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Articles

Don't Panic! Defending Cowardly Interventions During and After a Financial Crisis

Brett McDonnell*

ABSTRACT

How should we regulate the U.S. financial system after the financial crisis when we face the task with a radically inadequate understanding of what went wrong and what effect proposed regulations will likely have? This paper explores three quite different approaches to regulating in the face of severe uncertainty: the libertarianism of Friedrich Hayek, the conservatism of Michael Oakeshott, and the liberalism of John Maynard Keynes. Each man thought deeply about the problem of how uncertainty affects human affairs, but each came to different conclusions about how to address such uncertainty. The paper outlines the core, immensely useful insights of each theorist. The paper then outlines the even more useful and persuasive critiques that each launches at the other two. From

* Professor of Law, University of Minnesota Law School. I thank Prentiss Cox, Claire Hill, Richard Painter, Paul Rubin, Dan Schwarcz, David Zaring, and participants at sessions at the annual conferences of the Association of American Law Schools, the Law & Society Association, the Midwestern Law & Economics Association, and the University of Minnesota Law School for helpful comments.

this collision of viewpoints, the paper outlines a hybrid general approach to regulating the financial system which it (rather tongue-in-cheek) labels “cowardly interventions.” This approach accepts the basic insight of Keynes that unregulated financial markets will be deeply unstable, causing periodic destructive depressions. Thus, fairly strong regulation of finance is needed. But following the insights of Hayek and Oakeshott, I argue that new regulations should be cowardly. We should as much as possible heed the wisdom embedded in markets and existing institutions. We should identify as best we can the biggest problems that current markets pose, and address those problems with new rules that are measured, limited, market-friendly, and subject to evaluation and pruning.

This framework supports a three-part response to the crisis. First, the New Deal structure for regulating banks should be extended to the shadow banking system which was at the heart of the crisis. (What is “shadow banking”? Read the paper.) In that structure, the government acts as a lender of last resort to forestall panics while using resolution authority and prudential regulation to replicate much of the discipline of an unregulated market. Second, more specific limited rules should address glaring problems in the mortgage securitization chain. Third, regulatory agencies should be prodded to constantly re-evaluate existing regulation in light of new circumstances. Using this framework, this paper gives a guarded defense of the Dodd-Frank Act. All three elements of a proper response are there in the Act. There are major concerns, however. Most importantly, the Dodd-Frank Act does not do enough to address the largely unregulated shadow banking system. The Act should also have begun the process of eliminating Fannie Mae and Freddie Mac. Even legislation without these weaknesses would not end financial crises forever. However, if the many regulations implementing the Dodd-Frank Act are largely done well, they may postpone the next big crisis for a decade or two, as well as make the next crisis shorter and less severe when it does occur. The Dodd-Frank Act is imperfect even by the standards of a philosophy which emphasizes inevitable imperfection, but on balance it does pretty well under the circumstances.

I. INTRODUCTION

In 2007-08, a financial crisis launched the Great Recession. Since then, the United States has had to consider how to reform regulation of its financial system so as to reduce the chances of an encore downturn. We face this task with a radically inadequate understanding of what went

wrong and of the effect proposed regulations will likely have. What are we to do in the face of this great uncertainty?

This paper draws on the work of three of the twentieth century's greatest thinkers on the implications of uncertainty and the limits of reason: Friedrich Hayek, Michael Oakeshott, and John Maynard Keynes. Each represents one of our leading political tendencies: libertarianism, conservatism, and liberalism. These three men's theories respond quite differently to the dilemma of our recent deficit. Hayek focuses on the perils of central planning and argues for decentralized markets as the best repository of what knowledge we do have. Oakeshott focuses on the slow evolution of knowledge embodied in both the state and civil society and argues that we should be wary of meddling too much and too quickly with traditional institutions. Keynes focuses on private actors in financial markets and the instability that their uncertainty creates, and argues that aggressive state intervention is needed to stabilize the economy and prevent long bouts of devastating unemployment.

What do these three great thinkers tell us about our response to regulating the financial system after the crisis? Each offers key insight, but each also offers powerful critiques of the insights of the other two theorists. Fully following the prescriptions of any one of them is unattractive. I argue for an intermediate approach¹ that incorporates both the insights and the critiques of all three. Handling the private financial system with what I call cowardly interventions triangulates Hayek's libertarianism, Oakeshott's conservatism, and Keynes's liberalism. It is a chastened form of liberal regulation that would craft a variety of new rules to cabin the instability, which the overly laissez-faire approach of recent decades has created. But cowardly interveners (CIers² for short) are wary of going too fast and too far, and as much as possible work with, rather than against, existing markets and regulatory structures. CIers advocate identifying the biggest problems that we currently face and addressing those problems with limited new rules informed by best practice and subject to constant re-evaluation. As a response to the financial crisis, the Dodd-Frank Act is a plausible collection of cowardly interventions.

Part II quickly reviews what went wrong in the financial crisis. There is a lot to choose from. I focus on the stages of the mortgage securitization process and the shadow banking system. Financial innovation and deregulation created new ways to use short-term borrowing to fund long-term positions and created subtle new connections between many markets. When the prevailing optimism

1. That is to say, I wimp out.

2. Pronounced "sighers."

faltered, people tried to sell those long-term positions in order to cover their borrowing, and a negative feedback loop took hold. The resulting bailouts, though needed in some form, left us with severe moral hazard problems. The great and growing complexity of the financial system makes it increasingly hard to understand, predict, and regulate.

Part III introduces the core insights of Hayek, Oakeshott, and Keynes into how to regulate such a complex and uncertain system. Hayek stresses the immense informational challenge involved in coordinating the vast number of decisions that actors within an economy must make. A free market system allows individual actors to make decisions using their localized, tacit knowledge, and the price mechanism coordinates the decisions of those individual actors. Central planning or extensive regulation must fail because the planners or regulators cannot gather and use all of that information. Oakeshott resembles Hayek in many ways, but Oakeshott is unwilling to tear up existing structures to move towards Hayek's vision of a free market society. Oakeshott stresses that big moves in any direction will upset our adjustments to current practices, risk losing the often ill-understood benefits of existing ways, and fall prey to the law of unintended consequences. Keynes turns our focus to problems that uncertainty creates for unregulated financial markets. Keynes and his successors³ show how various negative feedback loops emanating from fragile financial markets can cause sustained recessions or depressions. Active governmental intervention, including financial regulation as well as fiscal and monetary policy, is needed to keep the downturns and the booms from getting out of hand.

Part IV engages in a round-robin shooting match, using alternating pairs of the thinkers to take aim at the third. The damage to each is great, but we gain a greater understanding. As to Hayek's libertarianism, Keynes asks why we should have any confidence in the ability of markets to avoid a Second Great Depression (and then a Third, and then . . .). For centuries, capitalist economies have been subject to repeated serious financial crises, and riding them out is not a satisfying or politically viable answer. Oakeshott argues that Hayek offers a rationalist vision of his own. Why should we trust that vision given the limits on reason Hayek himself stresses? Hayek lacks the humility of his convictions. As for Oakeshott, both Hayek and Keynes point out that conservatism provides a mood and an attitude towards change, but little in the way of a specific program. In looking to our past for guidance, do we dwell on the highly regulated environment of the fifties and sixties, or the deregulation of the last few decades? How should we adapt to the

3. The most important of which is Hyman Minsky—I shall draw upon him almost as much as upon Keynes himself.

many new financial innovations that have transformed markets in short periods of time? Oakeshott gives us little guidance. As for Keynes, both Hayek and Oakeshott critique his reliance on the reason of regulators. Getting financial regulation right is really hard, and the task never ends due to constant market evolution, partly in response to past regulations. It is a constant challenge to ascertain whether given regulations will make the economy better rather than worse. Moreover, the continual innovation of capitalism is one of its greatest qualities, and stringent financial regulation threatens that dynamism.

Part V uses these insights to set forth a framework for regulating in the face of uncertainty. Have we evolved a complex financial system that no one really understands, a deeply unstable system if not regulated but stagnant if regulated? In short, are we doomed? Well, in the long run we are all dead. At the moment the short run doesn't look too hot either. Perhaps doom can be avoided for a good long while, and its pain reduced and shortened. And anyway, preaching doom alone would make for overly depressing reading during a near-Depression.

*Alternative Title: We Are Not Certainly Doomed: Regulating Finance to Delay the Next Crisis.*⁴

I suggest an approach that triangulates the insights of Hayek, Oakeshott, and Keynes. I advocate cowardly interventions by the state into financial markets.⁵ The approach gives pride of place to Keynes (via Hyman Minsky), insofar as I accept their basic analysis of the instability arising from modern financial markets. Such markets are one area of the economy where we do need strong regulation. But in regulating we must always remain acutely aware of the limits on our ability to respond effectively, and as much as possible heed the wisdom embedded in markets and existing institutions. We should identify as best we can the biggest problems that current markets pose, and address those problems with new rules that are measured, limited, market-friendly, and subject to evaluation and pruning—in short, cowardly. The cowardice respects the limits on our knowledge as regulators, which Hayek and Oakeshott rightly emphasize.

This framework supports a three-part response to the crisis. First, the New Deal structure for regulating banks should be extended to shadow banking. In that structure, the government acts as a lender of last resort to forestall panics, while using resolution authority and prudential regulations to replicate much of the discipline of an unregulated market.

4. Not content to rest with the Douglas Adams allusion of the primary title, this essay resorts to a series of alternative possible titles that reflect the shifting degrees of its pessimism.

5. I call the interventions cowardly as a deliberately deflating term, a constant reminder of the inevitably inadequate nature of our responses in the face of uncertainty.

Second, more specific limited rules should address glaring problems in the securitization chain. Third, regulatory agencies should be prodded to constantly re-evaluate existing regulations in light of new circumstances.

Part VI gives a guarded defense of the Dodd-Frank Act. All three elements of a proper response are present. The bailouts proved the government will act as a lender of last resort, while the Act extends resolution authority and prudential regulation to at least some parts of the shadow banking world. Sections of the Act address each of the leading links in the securitization chain, including consumer products, origination of mortgage-backed securities, credit ratings, and derivatives. Many features in the Act promote constant examination of existing rules. Nevertheless, more (and less) will need to be done. As for the more, the Dodd-Frank Act does not do enough to address the shadow banking system, but that is a problem for the future. Also, the Act should have begun the process of eliminating Fannie Mae and Freddie Mac. As for the less, we need to watch for unintended consequences and be willing to jettison elements that are not working.

The Dodd-Frank Act and the regulations to follow will not end financial crises forever. But if the regulations are largely well done, they may postpone the next big crisis and make it both shorter and less severe when it does occur. Additionally, the Act may do so without imposing too great of a burden on positive financial innovation and economic growth.

Part VII briefly ponders whether there is a great enough chance of a truly catastrophic future crisis to justify, by the precautionary principle, much more extensive regulation than advocated in this paper. It concludes that there is a realistic chance of such catastrophe, but since over-regulation also would create a realistic chance of catastrophe, the precautionary principle does not get us anywhere. For now, cowardly interventions are the worst alternative—except for all of the others.⁶

II. THE CRISIS

The financial crisis, which led to the Great Recession starting in 2007, was complex. It had many important causes. Long books can be and have been written on what went wrong.⁷ I only have space and time⁸

6. Winston Churchill said, "It has been said that democracy is the worst form of government except all the others that have been tried." 444 PARL. DEB., H.C. (5th ser.) (1947) 206-07 (U.K.). This is an indispensable quote, and can be used for just about any preferred policy alternative one cares to defend.

7. A few that I find particularly useful: VIRAL A. ACHARYA ET AL., REGULATING WALL STREET: THE DODD-FRANK ACT AND THE NEW ARCHITECTURE OF GLOBAL FINANCE (2010); GARY B. GORTON, SLAPPED BY THE INVISIBLE HAND: THE PANIC OF 2007 (2010); SIMON JOHNSON & JAMES KWAK, THIRTEEN BANKERS: THE WALL STREET TAKEOVER AND

to give a brief, skeletal overview, emphasizing the main problems and themes that are particularly important in setting the stage for thinking about a plausible regulatory response. Which problems one emphasizes itself represents a choice which helps shape regulatory proposals. The following sketch of the crisis draws upon my own experience and understanding, economic theory, analyses of the crisis by leading economists, the history of similar crises, and—importantly—upon the understandings of financial systems and instability which we shall consider in parts III and IV, namely the work of Keynes, Minsky, and Hayek. Ultimately, the crisis reveals our financial institutions and markets to constitute a complex and evolving system. It presents a moving target for regulation—a target that moves in part in response to that very regulation.

To understand the core of what happened, it helps to start by considering bank runs.⁹ People give money to banks in the form of deposits. From the bank's point of view, a deposit is a liability, which it may have to pay off at any point when the depositor asks for her money back. Banks take this money and use much of it to lend to businesses and persons making purchases for long-term use (e.g., homes). Banks set aside some of the money as reserves to pay back deposits when demanded, but they do not set aside all of the money deposited—if they did so, they would not be able to make loans. Indeed, banks set aside well under half of the money as reserves. The less a bank sets aside, the more leveraged the bank is. Greater leverage allows banks to make greater profits.¹⁰

But greater leverage carries greater risk. One risk is that enough depositors may ask for their money back that the bank does not have enough set aside in reserve to pay them. At this point, the bank is in

THE NEXT FINANCIAL MELTDOWN (2010); BETHANY MCLEAN & JOE NOCERA, ALL THE DEVILS ARE HERE: THE HIDDEN HISTORY OF THE FINANCIAL CRISIS (2010); RICHARD POSNER, A FAILURE OF CAPITALISM: THE CRISIS OF '08 AND THE DESCENT INTO DEPRESSION (2009); ROBERT POZEN, TOO BIG TO SAVE? HOW TO FIX THE U.S. FINANCIAL SYSTEM (2010); RAGHURAM G. RAJAN, FAULT LINES: HOW HIDDEN FRACTURES STILL THREATEN THE WORLD ECONOMY (2010); NOURIEL ROUBINI & STEPHEN MIHM, CRISIS ECONOMICS: A CRASH COURSE IN THE FUTURE OF ECONOMICS (2010); ROBERT J. SHILLER, THE SUBPRIME SOLUTION: HOW TODAY'S GLOBAL FINANCIAL CRISIS HAPPENED, AND WHAT TO DO ABOUT IT (2008); ANDREW ROSS SORKIN, TOO BIG TO FAIL: THE INSIDE STORY OF HOW WALL STREET AND WASHINGTON FOUGHT TO SAVE THE FINANCIAL SYSTEM—AND THEMSELVES (2009); JOSEPH E. STIGLITZ, FREEFALL: AMERICA, FREE MARKETS, AND THE SINKING OF THE WORLD ECONOMY (2010).

8. And, let's be honest, expertise.

9. For a strong theoretical overview, see FRANKLIN ALLEN & DOUGLAS GALE, UNDERSTANDING FINANCIAL CRISES (2007). As we shall see, Hyman Minsky's understanding of the instability of financial systems is also closely tied to this analysis of bank runs and panics.

10. Leverage can increase profits for all sorts of investments, not just for banks.

trouble. It may try to sell or cash in its assets to raise enough money to pay the demands, but those assets are long-term loans: they are illiquid, and hard to cash in at a moment's notice. The bank will not be able to force many of its borrowers to repay immediately. It may try to sell its loans to someone else, but traditionally there was not an active market for such loans. If the bank cannot meet the demand from its depositors, it will fail.

