily We Forget

Forgetfulness is not a virtue, but it seems that our collective memory has a short attention span. It's amazing how quickly we as a nation turn from “This time is different!” to “The world is coming to an end!” Blinder reminds us of the teachings of Hyman Minsky who argued that speculative markets by their very nature go to extremes. “One key reason, according to Minsky, is that, unlike elephants, people forget. When the good times roll, investors expect them to roll indefinitely. But they don't. And when bubbles burst, investors are always surprised. We should remember our Minsky: Markets and people forget.” (Blinder (2013))

In his original first chapter of *The Great Crash, 1929*, John Kenneth Galbraith wrote, “...a good knowledge of what happened in 1929 remains our best safeguard against the recurrence of the more unhappy events of those days.” He expressed wonder that the country had not seen a recurrence of 1929 and suggested that one reason was “that the experience of 1929 burned itself so deeply into the national consciousness.” Galbraith concluded the chapter with the hope that a history such as *The Great Crash* “will keep bright that immunizing memory for a little longer.” (Galbraith (1955)) In the forward to a later edition of *The Great Crash*, Galbraith returned to the theme of immunizing memory: As protection against financial illusion or insanity, memory is far better than law. When the memory of the 1929 disaster failed, law and regulation no longer sufficed. For protecting people from the cupidity of others and their own, history is highly utilitarian. It sustains memory and memory serves the same purpose as the SEC and, on the record, is far more effective. (Quoted in Seligman (1995))

Perhaps our best hope of avoiding future financial crises lies in remembering. Financier Henry Kaufman believes business schools are partially responsible for the irresponsible

financial behavior of late. He writes, “Anything having to do with the qualitative side of business — ethics, business culture, history, and the like — was subordinated or eliminated as too “soft” and “impractical.” “Ethics and morality,” according to Kaufman, “are forged in our early upbringing and can, at best, be rekindled at a university, while the lessons of financial history can be fully grasped only with further study.” Kaufman concludes, “Business schools should require all degree candidates to take courses in business and financial history.” (Kaufman (2009))

Conclusion

It is unwise to believe that the federal government will ever be able to offer protection against financial meltdowns through regulation. Without a serious rethinking of how regulations are enacted and enforced, the government at best can create, in the words of Charles Francis Adams, Jr., “something having a good sound, but quite harmless, which will impress the popular mind with the idea that a great deal is being done, when, in reality, very little is intended to be done.” (Kolko (1965)) Both relying on the government to fix the problem and believing that the financial markets will self-correct are akin to the foolish investor who says, “This time is different.”

Reviewing our country's financial history helps to answer Will Rogers' question, “If stupidity got us into this mess, then why can't it get us out”. There is no doubt that our collective memories must be stimulated to recall what has happened in past financial crises. We need to remember the steps that brought our country into financial crisis and the financial decisions and actions of those that brought us through this far. We need to study history and assess which actions brought failure and which ones led to success. Our present and future financial climate demands that we respect lessons learned from the past and that we wisely move forward managing our present and future wealth, not taking it for granted or promising it to the future in a financially uncertain world.

References

- Acharya, V. V., Thomas, F., Cooley, M., Richardson, R. S. & Ingo, W. (2011a), A bird's-eye view: The Dodd-Frank wall street reform and consumer protection act, in Viral V. Acharya, Thomas F. Cooley, Matthew Richardson and Ingo Walter, eds.: *Regulating Wall Street: The Dodd-Frank Act and the New Architecture of Global Finance*, forward by Myron Scholes, (Wiley, Hoboken, N.J.).
- Ahamed, L. (2000). *Lords of Finance: The Bankers who broke the world* (Penguin Press, New York).
- Bair, S. (2013), *Bull by the horns: Fighting to save main street from wall street and wall street from Itself* (Free Press, New York).
- Barth, J. R., Gerard, C. Jr., & Ross, L. (2012), *Guardians of Finance: Making regulators work for us*, (MIT Press, Cambridge, Mass.).
- Blinder, A. S., (2013). *After the music stopped: The Financial crisis, the response, and the work ahead*, (Penguin Press, New York).
- Boatright, J. R. (2004), Individual responsibility in the American corporate system: Does Sarbanes-Oxley Strike the Right Balance? *Business & Professional Ethics Journal* 23, 9-41.
- Bush, G. W. (2002). President bush signs corporate, Corruption Bill, 2014.
- Calomiris, C. W., (2010). The political lessons of depression-era banking reform, *Oxford Review of Economic Policy* 26, 540-560.
- Coates, J. C. (2007). the goals and promise of the sarbanes-Oxley act, *The Journal of Economic Perspectives* 21, 91-116.
- Cole, H. L., & Lee, E. O. (2004), New deal policies and the persistence of the great depression: A general equilibrium analysis, *Journal of Political Economy* 112, 779-816.
- Davidoff, S. M. (2010), *Finding a good financial bill in 2,300 Pages*, 2014.
- Freeman, J. (2014). Obama's stimulus, five years later; Not much growth, but a new costume for bobber the water safety dog, *Wall Street Journal (Online)*, n/a.
- Haidan, L. Morton, P. & Sonja, Ol. R. (2008), Market reaction to events surrounding the sarbanes oxley Act of 2002 and Earnings Management, *Journal of Law and Economics* 51, 111-134.

- Kaufman, H. (2009). *The road to financial reformation: Warnings, consequences, reforms* (John Wiley & Sons, Hoboken, N.J.).
- Lewis, M. (2014), *Flash Boys: A wall street revolt* (W.W. Norton & Company, New York).
- McCulley, P. (2007). Teton reflections, *PIMCO Global Central Bank Focus*.
- Monga, V. (2014). Nearly half of dodd-frank rules still unwritten, *CFO Journal*, April 17, 2014.
- Nasar, S. (2012). *Grand pursuit: The story of economic genius* (Simon & Schuster, New York).
- Obama, B. H., (2010a). Remarks by the President at Signing of Dodd-Frank Wall Street Reform and Consumer Protection Act, 2014. ---. 2010b, Remarks by the President at a Town Hall Meeting on the Economy in Racine, Wisconsin, 2014.
- Perino, M. A. (2010). *The hellhound of wall street: How Ferdinand Pecora's investigation of the great crash forever changed American Finance*, (New York: Penguin Press, New York).
- Reinhart, C. M., & Kenneth, S. R. (2009). *This time is different: Eight centuries of financial folly*, (Princeton University Press, Princeton).
- Silber, W. L. (2009). Why did FDR's Bank Holiday Succeed? *Economic Policy Review* 15, 19-30.