As long as depositors do not rush to make demand upon the bank all at once, the bank should be OK. But things can go horribly wrong if too many depositors demand repayment at once. This can happen for two basic reasons. First, the bank may become troubled because it has made many bad loans, and in the absence of adequate insurance, depositors may fear the bank will not be able to pay them. As a result, many depositors may rush to withdraw their money. This becomes a self-fulfilling rush as depositors notice a run developing, and each tries to get in ahead of the others.¹¹ Second, even if a bank is healthy, a run may develop if for any reason there are an unusually large number of demands made. Depositors may notice this trend, and being uncertain about the bank's health, may rush to withdraw before other depositors have the chance to do so.¹² Runs often combine both elements, with some problematic fundamentals and much uncertainty about the general state of banks.¹³

Worst of all, such runs can become contagious. A run at one bank may cause nervousness about other banks, leading depositors to start withdrawing and thus creating self-fulfilling runs at many banks all at once.¹⁴ Thus, shaky finances at one bank may affect the safety of other banks. Banks do not have proper incentives to take such external effects into account.¹⁵ If such a general panic gets started, banks will stop making new loans and attempt to pile up reserves as high as possible so that they can stave off a run. Cutting off loans, though, hurts businesses, which in turn cut back on spending. Resulting layoffs, hour reductions, and lowered wages hurt employees, who in turn cut back on spending, and the financial crisis thus generates or deepens a recession or

11. The breakthrough formal analysis of a run based upon problematic fundamentals is John Bryant, *A Model of Reserves, Bank Runs, and Deposit Insurance*, 4 J. BANKING & FIN. 335 (1980).

12. The breakthrough formal analysis of a run not based upon problematic fundamentals is Douglas W. Diamond & Philip H. Dybvig, *Bank Runs, Deposit Insurance, and Liquidity*, 91 J. POL. ECON. 401 (1983).

13. ALLEN & GALE, *supra* note 9, at 96.

14. *Id.* at 260-98.

15. Economists call this an externality.

depression in the real economy.¹⁶ The slowdown in the real economy then feeds back into the financial system, as distressed consumers and businesses default on loans, worsening bank balance sheets.

Market economies have been subject to banking panics for hundreds of years.¹⁷ In the U.S., the Great Depression was the mother of all financial crises, but the panics of 1857, 1873, 1893, and 1907 were also no picnics. These financial struggles are typically tied to serious recessions in the real economy, may last for years, and may lead to dramatic increases in government debt. The current crisis follows the traditional playbook quite closely.¹⁸ Indeed, the title of Reinhardt and Rogoff's *This Time It's Different* emphasizes the core underlying dynamic that we have observed over and over again.

But while each depression appears the same from afar, each depression has its own idiosyncrasies when viewed under close scrutiny.¹⁹ And those differences matter for how regulations should look in response. Although traditional bank runs were a part of the latest crisis, they were not at its core. Instead, this crisis saw a run on the shadow banking system. To understand what this means and how it happened, one must consider the steps of the modern mortgage securitization process.

When banks today lend to persons who are buying a house, they often do not keep that mortgage on their own books. Instead, banks may securitize the mortgage. Banks typically do not originate the mortgage with customers with whom they are familiar. Rather, mortgage brokers identify borrowers, and direct those borrowers to banks or other financial entities.²⁰ Those entities use computerized algorithms rather than knowledge arising from a personal relationship to approve the loans.²¹

16. The real economy is the non-financial part of the economy, where people make things and provide other services.

17. The two best general histories are CHARLES P. KINDLEBERGER & ROBERT Z. ALIBER, *MANIAS, PANICS, AND CRASHES: A HISTORY OF FINANCIAL CRISES* (5th ed. 2005) and CARMEN REINHARDT & KENNETH ROGOFF, *THIS TIME IT'S DIFFERENT: EIGHT CENTURIES OF FINANCIAL FOLLY* (2009).

18. REINHARDT & ROGOFF, *supra* note 17, at 199-201.

19. Reinhardt & Rogoff reproduce an ad that describes the Mississippi bubble of 1719, which says, "History sometimes repeats itself—but not invariably." The ad then says that bubbles should no longer happen because investors have more ways to determine extensive facts about companies. The ad is dated September 14, 1929. The irony, the irony. *Id.* at 16. But note: the ad did point to a very real difference between 1720 and 1929. Markets were very different, with many more informational intermediaries in 1929. The difference matters a lot in considering what regulation should have looked like in 1720 and 1929.

20. Which, importantly, need not be regulated as banks. They are a part of the shadow banking system.

21. For a critique of these algorithms from a Hayekian perspective, see AMAR BHIDÉ, *A CALL FOR JUDGMENT: SENSIBLE FINANCE FOR A DYNAMIC ECONOMY* (2010).

Hundreds of loans are then pooled together by a financial company. The company may be the one making the loan or another company altogether. The cash flows from those loans are then sliced up into new cash flows evidenced by bonds that are issued to market investors—so called mortgage-backed securities (MBS).²²

The cash flows are structured to give investors the risk characteristics they desire. The most senior bonds have first dibs at the cash, which flows in during a given period, while losses are absorbed first by junior bonds. With this structure, even if many of the underlying loans have a serious chance of default, senior bonds should be quite safe, as they will go unpaid only if a large fraction of the underlying mortgages go into default all at once, which was assumed to be unlikely.²³ Credit rating agencies are hired by the issuers of the MBS bonds to rate the different bonds (or tranches) based on the projected likelihood of default. As the bonds became increasingly complicated, this rating process became harder. The agencies developed complex mathematical models, based upon state-of-the-art financial theory, for valuing the bonds. To further shift risk, issuers or buyers often arranged for third parties to insure bonds against the risk of default. This insurance often took the form of a credit default swap (CDS).

The end of the line comes with the buyers of these MBS (or, more generally, ABS) bonds. Many entities were buyers in these markets, including private equity funds or special investment vehicles (SIV) set up by large financial companies (some banks, some not). These entities raised money in a variety of ways. Some were equity investments, in which investors had the right to withdraw funds on quick notice. Many were financed with commercial paper, short-term loans which had to be rolled over regularly (i.e., new paper issued to pay off the old paper). ABS bonds were also widely used in the repo market as financial companies made short-term loans to each other with the bonds as assets.²⁴ These financing vehicles are a key part of this shadow banking world. They look a lot like banks—they finance long-term illiquid assets (the ABS bonds) with short-term debt. As we shall see, they were also subject to panics similar to bank runs.

In the crisis, things went wrong at every link in the securitization chain. Sub-prime mortgages to borrowers with poor credit became an increasingly large part of the mortgage market. To some extent this

But personalized knowledge has its own drawbacks—for instance, it leaves more room for racial and other forms of discrimination.

22. More generally, bonds can be issued based on many sorts of cash flows. The more general term is asset-backed securities (ABS).

23. Oops.

24. GORTON, *supra* note 7, at 27.

started as a social good, making house ownership possible for a wider group of people. Some innovations in the structure of mortgages were useful to make such lending viable.²⁵ But many sub-prime mortgages were structured in ways that created huge risks for borrowers, and those borrowers often were vulnerable, unsophisticated persons who often did not understand the risks. When many of these borrowers were unable to pay, defaults on subprime mortgages rose sharply.

Why were lenders willing to make loans that carried such a high risk of default? One reason is that high rewards helped compensate for the high risks. But it is probably also the case that interest rates were not high enough to adequately justify the high risks for at least the worst of the subprime mortgages. Furthermore, securitization creates an incentive problem. Neither the mortgage brokers nor the financial companies that provided the funds actually retain the risks of mortgages that are securitized—that risk gets passed on to the MBS investors. The originators therefore do not have a direct interest in maintaining underwriting standards for issuing mortgages. It appears that securitized mortgages defaulted at higher rates than non-securitized mortgages.²⁶

The incentive problem exists only if the MBS investors do not detect the drop in standards and in response pay less for bonds carrying higher risk as a result of the lowered standards. One way of addressing that risk is to construct the MBS bonds in a way that gives more cushion for senior, highly-rated bonds. That may have happened, but apparently not enough—too many investors paid too much for MBS bonds given their risk. But why didn't these investors properly take that risk into account? After all, it doesn't take an economics Ph.D. to figure out there is a problem, and anyway, many of the investors did have an economics Ph.D. Why did MBS investors exercise such poor judgment?

That's one of the key puzzles of this crisis. There are a variety of answers, and although each tells a part of the story, there is much debate over their relative importance. Leading elements include:

- *Corporate governance and compensation problems.* Financial companies may have taken on too much risk because equity-based compensation and bonuses rewarded short-term risk-taking. At the level of CEOs, one important study calls this into

25. *Id.* at 74-82.

26. For a review of relevant studies, see Christopher M. James, *Mortgage-Backed Securities: How Important is "Skin in the Game?"*, FED. RES. BANK S.F. ECON. LETTER 37 (Dec. 13, 2010), available at <http://www.frbsf.org/publications/economics/letter/2010/el2010-37.html>.

question,²⁷ but debate on this point continues.²⁸ The bigger problem may have been at the trader level, although one must then ask why the CEOs and CFOs allowed a structure that created too much risk if they themselves were adequately motivated to monitor risk.²⁹ One possibility is that the CEOs simply did not realize what was going on in their trading departments—MBS securities did have a good track record at the time.

- *Bailout moral hazard.* If market participants believed the government would bail them out if things got bad, that would also help explain the under-pricing of risk.³⁰ Indeed, such a belief turns out to have been quite justified and clearly explains why government-sponsored entities like Fannie Mae and Freddie Mac had lower capital costs. It is less clear whether markets players realized how pervasive the implied government guarantee really was.³¹ But if they did not realize then, they certainly do now—that is one of the great problems for the future.
- *Credit rating agency malfeasance.* The credit rating agencies appear to have been too liberal in their ratings. Many point to improper incentives created by the issuer-pays model.³² The MBS bond issuers pay the agencies to rate the bonds, so the

27. Rüdiger Fahlenbrach & Rene Stulz, *Bank CEO Incentives and the Credit Crisis*, 99 J. FIN. ECON. 11 (2010), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1439859.

28. Ing-Haw Cheng et al., *Yesterday's Heroes: Compensation and Creative Risk Taking* (Dec. 2009) (working paper), available at http://www.princeton.edu/~hhong/heroes_dec09.pdf.

29. Many argue that compensation, at both the executive and the trader level, played a major role in causing excessive risk-taking, including ROUBINI & MIHM, *supra* note 7, at 68-69; STIGLITZ, *supra* note 7, at 151-55. Others claim that compensation was not a major part of the problem, including Steve Bainbridge. Steven M. Bainbridge, *Dodd-Frank: Quack Federal Corporate Governance, Round II*, 95 MINN. L. REV. 1779, 1808-10 (2011); see also Fahlenbrach & Stulz, *supra* note 27.

30. Many point to this moral hazard problem. See e.g., RAJAN, *supra* note 7, at 18, 131; ROUBINI & MIHM, *supra* note 7, at 70-72.

31. There is evidence, though, that the biggest banks do have a lower cost of capital, possibly reflecting a belief that they will get bailed out of trouble. Dean Baker & Travis McArthur, *The Value of the "Too Big To Fail" Big Bank Subsidy*, CENTER FOR ECONOMIC POLICY AND RESEARCH (Sept. 2009), <http://www.cepr.net/index.php/publications/reports/too-big-to-fail-subsidy/>.

32. ROUBINI & MIHM, *supra* note 7, at 196; Frank Partnoy, *The Siskel and Ebert of Financial Markets?: Two Thumbs Down for the Credit Rating Agencies*, 77 WASH. U. L.Q. 619, 623-24 (1999).

agencies have strong reason to make the issuer happy by rating the bonds highly.

- *Herd behavior.* As money managers are often measured by their performance relative to their competitors, it may make sense to follow their competitor's strategies, even if that creates a risk of serious losses should that strategy go wrong. Should the strategy fail, everyone will be in the same boat and individual managers will get little blame.³³
- *Optimism.* As we shall see Minsky emphasizing,³⁴ as booms continue, investors forget downturns and come to believe the good times will last forever: This time it's different. To anyone who paid any attention to the credit rating agency models or the internal models of financial companies, the assumption that national housing prices could not significantly decline should have been obviously suspect. Yet few people chose to question the boom and act on those questions.³⁵ I believe that this is the most important reason for the crisis, and this is problematic for the future because it is also the element that has least to do with poor institutional design and is most tied to intractable elements of human psychology.
- *The above factors interacted with each other perniciously.* Rajan writes persuasively of how the system encouraged financial companies to take on tail risk—that is, to achieve high returns that had a small—but as it turned out, non-zero—chance of large future losses. Compensation favored a short time horizon, with traders not punished for big losses that occurred at a later date. Unduly high credit ratings made the risk appear smaller than it actually was, and if things did go wrong, they would go wrong for many players at once, leaving fewer individuals identifiably responsible. And behind all this was

33. RAJAN, *supra* note 7, at 139; Claire A. Hill, *Why Didn't Subprime Investors Demand (Much) More of a Lemons Premium*, 74 LAW & CONTEMP. PROBS. 47, 50 (2011); Claire A. Hill, *Who Were the Villains in the Subprime Crisis, and Why It Matters*, 4 ENTREPREN. BUS. L.J. 323, 345 (2010).

34. *Infra* notes 95-97 and accompanying text.

35. Some did, and some of them became very, very rich. See, e.g., MICHAEL LEWIS, *THE BIG SHORT: INSIDE THE DOOMSDAY MACHINE* (2010). But market arbitrage is risky with lots of costs involved, and so typically not enough of it occurs to bring prices into line. Andrei Shleifer & Robert Vishny, *The Limits of Arbitrage*, 52 J. FIN. 35, 46-47 (1997).

always the possibility (and in the end the reality) of government bailouts.³⁶

The CDS derivatives used to redistribute risks on MBS bonds also caused problems. A few big players—above all AIG—dominated this market, and issued insurance at extremely low prices. As defaults started to occur in large numbers, AIG found itself unable to honor its obligations and was taken over by the government. And here “counterparty risk” entered the general public’s lexicon. Many major companies had contracts with AIG and stood to lose vast sums of money when AIG could not pay. Given a lack of transparency in this market, it was not well known who was exposed to counterparty risk, and this helped fuel suspicion and panic as distrust spread.

Worst of all was the financing of MBS bond purchases at the far end of the securitization chain. As defaults started to occur in unexpectedly large numbers, bonds became riskier and less valuable. Because of their complexity, it was hard to determine where these heightened costs would fall. Originally over-valued, the price of the bonds started to drop. Persons in the commercial paper and repo markets who had been willing to lend based on MBS bonds as assets became suspicious, as they had trouble telling which bonds were safe and which were not. As fear spread, these persons moved from an overly optimistic assumption that all bonds were fine to an overly pessimistic assumption that none were safe, and they started to charge higher interest rates or require higher “haircuts” on repos as investors tried to roll over their loans, or became unwilling to lend at any price.³⁷

This put pressure on the MBS investors who needed to roll over their loans. Theoretically, an MBS bond market should have helped as compared with traditional bank runs, because part of the problem for traditional banks was that there was no market for their loans, so they could not raise money by selling their loans when necessary. But at this crucial moment, the MBS bond markets, never all that liquid to begin with, became illiquid. Everyone wanted to sell all at once, as many investors faced the same problem at the same time. No one wanted to buy. Arbitrageurs were willing to buy, but only at very low prices, given the costs and risks of arbitrage. Investors were unwilling to sell at such low prices because doing so would force them to record losses on their balance sheets,³⁸ and they preferred to hold on as long as possible in the

36. RAJAN, *supra* note 7, at 17-18.

37. GORTON, *supra* note 7, at 133-35.

38. Many believe that mark to market accounting exacerbated this problem, though its role in the crisis is controversial. *See id.* at 130-32; *see also* Tobias Adrian & Hyun

hope that the markets would steady. But some were forced to sell at fire sale prices, and the price of MBS bonds plummeted. Thus, the basic logic of bank runs re-asserted itself in the shadow banking world. Financial institutions had invested in MBS bonds, long-term assets that, in a pinch, were not liquid, and they had financed those assets with short-term, highly liquid debt. When the holders of that debt became distrustful, trouble ensued.³⁹

One debate is how much the MBS bond price drop represented a rational adjustment to the real underlying risk of default. One view is that MBS bonds were just bad assets, and the companies holding them were in many cases insolvent. This is the fundamentalist theory of bank runs.⁴⁰ A different view is that just as markets over-reacted in setting prices too high initially, they then over-reacted in the other direction and set prices too low. This is the liquidity theory of bank runs.⁴¹ As usual, both have some truth. An important question, which economists must eventually sort out, is the relative contribution of each story to this crisis.

The crisis spread to other financial markets. Many financial companies lost money through their ownership of MBS bonds and CDS derivatives and the like. They became much less willing to make new loans as they conserved cash to try to preserve their balance sheets. The balance sheets for big companies were murky to outsiders (and to insiders, for that matter), so it was quite unclear who had been hardest hit. That lack of clarity led to spreading mistrust, and financial companies became unwilling to deal with each other based on the fear that new potential debtors would be unable to repay their loans.⁴² And then, as is normal with financial crises, the downturn spread from financial markets to the real world; as businesses found themselves unable to get loans, unemployment grew, and this in turn caused consumers to cut back. This cutback fed back into the financial crisis, as housing mortgage defaults spread well beyond subprime mortgages, worsening the whole MBS market fiasco.

We have identified a number of specific problems that the crisis has revealed, and have also seen its general similarity to a traditional bank run, albeit with major details altered. Other trends helped feed the boom that led to the bust. The Federal Reserve kept interest rates quite low for years following the recession at the beginning of the decade, which

Song Shin, *Liquidity and Leverage 30* (May 2008) (unpublished manuscript), available at <http://www.princeton.edu/~hsshin/www/LiquidityLeverage.pdf>.

39. GORTON, *supra* note 7, at 125-27.

40. See *supra* note 11 and accompanying text.

41. See *supra* note 12 and accompanying text.

42. See GORTON, *supra* note 7, at 112-13.

helped pull money into financial markets.⁴³ High levels of savings in several large countries, particularly China, also poured into the U.S. financial system. Various government policies encouraged too much investment in the housing market, including tax laws and Fannie Mae and Freddie Mac. The relative importance of these various factors and the types of financial market failures that I have stressed is heavily debated.⁴⁴

If we now think about what happened at a higher level of abstraction, we can see the crisis as a stage in the evolution of the financial world as an evolving complex system.⁴⁵ We might say that the modern financial system features “complexity cubed.”⁴⁶ There are three layers of difficulties:

- Individual financial products—those MBS bonds—have become extremely complicated and hard to understand and value. This confusion builds as, over time, modular elements of older products are combined in new ways.⁴⁷
- Large financial companies have also become more complicated, offering more complicated products and operating in more sophisticated markets. It is not clear that the people running our leading financial companies had any real sense of what their companies were worth, what some important departments were doing, or what sort of risks those departments were creating for their companies.⁴⁸ Certainly few outsiders, regulators included, understood these matters.

43. RAJAN, *supra* note 7, at 15. But monetary policy is hard: slow employment growth in recoveries following recent recessions creates pressure to keep interest rates down until employment recovers.

44. *Compare, e.g.*, Paul Krugman & Robin Wells, *The Slump Goes On: Why?*, N.Y. REV. BOOKS, Aug. 31, 2010, <http://www.nybooks.com/articles/archives/2010/sep/30/slump-goes-why/>, with Raghuran Rajan, *Reviewing Krugman*, IGM FORUM (Sept. 16, 2010), <http://faculty.chicagobooth.edu/brian.barry/igm/reviewingkrugman.pdf>.

45. *See generally* W. BRIAN ARTHUR, ET AL., THE ECONOMY AS AN EVOLVING COMPLEX SYSTEM II (Santa Fe Inst. Ser. No. 27, 1997).

46. We might say it, but note, using “complexity” in the sense developed at the Santa Fe Institute, *see id.*, the first two levels of complexity in the text may really just be complicated, not complex. The editors of the Santa Fe Institute volume identify six features of the economy that collectively help define the complexity approach to economics: dispersed interaction, no global controller, cross-cutting hierarchical organization, continual adaptation, perpetual novelty, and out-of-equilibrium dynamics. *Id.* at 3-4. But “complicatedness cubed” doesn’t sound as good.

47. Which arguably may make them complex in the technical sense.

48. ROUBINI & MIHM, *supra* note 7, at 208.

- Markets have become increasingly complex⁴⁹ as these financial products and companies interact in new and unexpected ways. Innovations breed new innovations at a fast rate. The system is quite tightly coupled, as developments in one market quickly affect other markets through a series of ties between them.

Complex systems of this sort can be fiendishly hard to understand and predict. Recent past experience can be highly misleading—such a system can coast along smoothly for years before becoming highly chaotic and unstable. Positive feedback mechanisms can lead to sustained bubbles, which then burst and become sustained busts.⁵⁰ Coordinated expectations can extend the booms and then the busts even if underlying economic fundamentals are barely changed.⁵¹

Pity the poor regulator faced with such a system, particularly where that system is critical to the health of our entire economy and society. Not even the highly-trained and motivated persons running the biggest companies can predict where the system is headed, or when and what in detail⁵² may go wrong. Government regulators, at least in the U.S. where government service is less socially valued than in many other advanced economies, are likely to be behind the ball, and when they do concoct new regulations to address perceived risks, market participants will quickly adapt to get around those regulations as much as possible.⁵³

And yet, the task of financial regulation is not completely impossible. Following the New Deal financial regulations, the U.S. enjoyed roughly a half-century of relative stability and high growth, far and away the longest such period in our nation's history. Why did that period come to an end? Opinions differ, to say the least. I would point to two main trends. First, the monetary and fiscal policy that propped up the economy when crises threatened was ultimately inflationary, as overly-risky new financial strategies went unpunished.⁵⁴ The inflation of

49. And here I really do mean complex in the technical sense.

50. W. Brian Arthur et al., *Asset Prices Under Endogenous Expectation in Artificial Stock Markets*, in W. BRIAN ARTHUR ET AL., *THE ECONOMY AS AN EVOLVING COMPLEX SYSTEM* II 15 (1997).

51. The business cycle theories of Minsky and to a lesser extent Hayek exhibit these features. See *infra* Part III.C.

52. That “in detail” matters a lot. The general contours repeat over time, but regulators must address the details.

53. Perhaps the most sustained attempt by a law professor to analyze financial regulation from the standpoint of complexity theory is by Steven Schwarcz. See Steven L. Schwarcz, *Regulating Complexity in Financial Markets*, 87 WASH. U. L. REV. 211 (2009); Schwarcz, *Systemic Risk*, 97 GEO. L. J. 193 (2008); Schwarcz, *Markets, Systemic Risk, and the Subprime Mortgage Crisis*, 61 SMU L. REV. 209 (2008).

54. We shall see that this is a common thread for both Hayek and Minsky. See *infra* Part III.C.

the nineteen-seventies eventually undermined the Keynesian approach. Second, decades of stability and profits induced financial sector entrepreneurs to try new innovations, and to push for deregulation to allow such innovations. As memories of the Great Depression disappeared, caution and restraint became harder to maintain.⁵⁵ Even though the New Deal structure still underlies our system of financial regulation, that regulatory structure has been much weakened and the financial system has become far more complex and diverse. Regulators today must try to make sense of a bewildering new world that in many ways they do not understand, and which keeps shifting in front of them, partially in response to their attempts at reining it in.

III. HAYEK, OAKESHOTT, KEYNES

How do we go about regulating financial markets and institutions in light of the vast uncertainty that confronts both the regulators and the regulated? The problem is not unique to the world of finance. Indeed, almost any intellectually honest attempt to apply consequentialist reasoning to devising rules in any sphere where serious debate exists runs into a wall. Both theory and facts speak with forked tongues. Harry Truman wished in vain for a one-handed economist (to switch metaphors to a different body part).

But while our dilemma is not unique to financial regulation, it is particularly acute here. Participants in financial markets must value all sorts of instruments and entities whose value depends upon uncertain future events. Lots of money is bet on those futures. The presence of big money and the lure of future riches when the bets pay off attract thousands of very bright and highly motivated persons. They use their brains to devise a dizzying array of schemes, growing ever more complicated as they morph rapidly while drawing upon the structures of past schemes. Money flows in these markets determine which businesses have money to expand, while also providing the short and medium term financing that many businesses need to survive the ebbs and flows of revenues and expenditures: if capital markets fail, capitalism fails. History, measured in both months and centuries, suggests that no society has been able to maintain a financial system that is both dynamic and stable for very long. Failing to regulate the financial system is highly likely to result in economic strife. And yet, we must

55. Allegedly, John Kenneth Galbraith predicted that the next great American financial crisis would occur 15 years after the first post-Depression President was elected. Bill Clinton, born in 1946, was elected in 1992; the crisis hit in 2007. It may be apocryphal, but it's such a great story that who has the heart to check up on it?

still choose (even choosing to do nothing and let markets do their thing is a choice).

But our ignorance, while vast, is not complete. We do have some economic theory to give us guidance as to what financial markets do well and where they tend to have problems, and we have plenty of historical experience from which we can learn. In Part II, I laid out some of the major elements that steered America's financial system into its latest crisis. As this paper continues I will expand upon that discussion. How should we use what knowledge we do have to design financial regulation, while remaining aware of how limited that knowledge is?

Given the limits of our knowledge, we must necessarily fall back upon broad background understandings of how we should regulate. Technical economic studies, though important, are not enough because they do not answer enough of our questions. We all come to social and economic problems with certain attitudes and preconceptions that will play a major role in shaping our responses. These background preconceptions need not go unquestioned, however. We can examine these preconceptions at a general level, and see how much help they give us in understanding and responding to this crisis.

It is here, then, that we turn to our three great guides to how to go about regulating in the face of uncertainty: Hayek, Oakeshott, and Keynes. Why these three men? There are several reasons. For one, a central concern is how to regulate a complex social system in the face of pervasive uncertainty and limited knowledge, and we want as our guides thinkers who faced up to our limited knowledge and put it at the forefront of their thinking. Hayek, Oakeshott, and Keynes are three of the twentieth century's most acute thinkers about social action in the face of pervasive uncertainty. Two of them, Hayek and Keynes, were and remain among the most deep and creative theorists of the relationship between financial markets, uncertainty, and business cycles.

Beyond that, the three men give us high-level representative thinkers within each of the three leading intellectual and political tendencies that dominate American public life: libertarianism, conservatism, and Progressivism or liberalism. Most Americans, myself included, feel tugs of at least some real urgency in each of these directions. Thinkers and schemes that fall well outside of these three tendencies are simply not viable options within the U.S. today.⁵⁶ Thus,

56. Were I European, I would probably want to include a thinker within the socialist, or at least social democratic, tradition (and no, Keynes does not count). But I'm not European. Moreover, I am rather hard-pressed to think of a major thinker within that tradition who really grapples with uncertainty and the limits of reason at the core of his or her thinking. Were I to include a fourth person, it might well be John Dewey. While not quite a socialist within the European tradition, Dewey was a more thoroughly Progressive

in this part and the next I shall explore how arguably the greatest thinkers on the limits of human reason within our three leading political and intellectual traditions approach the task of regulating within the limits of our knowledge, and also how each critiques the strategies of the others.

A. *Hayek*

Hayek is probably the most profound and possibly the most influential⁵⁷ libertarian thinker of the twentieth century. Libertarian ideas have profoundly affected American thought and politics from the Founding Fathers to the Tea Partiers today. In his most profound essay, Hayek stresses the vastness of the problem of using knowledge to make economic decisions.⁵⁸ Knowledge is spread among all human beings, but much of that knowledge is tacit and cannot be systematized, written down, or communicated to others. As Hayek wrote:

[T]here is beyond question a body of very important but unorganized knowledge which cannot possibly be called scientific, in the sense of knowledge of general rules: the knowledge of the particular circumstances of time and place. It is with respect to this that practically every individual has some advantage over all others because he possesses unique information of which beneficial use might be made, but of which use can be made only if the decisions depending on it are left to him or are made with his active cooperation.⁵⁹

Thus, decision-making must be mostly decentralized, with each person deeply involved in the decisions focused on their own personal circumstances, if we are to use much of the important knowledge that humans possess. With the advance of civilization this becomes ever more true, as persons become more specialized and more of their activities embody tacit knowledge built up from past practices.⁶⁰ And yet, these decentralized decisions must be coordinated. Prices in the market system perform that function, conveying in simple signals

figure than Keynes, and would provide us with a harder push in that direction. Moreover, Dewey can be seen as a quite interesting thinker on the role of uncertainty and the limits to reason, though perhaps less explicitly so than the three considered here. For a very thoughtful treatment of Dewey from that perspective, which closely compares Dewey with Hayek, see Colin Koopman, *Morals and Markets: Liberal Democracy Through Dewey and Hayek*, 23 J. SPECULATIVE PHIL. 151 (2009).

57. Touche, Milton Friedman.

58. Friedrich A. Hayek, *The Use of Knowledge in Society*, 35 AM. ECON. REV. 519 (1945).

59. *Id.* at 521-22.

60. *Id.* at 522-24.

information about the costs and benefits to others of activities, so that each of us can account for the costs and benefits of our own decisions.⁶¹

Central planning, the state's effort to dictate economic decisions in great detail, is thus doomed because it cannot access critical information necessary for achieving any remotely efficient result. But matters are worse than this suggests. Not only is central planning doomed to fail to supply rational means to achieve its ends, but also planning in detail must involve the state in deciding among conflicting ends advanced by competing persons and groups.⁶² Trying to solve this conflict requires putting great discretionary power in the hands of administrative agencies. Given their lack of information, these agencies must fail in their tasks. But in the process of failing these agencies will spread their tentacles further and further into all areas of the economy and society. In *The Road to Serfdom*,⁶³ Hayek argued that this expansion of administrative agencies would ultimately lead to totalitarianism.

Hayek was thus particularly alarmed at the development of the modern administrative state, and he pondered how state agencies could be made consistent with liberty. Hayek resolved that agencies must conform to the rule of law. Statutes and regulations under the rule of law must dictate answers in advance, rather than allowing administrators to apply their own judgment as to the best outcome in particular circumstances *ex post*. Wrote Hayek in *The Constitution of Liberty*:

The conception of freedom under the law that is the chief concern of this book rests on the contention that when we obey laws, in the sense of general abstract rules laid down irrespective of their application to us, we are not subject to another man's will and are therefore free. It is because the lawgiver does not know the particular cases to which his rules will apply, and it is because the judge who applies them has no choice in drawing the conclusions that follow from the existing body of rules and the particular facts of the case, that it can be said that laws and not men rule.⁶⁴

Given this conception of the rule of law, the welfare state and the regulatory state pose threats much like that which central planning poses, because the spread of powerful administrative agencies with large degrees of discretion is very similar. Hayek would surely condemn the vast vesting of discretion in administrative agencies that is a key

61. *Id.* at 525-27.

62. Hayek, *Freedom and the Economic System*, 153 CONTEMP. REV. 434, 439 (1938).

63. HAYEK, *THE ROAD TO SERFDOM* 49-51 (1944).

64. HAYEK, *THE CONSTITUTION OF LIBERTY* 153 (1960).

characteristic of the Dodd-Frank Act. We shall have to think very carefully about this discretion when we turn to analyzing the Act later.

Yet despite his alarm at the growth of the modern state, Hayek believed that the state does play an important role. “Probably nothing has done so much harm to the liberal cause as the wooden insistence of some liberals on certain rough rules of thumb, above all the principle of *laissez faire*.”⁶⁵ Hayek recognized that the market on its own will get some important things wrong, and that the state must address this issue. Hayek further recognized that stabilizing the economy so as to avoid periods of high unemployment is one of those tasks.⁶⁶ Hayek even granted that a state-run central bank with discretionary power to control the money supply is necessary for that task.⁶⁷ He did so, though, rather reluctantly, and he put more stress on avoiding the dangers of inflation rather than depression because he saw inflation as the more likely threat in the context of a spreading administered economy.⁶⁸

Hayek has been influential in the deregulatory tendencies of recent decades. He was a major influence on Margaret Thatcher, for instance.⁶⁹ Many developments in economics over the last few decades have suggested that markets generally work on their own and that government intervention is usually unwise. But the belief that markets generally work on their own assumes an unrealistic degree of perfection in markets and is thus less realistic and wise than Hayek’s own arguments. Some modern analyses, however, including those done on financial crises, have admitted serious imperfections in markets yet have still argued against government intervention because the information required to properly intervene is quite detailed and without such information intervention may well make things worse. This sort of analysis gives more formal and detailed support for the kinds of arguments Hayek made.⁷⁰

B. Oakeshott

Michael Oakeshott was one of the twentieth century’s most important thinkers in the conservative tradition of Edmund Burke. A profound analysis of knowledge and the limits of rationalism lies at the heart of Oakeshott’s thought—his most famous essay is titled

65. HAYEK, *THE ROAD TO SERFDOM* 71 (1944).

66. *Id.* at 148-49; HAYEK, *THE CONSTITUTION OF LIBERTY* 264 (1960).

67. HAYEK, *THE CONSTITUTION OF LIBERTY* 334-37 (1960).

68. *Id.* at 327-28.

69. For some quotes from Thatcher lauding Hayek, see *The Friedrich Hayek Quote Page*, TAKING HAYEK SERIOUSLY, <http://hayekcenter.org/friedrichhayek/hayekquote.htm#liberalism> (last visited June 25, 2011).

70. A good example is ALLEN & GALE, *supra* note 9.

Rationalism in Politics.⁷¹ Oakeshott starts with an analysis of human knowledge quite close to that of Hayek. He distinguishes technical knowledge from practical or traditional knowledge. Practical knowledge “exists only in use, is not reflective, and (unlike technique) cannot be formulated in rules.”⁷² Oakeshott frequently illustrates the distinction with the use of tools. Although one can learn some aspects of using tools from written directions, much knowledge comes from experience that cannot be put down and passed on in words.⁷³

Oakeshott argues that modern thought puts far too much emphasis on technical knowledge. This emphasis on technique has extended to modern politics. Politics has come to be seen by intellectuals and academics as applying reason to solve various social problems: “The conduct of affairs, for the Rationalist, is a matter of solving problems, and in this no man can hope to be successful whose reason has become inflexible by surrender to habit or is clouded by the fumes of tradition.”⁷⁴

Oakeshott believed that such rationalism is doomed to failure, because its understanding of knowledge is too thin and will thus serve as an inadequate guide to action. Wrote Oakeshott, “[The rationalist’s] knowledge will never be more than half-knowledge, and consequently he will never be more than half-right.”⁷⁵

Oakeshott defends conservatism as a disposition based in part upon the inadequacy of technical knowledge as a guide to action. Our modern, liberal society contains many very different types of persons pursuing very different types of ends and behaving in very different types of ways. But over time, we have learned to adjust our behavior to those of others. “Our conduct consists of activity assimilated to that of others in small, and for the most part unconsidered and unobtrusive, adjustments.”⁷⁶

A rationalist examines individualistic behavior and wants to impose his or her own vision of optimal outcomes. But a conservative is deeply skeptical of anyone’s ability to do so in a way that does not lead to bad outcomes. The conservative believes that:

[I]t is beyond human experience to suppose that those who rule are endowed with a superior wisdom which discloses to them a better

71. MICHAEL OAKESHOTT, *Rationalism in Politics*, in RATIONALISM IN POLITICS AND OTHER ESSAYS 12 (1962).

72. *Id.*

73. *Id.* at 14.

74. *Id.* at 9.

75. *Id.* at 36. Though half-right ain’t half-bad.

76. OAKESHOTT, *On Being Conservative*, in RATIONALISM IN POLITICS AND OTHER ESSAYS 407, 425 (1962).

range of beliefs and activities and which gives them authority to impose upon their subjects a quite different manner of life.⁷⁷

A further argument is based directly upon the difficulty of predicting the consequences of attempted political reforms. Change means upsetting existing conditions, conditions to which we have evolved and with which we have become comfortable, or at least accommodated ourselves. It involves only uncertain future benefits, and likely unintended bad consequences. The burden of proof thus must be on reformers to produce good reasons as to why we should engage in their pet projects. As Oakeshott puts it:

Whenever there is innovation there is the certainty that the change will be greater than was intended, that there will be loss as well as gain and that the loss and the gain will not be equally distributed among the people affected; there is the chance that the benefits derived will be greater than those which were designed; and there is the risk that they will be off-set by changes for the worse.⁷⁸

In making this argument, Oakeshott followed a perhaps unlikely predecessor: Keynes. The great biographer of Keynes, Robert Skidelsky, lays much emphasis upon an undergraduate essay by Keynes on Burke. A key argument in the essay prefigured Keynes's later understanding of uncertainty:

Burke ever held, and held rightly, that it can seldom be right . . . to sacrifice a present benefit for a doubtful advantage in the future. . . . It is not wise to look too far ahead; our powers of prediction are slight, our command over results infinitesimal. . . . We can never know enough to make the chance worth taking. There is this further consideration that is often in need of emphasis: it is not sufficient that the state of affairs which we seek to promote should be better than the state of affairs which preceded it; it must be sufficiently better to make up for the evils of the transition.⁷⁹

Skidelsky believed this idea to be critical to understanding Keynes's approach to policymaking throughout his life, linking it to one of Keynes's most famous sentences from later in his life: "In the long run we are all dead."⁸⁰

Based upon this reasoning, Oakeshott concluded that we should be reluctant to try political reforms at all. Reform is likely to be more

77. *Id.* at 427.

78. *Id.* at 411.

79. Quoted in ROBERT SKIDELSKY, JOHN MAYNARD KEYNES: THE ECONOMIST AS SAVIOR, 1920-1937 62 (1992).

80. *Id.*

desirable where it is small and limited to correcting specific observed problems. It should be done slowly, with “pauses to observe current consequences and make appropriate adjustments.”⁸¹

Like Hayek, Oakeshott greatly valued liberty and limited government. However, his preference draws upon not some general economic or philosophical reasoning, but rather from the experience of being English. Oakeshott spoke approvingly of economist Henry Simons as follows:

He is a libertarian, not because he begins with an abstract definition of liberty, but because he has actually enjoyed a way of living (and seen others enjoy it) which those who have enjoyed it are accustomed (on account of certain precise characteristics) to call a free way of living, and because he has found it to be good.⁸²

Thus, Oakeshott does not give us a general prescription for what rules societies should have on any particular topic, much less our specific concern of financial regulation. Rather, Oakeshott provides a disposition for how we should go about practicing politics, and reasons for being skeptical of sweeping reforms which follow from someone’s elaborate social scientific arguments. One imagines that the significant grab for power by Congress and the financial agencies and the need for hectic rulemaking on hundreds of topics that are core elements of the Dodd-Frank Act would provoke deep skepticism from Oakeshott were he still alive.

And yet, perhaps many of the financial industry practices that caused the crisis would have provoked his skepticism as well. The financial engineering that dominated Wall Street for the last several decades represents a triumph of technique over tradition. Bankers created new financial instruments and took big risks, confident that their precise risk models would guide them well. More cautious, older methods of banking were seen as passé, at least by the cool kids who had the new ways and the big bucks.⁸³ One suspects that Oakeshott would prefer George Bailey over Mr. Potter as a model for bankers, but the

81. OAKESHOTT, *supra* note 76, at 412.

82. OAKESHOTT, *The Political Economy of Freedom, in RATIONALISM IN POLITICS AND OTHER ESSAYS* 384, 387 (1962).

83. See RAJAN, *supra* note 7, at 143. BHIDE, *supra* note 21, mounts a similar argument using Hayek’s theory of tacit information, but the argument is more persuasive within a Burkean conservative perspective—presumably Hayek would not want to interfere with this market phenomenon. *But see* discussion *supra* note 21.

Potter party has won out in modern banking.⁸⁴ How should we respond to that?

C. *Keynes*

Our final great thinker on uncertainty is John Maynard Keynes. Keynes falls within the liberal tradition, or what in the U.S. we sometimes call the progressive end of the political spectrum. Keynes turns our attention from the limitations of central planning and regulation to the limitations of the market in the face of our lack of knowledge. At the same time that Frank Knight was distinguishing between risk and uncertainty,⁸⁵ Keynes published his *Treatise on Probability*.⁸⁶ Like Knight, Keynes denied that all probability statements could be quantified. Sometimes we can assign clear numbers to probabilistic statements, such as when there is a series of related events and the event in question has been observed to occur some fraction of all occurrences. The canonical example is flipping a fair coin. Other times we can say that one event is more likely than another event but not apply a specific measure to either—we have an ordinal but not a cardinal ordering. And yet other times we cannot even say that one event is more or less likely than another event—a case of true unquantifiable uncertainty in the Knightian sense.⁸⁷

In his *General Theory*, Keynes argues that uncertainty is particularly crucial in the context of businesses making investment decisions.

[T]he entrepreneur . . . has to form the best expectations he can as to what the consumers will be prepared to pay when he is ready to supply them . . . after the elapse of what may be a lengthy period; and he has no choice but to be guided by these expectations, if he is to produce at all by processes which occupy time.⁸⁸

Moreover, “[T]he outstanding fact is the extreme precariousness of the basis of knowledge on which our estimates of prospective yield have to be made.”⁸⁹

84. See *IT'S A WONDERFUL LIFE* (Liberty Films 1946). I mean that—see it. The bank run scene explains fractional reserve banking and bank runs better than I do *supra* Part II.

85. FRANK H. KNIGHT, *RISK, UNCERTAINTY, AND PROFIT* (1922).

86. JOHN MAYNARD KEYNES, *A TREATISE ON PROBABILITY* (1921).

87. See *id.* at 20–40.

88. JOHN MAYNARD KEYNES, *THE GENERAL THEORY OF EMPLOYMENT, INTEREST, AND MONEY* 46 (Harcourt Brace Jovanovich 1964) (1936).

89. *Id.* at 149.

What then are entrepreneurs to do, given the need to make expensive decisions in the face of grave uncertainty? They fall back on conventions, the strongest of which is that the present will closely resemble the recent past.⁹⁰ But these conventions are brittle and subject to rapid fluctuation. Much depends on the general level of confidence.⁹¹ The existence of stock markets helps to a point—by providing liquidity, stock markets encourage investors to be more willing to invest, as they can withdraw their money should troubles arise.⁹² But the stock markets can instead add to instability—investments are revalued all the time, and investors can become focused on anticipating short term changes, leading to herd behavior, booms, and busts.⁹³ When the busts are significant, even very low interest rates may not be enough to induce new investment. What is needed is a return of confidence, but that is elusive and near-impossible to dictate.⁹⁴

Hyman Minsky has probably done more than any successors of Keynes to extend this aspect of Keynesian analysis. Minsky analyzed the banking industry in detail. He showed how, in the presence of widespread high degrees of leverage, even relatively small bad news can lead to a downward cascade: as borrowers default, banks face possible runs, and banks become unwilling to lend additional funds.⁹⁵ Sound familiar? Minsky's analysis is anchored in the understanding of banking crises discussed in Part II.

More depressingly (and hence insightfully), Minsky argued that periods of financial calm lead to their own demise. As memories of bad times dim, banks and businesses become willing to take on more risk.⁹⁶ Leverage (a great way to increase profits as long as things go well) grows and financial innovations proliferate. But once everyone has taken on huge piles of debt, the stage is set for a financial crisis and recession.⁹⁷

Thus, left to their own devices, private financial markets and institutions are unstable due to the uncertainties that attend large investments over time. Can the state do anything to stabilize this reality? Keynes focused mainly on macroeconomic tools: monetary and fiscal policy. Intelligent policy can reign in booms and help stimulate the

90. *Id.* at 152.

91. *Id.* at 148.

92. *Id.* at 150-51.

93. *Id.* at 150-55.

94. *Id.* at 315-17.

95. HYMAN P. MINSKY, *STABILIZING AN UNSTABLE ECONOMY* 219-45 (2ded. 2008).

96. *Id.* at 237.

97. *Id.* at 244-45. Beyond the dimming of memories of bad times, another piece of psychology may worsen the tendency. Gamblers tend to take on more risk after a bout of winning—they see themselves as playing with house money.

economy out of busts. Is regulation of financial institutions and markets a part of the Keynesian solution? Keynes himself did not say much on that question. He was certainly open to the possibility of serious government regulation in general, as the title of his essay *The End of Laissez-Faire* suggests.⁹⁸ And given that Keynes saw financial markets as a core source of instability, they certainly seem a plausible candidate for regulation.

Yet, Keynes does not clearly make a case for regulating financial markets generally, much less set out in any sort of detail what such regulation might look like. About the only specific proposal of such sort one finds in the *General Theory* is the suggestion of a transfer tax on stock exchange transactions.⁹⁹ Beyond that, he vaguely suggests the “socialization” of investment decisions.¹⁰⁰ Whatever that means.

Minsky gives some more detail, and as per his character, Minsky does so with greater pessimism than Keynes. State interventions to save failing financial institutions and prop up the economy are likely to encourage further financial speculation, as private actors have less fear of failure—a problem that is now obviously pressing. Disaster is averted, but Minsky argues that inflation results.¹⁰¹ Minsky sees financial regulation as an important part of an adequate response,¹⁰² but he does not provide much detail. This is partially because he sees the regulatory task as constantly evolving. Banks will adapt their strategies in response to whatever regulators do, requiring further responses from the regulators.¹⁰³ The task is Sisyphean,¹⁰⁴ but necessary.¹⁰⁵

A Keynesian perspective also helps call attention to how the growth of the financial sector has helped increase economic and political inequality in recent decades.¹⁰⁶ Not only have participants in the financial markets been among the biggest winners in recent years, but the growth of markets has also played a major role in the growth of

98. KEYNES, *The End of Laissez-Faire* (1926), reprinted in *ESSAYS IN PERSUASION* 312 (W. W. Norton & Co. 1963).

99. KEYNES, *supra* note 88, at 160.

100. *Id.* at 378, 164; cf. Keynes, *supra* note 98, at 318.

101. Minsky, *supra* note 95, at 301.

102. *Id.* at 349-65.

103. *Id.* at 370.

104. “One must imagine Sisyphus happy.” ALBERT CAMUS, *The Myth of Sisyphus, in THE MYTH OF SISYPHUS AND OTHER ESSAYS* 119, 123 (Justin O’Brien trans., Vintage International 1991) (1942).

105. In Brett McDonnell, *Of Mises and Min(sky): Libertarian and Liberal Responses to Financial Crises Past and Present*, 34 SEATTLE U. L. REV. 1279 (forthcoming 2011), I go into more detail on the development of a post-Keynesian approach to financial regulation.

106. See, e.g., PAUL KRUGMAN, *THE CONSCIENCE OF A LIBERAL* (2007); PAUL KRUGMAN, *THE RETURN OF DEPRESSION ECONOMICS AND THE CRISIS OF 2008* (2009).

compensation for CEOs and other top managers, and hence in growing inequality within corporations. The financial sector has achieved great political power, as demonstrated by its ability to lobby for major bailouts with remarkably little punishment of the leaders of the bailed-out companies during the recent crisis.¹⁰⁷

Subsequent economists have extended and deepened the insights of Keynes and Minsky. Minsky himself is often linked with a group of economists known as “Post-Keynesians.” These economists were less mathematically inclined than the post-World War II mainstream, and less inclined to compromise Keynes’s ideas with neoclassical ideas than the mainstream Keynesianism that dominated economics departments for several generations. Besides Minsky, the most important post-Keynesian is Paul Davidson.¹⁰⁸

A somewhat more conventional group of economists called the “New Keynesians” has extended Keynes’s work using more formal models. The most important strand of this school uses developments in the theory of asymmetric information to help give microfoundational explanations for failures in labor and credit markets. Joseph Stiglitz is the most important figure in this strand of work influenced by Keynes.¹⁰⁹

More recently, economists have moved away from the rationality assumption that has dominated the profession’s mainstream. Economists have explored various ways in which psychologists have suggested people will vary from that model. Some economists recently have applied this so-called behavioral economics to macroeconomic questions. The results often tend to follow a Keynesian line, and give some more detail to the idea of “animal spirits.”¹¹⁰

IV. A CIRCLE OF CRITIQUES

Hayek, Oakeshott, and Keynes each make persuasive points about the behavior of states and markets in the face of uncertainty and the limits to our knowledge. But they cannot all be right, can they?¹¹¹ Or rather, maybe they are all too right, but mainly to the extent that they demonstrate the failure of various human institutions given our ignorance. In this part, I use the ideas of each to critique the ideas of the

107. See JOHNSON & KWAK, *supra* note 7, at 179-88.

108. See generally PAUL DAVIDSON, *THE KEYNES SOLUTION: THE PATH TO GLOBAL PROSPERITY* (2009).

109. See generally STIGLITZ, *supra* note 7.

110. GEORGE A. AKERLOF & ROBERT J. SHILLER, *ANIMAL SPIRITS: HOW HUMAN PSYCHOLOGY DRIVES THE ECONOMY, AND WHY IT MATTERS FOR GLOBAL CAPITALISM* (2009).

111. “But Tevye, they can’t both be right. Tevye: You are right too.” JOSEPH STEIN AND SHELDON HARNICK, *FIDDLER ON THE ROOF* (1964).

others. Thus, I start by showing how Keynes and Oakeshott can be used to critique Hayek, and then similarly show how we can critique Oakeshott and Keynes in turn. If persuasive, we will reach the end of this section wondering how we can have any idea at all about what to do. Hence another alternative title for this essay:

Alternative Title: If These Guys Don't Know, Then How Can I? Hayek, Oakeshott, and Keynes on Uncertainty and Financial Regulation.

A. *Keynes & Oakeshott v. Hayek*

The Keynesian critique of Hayek is obvious. Hayek dwells on the many benefits of markets, but he is insufficiently aware of their costs. In particular, Keynes and various post-Keynesians (especially Minsky) have persuasively shown how financial institutions and markets generate systemic instability. History supports their theory: before New Deal stabilization measures were put in place, the American economy faced significant financial crises every fifteen to twenty years.¹¹²

Hayek argued that these crises were often caused by bad government policies, but his analysis in the 1930s of cycles in credit, prices, and production suggests a more subtle story.¹¹³ Hayek emphasizes the importance that more capital-intensive production involves investment decisions that take time, and typically more time for more capital. Entrepreneurs may make mistakes and over-optimistically invest in processes that prove not worth it. At some point they realize the errors of their ways. At that point, they pull back. This sets in motion a contractionary process of recession or depression.

Hayek emphasizes overly-expansive monetary policy as the cause of this malinvestment. However, others have noted that the logic of the story suggests that malinvestment episodes could well have other causes. That is, modern financial institutions, on Hayek's own theory, generate instability. Indeed, there is much in common between Hayek's theory and Minsky's theory.¹¹⁴

Hayek argues further that once the market begins to unwind the malinvestments, the government can do nothing to help. Government interference will simply delay the adjustment and make it worse in the long run. However, once one realizes that Hayek's theory of the business cycle points to deep instability in private markets, it is not clear why the government cannot help. Simply put, one can argue for a *laissez-faire* approach either because one believes that markets work well

112. CONG. OVERSIGHT PANEL, SPECIAL REP. ON REGULATORY REFORM 2 (Jan. 29, 2009).

113. See generally FRIEDRICH A. HAYEK, PRICES AND PRODUCTION (1931).

114. McDonnell, *supra* note 105.

and government intervention isn't needed, or because even though markets may have big, systematic, and identifiable problems, government intervention is likely to make things even worse. Much of the time, Hayek largely tries to take the former position, and certainly his followers in academia and in politics tend to do the same. But the logic of his theory of credit and production suggests that only the latter defense of laissez-faire is truly honest. Given the serious failure of markets to ensure stability, we need a very strong case indeed for the inevitable failure of government intervention. The fact that for a half century after the New Deal America achieved by far its most stable financial markets ever, and that this stability broke down only after years of financial deregulation, is powerful evidence against Hayek's anti-regulation hypothesis.¹¹⁵

Hayek's position is also a political non-starter. In the face of the Great Depression, Hayek argued that we should do nothing and wait for the storm to pass, even though it might take years. Such a position was political poison then, and it is even more so today as the President is, above all else, subject to judgment based on the state of the economy. Moreover, private market actors can and do anticipate that, and after the massive bailouts of the last crisis, they can and should expect the same next time, no matter how much some subsequent Hayekian regulators might want to say it ain't so. This implicit guarantee creates a severe moral hazard problem—financial market participants will take risks knowing that if they act in an ill-advised manner, they are likely to be bailed out. Hayekians (and others) may deplore this notion, but it is an inescapable reality, further undoing the case for laissez-faire financial regulation.

Oakeshott offers a more subtle critique of Hayek, though they have much in common. For all his criticism of rationalism, Hayek's own intellectual edifice is deeply rationalist. Reasoning from his own version of economic first principles, Hayek argued for a libertarian society that deviates in many ways from how American society—or any other society, for that matter—has evolved. Hayek calls for some radical changes from the status quo. As Oakeshott noted:

This is, perhaps, the main significance of Hayek's *Road to Serfdom*—not the cogency of his doctrine, but the fact that it is a doctrine. A plan to resist all planning may be better than its opposite, but it belongs to the same style of politics.¹¹⁶

115. For more on Keynes versus Hayek, see McDonnell, *supra* note 105.

116. Oakeshott, *Rationalism in Politics*, *supra* note 71, at 26.

The same point can be seen from the same side in Oakeshott's praise for the more Burkean libertarianism of Henry Simons quoted earlier.¹¹⁷

But why should we trust this utopian rationalist project much more than other rationalist projects? We know from the writings of Keynes and many other economists that there are good theoretical reasons to think that markets, while they have many vital strengths, also have many important weaknesses. And the history of financial instability reinforces those theoretical lessons.¹¹⁸ Hayek-style libertarians have answers to all of that theory and history, it is true. But should we take a huge bet that those libertarian answers are all correct? The principle of Burkean prudence, recognized by Keynes as well as Oakeshott, counsels against too radical a move towards laissez-faire from current policy.

As previously noted, Hayek did not believe in a pure laissez-faire approach.¹¹⁹ He recognized many areas where government intervention is needed to correct market failures, and this includes policies to stabilize the business cycle and unemployment. However, these sorts of concessions make Hayek vulnerable to Keynes's response to *The Road to Serfdom*. Keynes was greatly impressed with the book. He called it a "grand book," and said that "[m]orally and philosophically I find myself in agreement with virtually the whole of it; and not only in agreement, but in a deeply moved agreement."¹²⁰ But Keynes argued that once Hayek admitted a radical laissez-faire position to be untenable, Hayek left himself with no principled dividing line between his own position and that of Keynes:

You admit . . . that it is a question of knowing where to draw the line. You agree that the line has to be drawn somewhere, and that the logical extreme is not possible. But you give us no guidance whatever as to where to draw it. It is true that you and I would probably draw it in different places. I should guess that according to my ideas you greatly under-estimate the practicability of the middle course. But as soon as you admit that the extreme is not possible . . . you are, on your own argument, done for, since you are trying to persuade us that soon as one moves an inch in the planned direction you are necessarily launched on the slippery path which will lead you in the course over the precipice.¹²¹

117. See *supra* note 82 and accompanying text.

118. See KINDLEBERGER, *supra* note 17; Reinhardt & Rogoff, *supra* note 17.

119. See *supra* note 114 and accompanying text.

120. ROBERT SKIDELSKY, JOHN MAYNARD KEYNES: FIGHTING FOR BRITAIN, 1937-1946 284 (2000).

121. *Id.* at 285.

B. *Hayek & Keynes v. Oakeshott*

Hayek and Oakeshott have much in common. Hayek heavily praised Burkean conservatives for their appreciation of the merits of evolved institutions such as language, the common law, and morals, but he drew a strong line between his philosophy and that of conservatives in his essay *Why I Am Not a Conservative*.¹²² His leading criticism was that conservatism does not offer an affirmative vision of its own:

Let me now state what seems to me the decisive objection to any conservatism which deserves to be called such. It is that by its very nature it cannot offer an alternative to the direction in which we are moving. It may succeed by its resistance to current tendencies in slowing down undesirable developments, but, since it does not indicate another direction, it cannot prevent their continuance. It has, for this reason, invariably been the fate of conservatism to be dragged along a path not of its own choosing.¹²³

This difference is particularly important where policy has moved in a statist direction for a long period of time. Hayek would argue that liberal ideals then call for large-scale action to roll back accumulated bad governmental interventions, whereas Oakeshott and fellow conservatives would call for less change.¹²⁴ If one believes that the problems with America's current financial system stem mainly from too much government involvement, and particularly the harmful moral hazard caused by bailouts, then Oakeshott's philosophy might lead to ineffectual, low-energy attempts that fall short of the needed reform.

Another difference between Hayek and Oakeshott is in their attitude towards science, and social science in particular. As Hayek says:

Though the liberal certainly does not regard all change as progress, he does regard the advance of knowledge as one of the chief aims of human effort and expects from it the gradual solution of such problems and difficulties as we can hope to solve. Without preferring the new merely because it is new, the liberal is aware that it is of the essence of human achievement that it produces something new; and he is prepared to come to terms with new knowledge, whether he likes its immediate effects or not.¹²⁵

Thus, while Oakeshott effectively criticizes Hayek for going too far in relying on his reasoning to point us towards an ideal liberal society,

122. HAYEK, *supra* note 64, at 397.

123. *Id.* at 398.

124. *Id.* at 399.

125. *Id.* at 404.

Hayek in turn critiques conservatives like Oakeshott for not paying enough attention to what reason does have to teach us.

Keynes also helps us to see weaknesses in Oakeshott's conservatism. For one thing, conservatives like Oakeshott have little to add to help understand the ways in which financial markets and institutions may cause harm. Worse, those markets and institutions can evolve very quickly, as large potential profits induce rapid innovation. How should policymakers respond to the threats that this innovation may pose? For instance, would a Burkean conservative have allowed the creation of securitization, which required considerable governmental support to get started? Would a conservative now be willing to accept securitization given decades of experience with it, or does the crisis indicate that securitization was a mistake? Should securitization be allowed but limited in some ways, and if so, how? Vague bromides about cautious change do not help much in answering such questions. The past may teach us something, but it will tell us little about the details of what has changed, and how those changes may (or may not) cause problems.

More generally, Keynes argued that conservatives do not pay enough attention to reason. We have seen that Keynes had a great respect for Burke and drew heavily upon his cautionary principle. But Keynes was also critical of Burke with a charge that applies to fellow Burkeans like Oakeshott as well. Skidelsky put it as follows:

The undergraduate Keynes criticized Burke, as he did Moore, not for his "method," which he regarded as correct, but for his assumption that the best results on the whole are to be got by sticking to "rules," even if these are based on irrational prejudices. In short, Burke put the claims of peace and expediency over those of truth and rationality. The nearest he came to forsaking his own maxim was when he decided to speak out against the French Revolution. "For, on this occasion," Keynes wrote, "He maintained that the best possible course for a rational man was to expound the truth and take his chance on the event." But remarks like this cannot be construed as advocacy of truth-telling "regardless of consequences," for what Keynes was arguing against Burke (and in the spirit of Mill) was that "whatever the immediate consequences of a new truth may be, there is a high probability that truth will in the long run lead to better results than falsehood."¹²⁶

Note that this critique closely resembles Hayek's critique of Oakeshott—like conservatism. Both men thought that reasoned inquiry can help extend our knowledge even when it comes to understanding

126. SKIDELSKY, *supra* note 79, at 62-63.

societies and economies, and pushed to incorporate that knowledge into our approach to regulating the economy. It is no coincidence that Keynes and Hayek were both economists while Oakeshott was a non-technical philosopher. It is not clear that the general prescriptions of conservative philosophy help us very much in a technical and fast-moving area like financial regulation. Respect the past, fine, but does that mean the past as of 2000, 1970, or 1930? The financial system evolves rapidly, in part in response to our attempts at regulating it. I can think of very few instances where conservatism has importantly aided an economist's understanding of financial regulation. That is not to say that there are few conservative economists, but rather that the conservative approaches advocated by Oakeshott and Burke do not seem to play a big role in aiding analysis in this area.

C. *Hayek & Oakeshott v. Keynes*

Finally, consider how Hayek and Oakeshott would critique Keynes. Their core attack is shared: Keynes has too much faith in the power of reason to shape government action. Oakeshott specifically points to Keynes as an exemplar of the modern rationalist's overly simplistic understanding of reason:

[The rationalist] will deplore the unregulated conduct which, because it is externally unregulated, he will think of as "irrational." But it will always be difficult for him to entertain the notion that what he identified as "rational" conduct is in fact impossible, not because it is liable to be swamped by "insane and irrational springs of sickness in most men," but because it involves a misrepresentation of the nature of human conduct. He will readily admit that he has been the victim of an illusion; but the exact character of the illusion will elude him. An interesting example of this is afforded by J. M. Keynes's essay, *My Early Beliefs*, where a candid attempt to supersede what he detected as a too narrow idea of "rationality" in behavior is ruined by a failure to carry out a similar reform of the idea of "irrationality." In the end, Keynes still retains the idea of "rational" conduct as that which springs from an independently premeditated purpose, and he modifies his original exclusive attachment to such conduct by admitting that much of what it excludes (which he identifies as "vulgar passions," "volcanic and even wicked impulses," [and] "spontaneous outbursts") is valuable while nevertheless remaining "irrational." This is a confused position, and from confusion of this

sort a fresh attempt to determine the meaning of “rationality” in conduct is not likely to spring.¹²⁷

Hayek’s critique of the Keynesian reliance on a centralized rationality focuses more on the simple lack of information necessarily available to any central regulator.

This generalized philosophical critique can play out in specific narratives as to what went wrong during the Great Depression and also as to what went wrong in our current Great Recession. Hayek saw an overly expansive monetary policy leading to a bubble which must inevitably burst. Today this is a common claim: specifically, that Federal Reserve policy in the early 2000s played a major role in creating the housing bubble which led to the Great Recession.¹²⁸ One might reply that wiser policy would not have led to such problems, but the difficulty of being consistently wise is one of the main lessons to take from Hayek.

Hayek has another major complaint about Keynesian monetary policy: he believes it is inflationary. “With government in control of monetary policy, the chief threat in this field has become inflation. Governments everywhere and at all times have been the chief cause of the depreciation of the currency.”¹²⁹

Part of Hayek’s critique is political. Unions will push for a full employment policy, and governments will respond to this pressure with inflation.¹³⁰ Part of his argument is economic. As inflationary expectations take hold, the rate of inflation will need to accelerate in order to have the same effect on employment as earlier.¹³¹ Minsky’s analysis also highlights the inflationary dangers of Keynesian policy. As the government saves financial firms that have made risky innovations, either through individual bailouts or through expansive monetary and fiscal policy, this reinforces their decisions to take great risks with financial innovations. If those innovations lead to problems, the government will step in to provide solutions. In recent decades this came to be called the Greenspan put. The effect is to create an inflationary spiral, as institutions take on more and more risk, piling up ever greater leverage, and no major busts occur to stop them.¹³²

127. MICHAEL OAKESHOTT, *Rational Conduct*, in RATIONALISM IN POLITICS AND OTHER ESSAYS 99, 115 (1962).

128. See, e.g., POSNER, *supra* note 7.

129. HAYEK, *supra* note 64, at 327.

130. FREIDRICH A. HAYEK, A TIGER BY THE TAIL: THE KEYNESIAN LEGACY OF INFLATION 65-88 (Sudha R. Shenoy ed., 3d ed. 2009).

131. *Id.* at 88-95. This presaged a highly influential argument by Friedman. See Milton Friedman, *The Role of Monetary Policy*, 58 AM. ECON. REV. 1 (1968).

132. MINSKY, *supra* note 95, at 283-316.

A final Hayekian critique of Keynes is that high levels of regulation will stifle innovation. One of the greatest benefits of a market economy is that it promotes innovation and change. A key characteristic of the liberal temperament, for Hayek, is that it embraces change.¹³³ Because the financial sector is at the heart of a capitalist economy, preventing changes in finance risks preventing change throughout the economy. Some are skeptical of the value of many financial innovations in recent decades. But while some innovations have been harmful, many have been helpful. Consider, for instance, the financial innovation of venture capitalism—our current economy, and society as a whole, would be much less advanced and exciting without it. Thus, stifling creativity in finance risks stifling all economic creativity.¹³⁴

V. COWARDLY INTERVENTIONS

We have seen that each of our three thinkers takes bounded rationality and deep uncertainty very seriously. Each thinker offers important insights for how markets and governments are likely to respond in the face of such uncertainty. Each thinker also offers major critiques of the insights of their peers. In each case, I cannot help but find the critiques more persuasive than the positive insights. Perhaps that is inevitable. Our core starting point is that when it comes to finance, humans must make big decisions that have long term future effects, and yet must do so with very limited information and brains that, while impressive compared with other animals, are all-too-often not up to the task. Any institution made up of such imperfect components will have problems; even though markets may help aggregate information in clever, parsimonious ways, and well-constructed governments may help guide and constrain individual tendencies, there is only so much one can do given such suspect building blocks. “Out of the crooked timber of humanity, no straight thing was ever made.”¹³⁵

This truism suggests that my title is too optimistic. Perhaps better would be the following:

Alternative Title: We Are So Doomed: The Inevitable Failure of Financial Regulation

Or more simply: *Alternative Alternative Title:* Panic!

133. HAYEK, *supra* note 64, at 400.

134. For an argument that a relatively large amount, though far from all, financial innovation of recent decades was useful, see Robert Litan, *In Defense of Much, But Not All, Financial Innovation*, BROOKINGS INST. (Feb. 17, 2010), http://www.brookings.edu/papers/2010/0217_financial_innovation_litan.aspx.

135. Immanuel Kant, *Idea for a General History with a Cosmopolitan Purpose*, Prop. 6 (1784).

A. *Cowardly Interventions—General Guidelines*

If none of our three paradigmatic thinkers provides a fully satisfactory approach to how we should (or should not) regulate in the face of pervasive uncertainty, where else can we look for guidance? Here is where it would be really great to present my own alternative approach to action in the face of uncertainty. This is a pervasive problem throughout human conduct, so a persuasive approach for handling it would be a handy thing to have, and would garner an awful lot of citations.

Alas, I have no such grand philosophy to offer. Rather, I suggest a muddled compromise triangulating the theories of Hayek, Oakeshott, and Keynes. I advocate what I will call cowardly interventions by government regulators in the face of threats to the financial system. The noun follows Keynes, while the adjective reflects Oakeshott and Hayek.

To start, Clers support a relatively extensive system of financial regulation. We do not believe that for all kinds of markets. Given the lessons we have learned from Hayek, we need strong arguments in place before we start heavily regulating any market. In many areas today, we probably take regulations too far.¹³⁶ But Keynes and Minsky, along with centuries of history,¹³⁷ including the recent crisis itself, teach us that the financial system is one area where we do need strong regulation. Financial markets on their own are too unstable, and the amount of harm they can cause to the whole economy is too devastating to be left unregulated. Moreover, we now have a long history of regulating the financial market, and although that history has not succeeded in avoiding crises in their entirety (nor should we expect to do so in the future), this history has shown ways to reduce the number and severity of crises.

In short, we need a robust but not stifling system of financial regulation. Where a financial crisis has spotlighted weaknesses in our current system, we should respond with new regulations that target the main problems that appear to have led to the crisis. To the extent possible we should also try to anticipate future crises, or at least build into the regulatory structure prods to keep regulators vigilant and searching for new weaknesses during booms.¹³⁸

136. One example that hits close to home is the regulation of the legal profession. Milton Friedman was right: there is no need for mandatory licensing for lawyers or doctors (I am a little less sure about the latter than the former.). MILTON FRIEDMAN, *CAPITALISM AND FREEDOM* 137-60 (40th anniversary ed. 2002).

137. See REINHARDT & ROGOFF, *supra* note 17; KINDLEBERGER & ALIBER, *supra* note 17.

138. See Brett McDonnell & Daniel Schwarcz, *Regulatory Contrarians*, 89 N.C. L. REV. 1629 (2011).

But these new regulatory initiatives should be cowardly. They should not go too far beyond existing rules. They should build upon existing and past rules. They should, as far as possible, try to work with, rather than against, markets and leave room for a reasonable degree of financial innovation. Where there is great doubt as to the efficacy of a proposed rule, we should consider delaying with further study, implementing a watered-down version of the rule, or simply waiting until the next crisis.¹³⁹ We should also always be on the lookout for instances where governmental interventions have created harmful unintended consequences. Where they have, we should strongly consider ending those interventions. If that is not desirable because they are the best way to address a truly serious flaw in financial markets, then we should try to repair the collateral damage intervention has caused, preferably in a way that mimics what the market would do to the extent possible.¹⁴⁰

Hayek's analysis also suggests that as far as possible we should strive to put in place clear, determinate rules that tell companies *ex ante* what actions are and are not allowed. We should not multiply the number of such rules unnecessarily. But there are countervailing considerations that we can see from the Keynesian direction. The ever-growing complexity of the financial world makes simple, clear rules very hard to write, and even if we succeed in writing such rules for a moment in time, practices are likely to evolve around those rules in ways that soon leave them outdated. Regulators will need some flexibility in order to restrict practices that attempt an end run around the rules, and rules are quite likely to grow in complexity along with the subject matter of their regulation. We need to encourage an adaptive regulatory system that constantly pushes the regulators to re-think their approaches. The rules should be as simple and stable as is desirable, but no more so.¹⁴¹

I have painted cowardly interventions as borrowing from all three thinkers rather than fitting in within any one of them. In actuality, I

139. Among recent commentators on the crisis, Rajan captures much of the spirit. "In defending the basic structure of a system that has failed, I face the risk of being dismissed as a conservative, and unregenerate apologist, or worse, a toady of banking interests that favor the status quo. But although systemic failure does imply the need for serious reform, it does not mean that a radically different system would be better. I believe that we have to work to fix the problems I have identified, which are serious indeed." RAJAN, *supra* note 7, at 155.

140. ACHARYA ET AL., *supra* note 7, at 411.

141. The arguments in this paragraph track the extensive literature on rules versus standards. See Russell B. Korobkin, *Behavioral Analysis and Legal Form: Rules and Standards Revisited*, 79 OR. L. REV. 23 (2000); Jason Scott Johnston, *Bargaining Under Rules Versus Standards*, 11 J.L. ECON. & ORG. 256 (1995); Louis Kaplow, *Rules Versus Standards: An Economic Analysis*, 42 DUKE L.J. 557 (1992); Kathleen M. Sullivan, *The Supreme Court, 1991 Term Foreword, The Justices of Rules and Standards*, 106 HARV. L. REV. 22 (1992).

believe that Keynes and Oakeshott were both arguably Ciers.¹⁴² As to Keynes, although I am using him here as an exemplar of government intervention, Keynes was himself looking for a middle way between the conservatism and socialism of his day. We have seen his appreciation for Burke¹⁴³ and for *The Road to Serfdom*.¹⁴⁴ Keynes's search for a middle way also shows in his attachment to the Liberal Party as opposed to Labour or the Conservatives.¹⁴⁵ Keynes might well agree with a program of cowardly interventions, although I doubt he would be thrilled with the adjective.¹⁴⁶

A Burkean conservative like Oakeshott could also be comfortable with cowardly interventions. Such conservatives are not opposed to all regulatory interventions; they just do not want to do too much too fast. There is room for conservatives to accept a fair number of new rules in response to urgent need demonstrated by a crisis, particularly in a technical area like financial regulation which is well removed from the kind of moral regulation which is closest to the hearts of most conservatives.

It is a much greater stretch to say that cowardly interventions fit within a Hayekian approach. Certainly most present-day disciples of Hayek, generally rather extreme libertarians, would advocate reduced government involvement and regulation rather than more, and that seems in keeping with the genuine spirit of Hayek.¹⁴⁷ Still, we have seen that Hayek did recognize that there exists a real need for government involvement in stabilizing the financial sector.¹⁴⁸ And we have seen that Keynes plausibly critiqued *A Road to Serfdom* by arguing that all Hayek really establishes is a difference in degree rather than kind from what

142. See *supra* note 2 and accompanying text.

143. See *supra* notes 79-80 and accompanying text.

144. See *supra* notes 120-123 and accompanying text.

145. See Keynes, *Am I a Liberal?*, in *ESSAYS IN PERSUASION* 323 (1932); Keynes, *Liberalism and Labour*, in *ESSAYS IN PERSUASION* 339 (1932).

146. Keynes was more confident in the wisdom of his policy prescriptions than am I in mine. Given his vastly greater intelligence and vision, he had much justification. But brilliance can lead to over-confidence. We plodders at least are more likely to exhibit the virtue of humility.

147. Late in his career, Hayek toyed with the radical idea of de-nationalizing money. See FRIEDRICH A. HAYEK, *CHOICE IN CURRENCY: A WAY TO STOP INFLATION* (1976), available at <http://mises.org/resources/3983>; FRIEDRICH A. HAYEK, *DENATIONALISATION OF MONEY: THE ARGUMENT REFINED* (3d ed. 1990), <http://mises.org/resources/3970>.

148. In McDonnell, *supra* note 105, I argue that Hayek's analysis of credit cycles actually suggests a great degree of instability in financial systems, and can be pushed to grudgingly accept a large degree of regulation in the area. Indeed, some followers of Hayek have advocated eliminating fractional reserve banking, a far bolder regulatory move than anything one will find among cowardly interventions. See MURRAY ROTHBARD, *AMERICA'S GREAT DEPRESSION 23-29* (5th ed. 2000), available at <http://mises.org/rothbard/agd.pdf>.

Keynes himself advocated.¹⁴⁹ So, while I would not characterize my approach to cowardly interventions as fitting within a spectrum of possible Hayekian positions, I do think it is not that far away from the most squishy moderate positions on that spectrum.

Another attraction of cowardly interventions is that they are politically feasible, although not easy. Neither complete deregulation nor massive new regulation to squeeze out almost all financial innovation is politically possible, at least not until we experience a financial crisis that goes much further than even the current troubles. Such extreme changes pose too much risk and offend too many special interests to be practicable. By contrast, the main political hurdle to cowardly interventions is the tendency to industry capture—too often bankers are able to influence politicians and bureaucrats to write rules that favor them. The financial industry is well organized and resistant to regulation that would reduce profits and profitable innovations. This is particularly true given the development of financial behemoths with great political clout, with Goldman Sachs as the poster child.¹⁵⁰ Outside of times of crises, few people pay attention to financial regulation; that is a recipe for industry capture.¹⁵¹

During times of crisis, however, ordinary citizens do pay attention, and indeed often experience revulsion against the industry. Populist legislation becomes possible during these times. The trick is coming up with sensible regulation and maintaining the strength of that regulation during boom times when popular attention has turned elsewhere. My colleague Dan Schwarcz and I have explored some mechanisms for doing this,¹⁵² and in Part VI I will consider elements of the Dodd-Frank Act that may succeed, at least partially.¹⁵³

The balance of political risks looks different in different eras. In the post-World War II period to the mid-1970s, over-regulation was the greater risk. The stagflation crisis of the 1970s was in part the result. Since then, under-regulation has become our bigger temptation. The basic politics of capture have combined with a more intellectual and cultural form of change that has occurred in recent decades, leading to an intellectual climate that strongly favors markets over governments. The Tea Party is just a new and particularly extreme manifestation of this

149. See *supra* note 121 and accompanying text.

150. JOHNSON & KWAK, *supra* note 7, at 5-6.

151. See generally MANCUR OLSON, *THE LOGIC OF COLLECTIVE ACTION* (1965), reprinted in *CONTEMPORARY SOCIOLOGICAL THEORY* (Craig Calhoun et al. eds., 2007); JAMES M. BUCHANAN & GORDON TULLOCK, *THE CALCULUS OF CONSENT: LOGICAL FOUNDATIONS OF CONSTITUTIONAL DEMOCRACY* (Charles K. Rowley ed., 1958); George Stigler, *The Theory of Economic Regulation*, 2 *BELL J. ECON. & MGMT. SCI.* 3 (1971).

152. See McDonnell & Schwarcz, *supra* note 138.

153. See *infra* notes 223-232 and accompanying text.

tendency. One might have thought that the awful performance of the most critical markets in our system would have led to changed thinking, and the first year or two of the Obama Administration, including the passage of the Dodd-Frank Act, did suggest some change. However, even in the time since the first draft of this paper was finished, I have been astonished by how quickly the pressure to cut back dramatically on new regulation has increased.¹⁵⁴ I knew that opposition would strengthen eventually, but only a few years after the onslaught of the crisis, while the country is still barely recovering? The speed of the backlash is striking.

B. How Should Clers Respond to this Crisis?

What are the general contours of regulation that Clers should advocate today in the wake of the crisis of 2008? To answer this question, we must consider the major causes of the crisis as discussed in Part II with guidance from the insights of Keynes and Minsky. In essence, we witnessed a more complex version of a traditional bank run. The shadow banking system and securitization created a batch of new businesses and markets that were not banks as traditionally and legally defined, but at their core replicated most of the economics of banks. As such, they were subject to instabilities similar to those banks face—those holding short term debt became nervous and started to pull out, leading to panicked sales of assets to meet those calls on debt, and a downward spiral of deleveraging. Poor compensation systems and the implied insurance provided by the likelihood of government bailouts made market participants more willing to take on risk, although I believe even without these incentive problems a crisis would have happened. The natural human tendencies to forget about what went wrong to inspire the previous crisis and to follow the herd in seeking high profits were the core problems.

How can we prevent this from recurring? Or rather, how can we delay the next crisis and make it less severe when it does occur? Some would have us combine further deregulation and the removal of government from the relevant markets with a strong commitment to no more bailouts.¹⁵⁵ That is the extreme Hayek solution. It has some support within the general cowardly interventionist framework. As we

154. See, e.g., Maya Jackson Randall, *GOP Senators Weigh Fresh Angles to Rein in Dodd-Frank*, WALL ST. J., June 10, 2011, <http://online.wsj.com/article/SB10001424052702304259304576376040466031226.html>.

155. See, e.g., Peter J. Wallison, *Dissenting Statement to FIN. CRISIS INQUIRY COMM'N*, THE FINANCIAL CRISIS INQUIRY REPORT 441 (2011), available at <http://www.gpoaccess.gov/fcic/fcic.pdf>.

have seen, where an intervention has major unintended consequences, we should consider eliminating it. The suspect intervention here is the government's willingness to rescue failing financial companies, which has created serious moral hazards. Perhaps we should end rescues, which in turn would end the need for extensive oversight and regulation of financial markets.

Such a solution has many attractions but also a major blemish: It won't work. There are two main reasons. First, a commitment to no future bailouts is simply not credible.¹⁵⁶ The political power of the financial industry and the horrible consequences of financial collapse for the whole economy are such that if we do reach a crisis point, any government with even a passing interest in staying in power will engage in a bailout. I suspect that fact is very, very obvious to everyone in the financial industry. Second, although a credible commitment to no bailouts (if possible) would indeed reduce non-optimal risk taking by financial institutions, it would not eliminate excessive risk taking as a whole. The sorts of risk externalities (contagion), poor internal incentives, and cognitive failures described in part II would still permeate financial markets and still lead to crises. Given how much pain those crises would cause, it is not acceptable to say that it is just the price we pay for our capitalist system. In short, government intervention in financial markets is here to stay. The history of financial crises and regulatory responses strongly supports that conclusion.

If stronger regulation is the better strategy, what should it look like? I would classify the appropriate response into three parts. First, we need a core regulatory structure that addresses the shadow banking world. Second, we could use a series of more limited new rules that address the most serious specific problems that exacerbated the recent crisis. Third, our regulatory architecture should have a prominent place for persons who focus on constantly scrutinizing the markets and their regulators for ways in which current rules do not appropriately respond to emerging market conditions. Let us consider each element in turn.

1. Addressing Shadow Banking

There are two different paths within our framework to get at what the core structure for regulating shadow banking should look like. The conservative path proceeds from looking at existing and past regulation, while the Keynesian path proceeds more from first principles. Consider first the conservative path. Clers look for as simple and basic a structure

156. Even a prescient pre-crisis warning about the dangers of too big to fail banks, which argues for limiting future bailouts, stresses that committing to no bailouts under any circumstances is not credible.

as possible, one with a proven track record or at least relatively close antecedents to which markets can adapt. We have such a structure with the New Deal financial regulations, which put in place the calmest half-century American financial markets ever experienced. There were several main features to New Deal banking regulation.¹⁵⁷ FDIC insured depositors, preventing runs and contagions. If depositors are protected by the FDIC, they need not fear a bank's failure, and hence need not rush to remove their money. With the FDIC came a need to quickly and effectively dispose of banks that did fail. The resolution process punished shareholders and managers of failed banks, providing effective deterrence. Increased bank supervision and regulation, particularly capital requirements, addressed the moral hazard problem that deposit insurance created.

What is needed is a way to generalize these solutions to our more complicated present world while not eliminating the wide variety of financial instruments, institutions, and markets that have appeared in recent decades (although we may have to prune that variety somewhat). Thus, the core structural reform ideally would apply a variant of the New Deal regime beyond banks to shadow banking institutions. All institutions that are enough like banks to face the basic problems of banks would have the Federal Reserve (or some other agency) as a lender of last resort, but in return should be subject to rules governing basic soundness. The rules applied would, at least at their core, be relatively simple—above all, capital requirements and/or leverage limits plus resolution authority for failed companies.

We can come to the same conclusion via a different path that goes through Keynes and Minsky. The key problem is the tendency of booms and busts within unstable financial markets. We want to stop panics. The most straightforward way to stop panics, one with a very long historical pedigree, is for the government to step in and rescue enough institutions and/or investors to stop the panic.¹⁵⁸ But these rescues have a large unintended consequence, one Minsky highlights. The prospect of rescue induces financial institutions to take on too much risk, with increases in leverage, speculation, and financial innovation leading to

157. See generally ELLEN D. RUSSELL, *NEW DEAL BANKING REFORMS AND KEYNESIAN WELFARE STATE CAPITALISM* (Richard McIntyre ed., 2008). Beyond the reforms mentioned in the text, the post-War banking regulatory regime also contained more stringent limits that look quite draconian today, including usury limits, limits on interstate banking, and strict limits on entry and the creation of new financial products. A very hard question is to what extent the post-War market stability depended upon those restrictive regulations. In an instance of bald cowardice, I have buried that question in a footnote.

158. See sources cited *supra* note 53, on the importance of a lender of last resort as a response to systemic risk.

inflationary booms once the discipline of likely busts is taken away. Hayek's response is to fore swear the rescues, but I have already argued that this response is neither politically feasible nor wise. So, if we are going to do rescues, our framework suggests that we should do what we can to replicate the kinds of discipline that the market would provide in the absence of such interventions.¹⁵⁹

The New Deal banking framework does this in two main ways. First, resolution authority imposes discipline on the core decision-makers of failed and rescued institutions. If top officers and equity investors of such institutions know that they are likely to lose their jobs or their investments in the event of a government bailout, then these officers and investors will have a strong incentive to avoid taking on risks that may lead to a bailout. Thus, such a resolution authority closely mimics the incentives those persons would face in the market without the prospect of rescue. Second, in the absence of rescue, financial institutions have incentive to build up a strong capital cushion, both to reduce the prospect of bankruptcy and also to reassure creditors. The prospect of bailouts eliminates or greatly reduces the market discipline that comes from creditors, and thus we would expect to see lower capital cushions. The evidence supports this expectation.¹⁶⁰ The government can try to correct this by imposing capital requirements that would reduce the amount of risky leverage and speculation in which protected institutions can engage, and also provide more of a cushion for when the markets turn down, reducing the chances that the regulated institutions will need to be rescued.

Thus, two core arguments within our framework suggest that we use the New Deal's banking framework as a template for shadow bank regulation. We shall see that the Dodd-Frank Act's most important provisions go pretty far in following this template. But there is a big problem with my prescription: we do not have a good way to define which companies are shadow banks that should fall within the system's protection and regulation, nor do we have definitions of capital and leverage that adequately reflect all the various ways that companies can take on leverage and liquidity mismatches in today's complex financial world. In the next Part, I shall criticize the Act and worry mightily that its failure to extend its rules to enough of the shadow banking world will play a big role in bringing about the next crisis. But I will not have any good alternative schemes to offer—this problem is very hard indeed.

Some have argued that we should clearly delineate which companies will be regulated as banks, greatly restricting their activities

159. See ACHARYA ET AL., *supra* note 7, at 411, 712.

160. See *supra* note 31.

but granting them access to lender of last resort protection.¹⁶¹ Companies outside this (necessarily somewhat arbitrary) definition would be allowed to operate with only light regulation, but would also be allowed to fail without rescue. This suggestion has many positives, and the Dodd-Frank Act seems to be trying to do something similar. But there is a big problem: any arbitrary definition we use may very well wind up leaving out institutions, or classes of institutions, which individually or collectively come to pose a systemic risk that we do not anticipate and realize only as the institutions fail. At that point, the commitment to not rescue will be set aside. But companies know this, and hence the moral hazard problem remains with no regulation to correct it.

2. Addressing Other Old Problems

Beyond addressing the core structural issues of shadow banking, we should also address some of the more specific problems that led to the crisis, including manipulative mortgages, the moral hazard of securitization, credit rating agencies that performed poorly, and the unexpected systemic risk created by complex derivatives. These rules should be more specific than the general prudential scheme for shadow banking, and should attempt to stop practices that have been shown to cause specific harms. The rules should be limited in scope, limiting market activity as little as possible, and, to the extent possible, modeled upon other rules that have already had some demonstrable success. It may be argued that these rules would involve protecting against the causes of the past crisis rather than what is likely to lead to the next crisis. This argument is true—and the next suggestion tries to address future problems—but if we do not correct the specific problems that led to the last crisis, those same problems are likely to play a role in future crises.¹⁶²

Where past governmental interventions have caused problems, we should consider eliminating or greatly modifying them. Current examples of where Clers should be willing to make such modifications are the government-sponsored entities Fannie Mae and Freddie Mac.

3. Addressing Future Problems

Finally, we need to recognize that the financial system will constantly evolve, and our rules need to evolve with it.¹⁶³ Also, as we

161. See, e.g., Sankarshan Acharya, *Safe Banking*, 3 J. AM. ACAD. BUS. 247 (2003), available at <http://www.pro-prosperity.com/usa/safe%20Banking.pdf>.

162. ACHARYA ET AL., *supra* note 7, at 21.

163. *Id.*

implement new rules, we should evaluate them and change or eliminate those that do not appear to be working as planned. Thus, a strong regulatory system should have in place people who are constantly monitoring that system's effectiveness and asking questions about what regulators could and should be doing differently. We need to recognize our limits as regulators and build in structures to handle these limitations as much as possible—always realizing that this is a Sisyphean task that can never fully succeed.

Has the Dodd-Frank Act done all of this effectively? That is the question for our next section.

VI. DODD-FRANK AS COWARDLY INTERVENTION

The answer to our question is yes. On balance, the Dodd-Frank Act consists of a series of plausible cowardly interventions in the face of the problems that the crisis has revealed. It is an ambitious act—famously over 2,000 pages long and with thousands of pages in administrative rules and studies to follow. But as we shall see, each major part of the Act is plausibly rooted in existing regulation, responds to real problems, and is not at all radical. There are, however, some important gaps that will still need to be addressed. And we should be prepared to cut back on elements in the Act that upon implementation prove to cause more problems than they solve. Let us consider how well the Dodd-Frank Act handles the three broad areas for reform identified above: regulating shadow banking, addressing other past problems, and addressing future problems.

A. Regulating Shadow Banking

I have argued that CIers should support regulating shadow banking by applying the New Deal banking regulation template. This involves three main elements: insurance or lender of last resort rescues, resolution authority, and basic prudential regulation (mainly capital requirements).

1. Insurance

One main element of the New Deal banking regulatory structure was FDIC insurance, which has largely ended traditional bank runs. The Dodd-Frank Act provides no such explicit insurance. Indeed, at various points the Act attempts to disavow expectations of government bailouts. Yet after the events of 2008, those disavowals are surely unbelievable. The government would have to go to extreme lengths to prevent itself from engaging in bailouts for any such disavowal to be worth notice, and

nothing in the Act does so. Indeed, it is far from clear how the government could effectively commit to no bailouts.

Thus, as a matter of well-understood fact if not explicit law, everyone now expects the federal government to bail out failing financial institutions where collapse of the financial system looms. That should go a long way to avoiding runs.¹⁶⁴ It is true that there is some uncertainty as to when the government will step in—the bailouts did prove extremely unpopular, which will make future politicians loath to repeat the experience, and after all Lehman Brothers was not rescued. Some argue that this sort of probabilistic insurance actually makes a lot of sense. The likelihood of a bailout helps reduce the chance of runs, while the possibility that a bailout will not occur for some institutions helps reduce the moral hazard to take on too much risk.¹⁶⁵ This implicit insurance or guarantee should appeal to Cifers because there are no complicated new rules or institutions, simply a tacit recognition that governments will continue to behave as they have long behaved when crises occur.

The funding for future bailouts, however, could have been better arranged. The Obama Administration proposed creating a fund through a tax on financial institutions to pay for future rescues. This was removed in Congress out of fear that it would make bailouts more likely. While that fear is not unfounded, funding bailouts through such a tax could be very helpful if the tax could be made to depend upon the degree of systemic risk particular institutions are creating. Such a funding mechanism, similar to what the FDIC does for banks, would have helped to reduce the systemic risk externality.¹⁶⁶

Another concern is that several of the Dodd-Frank Act provisions either limit the authority of the Federal Reserve to engage in certain actions it used for bailouts in the crisis, or require the support of other regulators before engaging in certain bailout activities.¹⁶⁷ The prohibition on certain activities is indeed a concern, although the Federal Reserve is likely creative enough, and has enough remaining power, that it will probably be able to find a way to do what is needed. Requiring

164. Schwarcz has emphasized the importance of having a lender of last resort to prevent runs within a complex system. See Schwarcz, *Regulating Complexity in Financial Markets*, *supra* note 53, at 247-56.

165. Some have even argued that in light of this general, if probabilistic, guarantee, the specific legal insurance of FDIC should be eliminated, so that banks do not get special treatment. RAJAN, *supra* note 7, at 178-80. That strikes me as a dangerous suggestion—FDIC was one of the most successful regulatory innovations in the history of American finance, and has continued to work very well. In an area where well-functioning laws are hard to devise and ultimately tend to become obsolete, it seems foolish to get rid of one that has worked so well for so long.

166. ACHARYA ET AL., *supra* note 7, at 47, 218-19.

167. *Id.* at 222.

approval from other regulators is less bothersome. It provides a bit of a brake, which may be helpful in discouraging needless bailouts. Should a genuine need arise, however, it is hard to imagine that other regulators will prevent the Federal Reserve from acting.

2. Resolution Authority

Even if other regulations help reduce the chances of future crises, crises will happen. Regulators need to be able to step in and deal quickly with failing institutions when they come. Since the advent of the New Deal, the FDIC has been able to do that with traditional commercial banks. But in the recent crisis many troubled institutions were not banks covered by the FDIC. Regulators did not have adequate tools to deal with these institutions, and thus resorted to bailouts which were in some cases more generous than they should have been. Not only were these bailouts widely, and correctly, seen as unfair, but they also worsened the moral hazard problem for the future.

The Dodd-Frank Act extends a new resolution authority to non-bank financial institutions that are deemed to pose a systemic risk to the financial system and the economy.¹⁶⁸ The terms of that authority largely mimic both bankruptcy and FDIC resolution authority, and put power over systemically risky failing financial institutions in the hands of the FDIC. Thus, this is not some wild new power, but rather an extension of existing, well-established approaches just as CIers recommend. Importantly, the Act dictates that shareholders will lose all¹⁶⁹ and managers will also lose out, losing their jobs¹⁷⁰ and facing possible clawbacks.¹⁷¹ This gives strong incentives for managers and shareholders to want to avoid the resolution process. The treatment of secured creditors is less clear—will they face haircuts, in which they lose some of their investment? Haircuts run the risk of inducing runs, but also add some further discipline to the system, giving creditors incentives to better monitor financial institutions. The Act punts on this point, mandating a study on creditor haircuts.¹⁷² We shall see that such punting is a common, and defensible, strategy in the Act.

168. See Dodd-Frank Wall Street Reform & Consumer Protection Act, Pub. L. No. 111-203, §§ 201-17, 124 Stat. 1376, 1442-520 (2010).

169. See *id.* at §§ 204(a)(1), 206(2).

170. See *id.* at §§ 204(a)(2), 206(4).

171. See *id.* at §§ 204(a)(3), 210(s). Clawbacks take back compensation already paid.

172. See *id.* at § 215. Most likely the best approach is an intermediate one—punishing unsecured creditors enough that it creates some discipline, but not too much, so as to limit the risk of a panic. Thus, the haircut should be somewhere between hippy and a crew cut.

Much depends upon how aggressive regulators are in determining which companies are systemically risky. For the resolution authority to apply, the FDIC and the Federal Reserve must make a recommendation to the Secretary of the Treasury, who then determines if use of the authority is appropriate for a particular company.¹⁷³ We have seen that the shadow banking system is quite widespread. In some markets, the aggregated behavior of many relatively small companies acting similarly can add up to serious risk to the whole financial system and may lead to a need to take over many such companies during a crisis. Indeed, as noted in Part II, that is what happened with banks during the Great Depression. Will the regulators limit coverage of this resolution authority only to a few very large, inter-connected companies, or will they go further and recognize the risk that even relatively modest companies may create when they are part of a market that is similarly situated, and all face collapse at the same time? The answer to this question will help determine how far the Dodd-Frank Act in fact goes in addressing the shadow banking system.

Another tension here is that the definition of companies covered by this resolution authority is vague, thus vesting a lot of discretion with the regulators. That is problematic from a Hayekian point of view. And yet, the difficulty of clearly identifying those companies that we should want to cover, and the rapidly changing circumstances which are likely to change our understanding of that question over time, argues for keeping a fairly vague standard and allowing regulators room to exercise judgment. The statutory language provides some guidance,¹⁷⁴ and implementing regulations can hopefully add some clarity.

A number of commentators have argued that we would be better off using a modified version of chapter 11 bankruptcy rather than a new resolution authority. These commentators argue that chapter 11 is well established and clear, with procedural protections for creditors. It has more rule of law virtues than the new authority, which vests much discretion in the FDIC.¹⁷⁵ But there are significant problems with

173. *See id.* at § 203(a), (b).

174. The Secretary of the Treasury must consider seven items in determining that a company shall be subject to the new resolution authority: the company is in default or in danger of default; the company's failure "would have serious adverse effects on financial stability"; no viable private sector alternative is available to prevent default; the effect on creditors; resolution would mitigate such effects on credits; an agency has ordered the company to convert all of its convertible debt instruments; and the company satisfies the definition of a financial company. *Id.* at § 203(b).

175. *See* ACHARYA ET AL., *supra* note 7, at 213-40; DAVID SKEEL, THE NEW FINANCIAL DEAL: UNDERSTANDING THE DODD-FRANK ACT AND ITS (UNINTENDED) CONSEQUENCES 129-52 (2010); Stephen J. Lubben, *Systemic Risk and Chapter 11*, 82 TEMP. L. REV. 433 (2009).

applying chapter 11 to financial institutions in the midst of a panic. Most importantly, speed is of the essence during a panic, and courts are not known for their speed. Also, financial institutions are complex entities within a complex system, and their resolution requires an expert hand that understands the individual company and is also acting with the interests of the entire system in mind.¹⁷⁶ Moreover, the discretionary authority to invoke an alternative resolution regime will give the government important bargaining power during the next crisis that it lacked in 2008.

Either an FDIC-based system or chapter 11 could be modified to meet some objections. Chapter 11 would probably need to change a variety of specific rules to meet the specific needs of financial institutions.¹⁷⁷ Special masters could be used to provide financial expertise, and banking regulators could be given the power to commence chapter 11 proceedings under specified circumstances. Similarly, the new FDIC-based resolution authority could be modified to give it more predictability. The financial regulators could establish rules giving guidance regarding when they will invoke the new resolution authority. Other rules could make the new procedure look more like chapter 11 (which it already resembles in many ways).¹⁷⁸ Indeed, after such modifications, the two alternatives look similar.

A Hayekian libertarian should prefer chapter 11 and its rule of law virtues. A Keynesian liberal should prefer the new resolution authority, with its greater powers and nimbleness to respond to market panics. An Oakeshottian conservative can find things to admire in both—the Bankruptcy Code is a longstanding traditional institution (at least in broad outline), but the FDIC resolution authority for banks on which the Dodd-Frank Act's authority is patterned is also well-established by now and has proven very successful. On balance, I lean towards the Dodd-Frank Act's approach over chapter 11 for financial institutions, mainly because of the need for extreme speed during a crisis.

3. Regulating Systemically Risky Companies

The New Deal banking regulations (not to mention Minsky and Hayek) teach us that with the promise of insurance or a bailout comes the need for increased regulation and supervision. The promise of rescue

176. Morrison, Edward R., *Is the Bankruptcy Code an Adequate Mechanism for Resolving the Distress of Systemically Important Institutions?*, 82 TEMP. L. REV. 449 (2009).

177. See ACHARYA ET AL., *supra* note 7, 213-40; Lubben, *supra* note 175; SKEEL, *supra* note 175, at 129-52.

178. Stephen J. Lubben, *Financial Institutions in Bankruptcy*, 34 SEATTLE U. L. REV. 1259 (2011).

when things go badly creates moral hazard as companies take on too much risk. Regulation of banks subject to the FDIC guarantees both limits to risky activities and requires banks to limit leverage and retain a capital cushion which hopefully will save the bank during hard times. Since we have now extended an implicit guarantee to some companies in the shadow banking world, we need to extend such regulation and supervision as well.¹⁷⁹

The Dodd-Frank Act creates a Financial Stability Oversight Council (Council) composed of the heads of the leading financial regulatory agencies.¹⁸⁰ The Council has authority to supervise and regulate nonbank financial companies that it deems to pose systemic risk.¹⁸¹ This involves supervision similar to that of banks, and imposing prudential standards, most importantly capital requirements.¹⁸² Working within existing regulatory agencies and imposing rules already familiar in banking regulation puts this new authority well within the Cier camp. Much obviously depends upon the stringency of the standards and supervision imposed, but I am more concerned with which institutions the Council chooses to regulate. The point is very close to that raised above for the resolution authority. Systemic risk can arise just as well from many modestly sized companies in a market behaving similarly as from a few giants.¹⁸³ If the Council limits its attention only to the latter, it will miss out on much of the shadow banking world. But if it interprets its authority more broadly, then the Act will be a major positive step in regulating shadow banking. Here, too, the balance between precise rules and vague standards is tricky.

Hedge funds are an important part of shadow banking. One section of the Dodd-Frank Act focuses on hedge funds and their advisers.¹⁸⁴ The Act does not give authority for any significant substantive regulation of hedge funds or their advisers, but it does require hedge funds and their advisers to provide extensive new disclosures to regulators.¹⁸⁵ This will give regulators more information as to what is going on in an important part of the modern financial world, and will at least give them a better chance of identifying new risks. Disclosure requirements are a modest, familiar, and hence appropriately cowardly strategy.

Some of the key regulatory safeguards are capital requirements, which create a safety cushion and limit the degree of risky leverage

179. See *infra* notes 186 through 191 and accompanying text.

180. Dodd-Frank Wall Street Reform & Consumer Protection Act § 111.

181. *Id.* § 113.

182. *Id.*

183. ROUBINI & MIHM, *supra* note 7, at 213; RAJAN, *supra* note 7, at 171.

184. Dodd-Frank Wall Street Reform & Consumer Protection Act, §§ 501-42.

185. *Id.* §§ 403-05.

regulated companies may undertake. The Dodd-Frank Act makes some improvements in capital requirements, but it leaves most details to regulators domestic and foreign. As already mentioned, the Act extends regulation, including capital requirements, to a broader set of companies with the inclusion of systemically important non-bank financial companies. The Act also urges regulators to set counter-cyclical capital requirements.¹⁸⁶ This is important because we want to force companies to pull back as bubbles start to take hold while not overly restricting them during times of crisis when reluctance to advance credit feeds the crisis.¹⁸⁷ The natural tendency of regulators is like the regulated, however: pro-cyclical—falling asleep at the switch when the market is booming, and becoming too vigilant when crises reveal problems. The big question mark is how to make regulators effectively implement counter-cyclical capital requirements. As with so many things, the Act leaves the answer to that question to future regulations.¹⁸⁸ The Act consigns to a study an ingenious suggestion to force financial companies to issue contingent debt which would convert to equity when the company neared insolvency.¹⁸⁹ This would provide an automatic stabilizer that creates more equity capital when needed, and the market price for such debt would indicate what market participants believe concerning the health of the company. There is a serious question whether markets for such debt would actually develop, however—would anyone want to hold it? This is an intriguing idea, but probably one that needs more study—and that is what Congress has done, showing due caution while recognizing a potentially useful regulatory innovation.

The Act does not set clear, bright-line capital requirements, instead leaving the details to regulators.¹⁹⁰ The problem is quite deep—with modern financial and accounting practices, evaluating the nature and risk of different kinds of capital is exceedingly difficult.¹⁹¹ This problem is best left to regulators rather than members of Congress, but even the former will find this a deep challenge—ultimately one that is bound to partially defeat them. In the area of capital requirements, the most important rulemaking is occurring at the international level, as the Basel

186. *Id.* § 616.

187. See ROUBINI & MIHM, *supra* note 7, at 206; Amitai Aviram, *Counter-Cyclical Enforcement of Corporate Law*, 25 YALE J. REG. 1 (2008).

188. For an interesting analysis which draws upon a framework called Imperfect Knowledge Economics, stressing the futility of attempting to precisely predict economic variables, see Roman Frydman & Michael D. Goldberg, *Financial Markets and the State: Long Swings, Risk, and the Scope of Regulation*, 4 CAPITALISM & SOC'Y (2009), available at <http://www.bepress.com/cas/vol4/iss2/art2>.

189. Dodd-Frank Wall Street Reform & Consumer Protection Act §§ 115, 163.

190. *Id.* §§ 115, 121, 165, 171; *Id.* §§ 606, 616.

191. SKEEL, *supra* note 175, at 82-83.

Committee on Banking Supervision moves to finalize the Basel III Accords. I will discuss this a bit more below when I turn to international cooperation in financial regulation. A further innovation regulators should consider is regular usage of stress tests.¹⁹²

Given the important role of illiquidity in bank-like panics, regulators might also usefully consider whether and how to impose liquidity requirements upon investments by banks and bank-like entities. That task is daunting and possibly infeasible, however. As the latest crisis demonstrated, assets may be subject to markets that look decently liquid during good times but that prove illiquid when most needed in a panic. How to predict in advance which markets will become illiquid is quite unclear.

B. Addressing Problems from the Past Crisis

I believe that the portions of the Dodd-Frank Act mentioned above are its most important provisions. It is these provisions that go closest to the core of shadow banking, and begin to extend the regulatory net to the new world of non-bank financial companies. But beyond the general characteristics of shadow banking, we saw in Part II some particular problems that also helped to cause the crisis. These problems arose at various links in the securitization chain. Addressing these problems is more a matter of plugging the specific holes exposed by the last crisis than focusing on the grand architecture of the financial system. Still, if we do not plug the holes that leaked in 2008, they are likely to continue leaking, so these reforms matter as well, and they take up a large portion of the Act. Clers want to mend securitization, not end it, and that is what the Act tries to do.

1. Consumer Financial Products

Many mortgages, particularly sub-prime and Alt A mortgages, were abusive, with terms that took advantage of unsophisticated buyers. Exactly what proportion were abusive is a matter of heated debate, because some characteristics that are termed abusive are defensible as clever ways to make credit for buying houses available to persons who would not otherwise be credit-worthy.¹⁹³ Still, few deny that at least some practices were wrong. Protecting consumers from such practices is important as a matter of consumer protection. But is it also defensible as a way to protect the soundness of the financial system? Some argue that the two goals are in conflict. After all, consumer protection measures

192. ACHARYA ET AL., *supra* note 7, at 23.

193. *See, e.g.*, GORTON, *supra* note 7, at 74-81.

undermine the profitability of financial companies, and lower profits may endanger the health of those companies.

While this may be so, the profits from abusive practices come mainly during financial bubbles, and these profits further inflate those bubbles. When the bubbles burst, the abusive practices may collapse and cause problems for their makers. Thus, some have argued that consumer advocates who warned about abusive financial practices had early insights into the existence of the housing bubble. Financial regulators should have listened.¹⁹⁴

The Dodd-Frank Act creates a new Bureau of Consumer Financial Protection (Bureau) to focus on practices that take advantage of consumers.¹⁹⁵ The Bureau is located within the Federal Reserve, but given much independence. This was one of the most controversial parts of the Act, and it comes with danger. The Bureau could go too far in discouraging valuable financial innovation. As noted, in some cases its mission may conflict with preserving the soundness of financial institutions, though much more often I think the two goals are complementary. There are always dangers when creating new bureaucracies: who knows in which direction they will head (industry capture? over-regulation to glorify themselves?), and once established they are very hard to eliminate, even if they create more costs than benefits. And it is not as if the already-crowded world of federal financial regulatory agencies was clearly in need of one more agency with its own agenda. Moreover, the Act vests much discretion in this new Bureau—always a red, or at least yellow, flag signaling the need for great caution before proceeding. And yet, given both the demonstrated need for more consumer protection with respect to financial products, and even more importantly the role that abusive products can play in destabilizing the financial system, on balance having an agency dedicated to this task is probably a good move.¹⁹⁶ For me, the most decisive argument for the Bureau is that it could prove an important counter to the industry capture which always threatens to dilute financial regulation. Wall Street's fear of Elizabeth Warren is precisely why she should be appointed to head the Bureau. Criers should be anxious as to how the new Bureau will behave, but all in all thankful that it was created. This is perhaps the most questionable major element of the Act,

194. See, e.g., Prentiss Cox, *The Importance of Deceptive Practice Enforcement in Financial Regulation*, 30 PACE L. REV. 279 (2009); Erik F. Gerding, *The Subprime Crisis and the Link Between Consumer Financial Protection and Systemic Risk*, 4 FLA. INT'L U. L. REV. 435 (2009).

195. Dodd-Frank Wall Street Reform & Consumer Protection Act §§ 1001-99.

196. See Elizabeth Warren & Oren Bar-Gill, *Making Credit Safer*, 157 U. PA. L. REV. 1 (2008).

and it may turn out to have been a mistake. On balance, however, this Bureau appears advisable.

2. More Skin in the Securitization Game

There was a significant incentive problem within the mortgage securitization system. Mortgage originators who planned to quickly securitize had reduced incentive to ensure the quality of those mortgages. This problem would have been reduced if investors in the securitized interests had been adequately aware of the problem and had monitored that risk. But they weren't and they didn't, so securitization helped lead to an increase in mortgage default risk.

The Dodd-Frank Act may reduce this problem. It requires the securitizers of most asset-backed securities to retain at least five percent of the credit risk of the securities they sell.¹⁹⁷ With this skin in the game, there exists more incentive to ensure that underwriting standards are adequate. The requirement is waived for certain vanilla types of mortgages,¹⁹⁸ increasing the incentive to offer those types of less risky mortgages. This requirement is modest and is one of the clearest and most precise parts of the Act, and it appears well-targeted at the source of the incentive problem. Therefore, it is an appropriately cowardly intervention. It may be too modest—many MBS sellers did retain significant amounts of skin and still came a cropper, so the 5% requirement may not actually solve the problem. But it may help, and at any rate appears unlikely to cause harm.¹⁹⁹

3. Credit Rating Agencies

Credit rating agencies also helped to cause the securitization mess, with ratings that at least in retrospect were often too optimistic. The Dodd-Frank Act takes some significant steps to address the problem. Perhaps most importantly, it requires agencies to stop their regulatory reliance on ratings.²⁰⁰ Frank Partnoy has argued that a leading reason for the heavy dependence of markets on ratings has been regulatory arbitrage. Some major institutional investors are required to limit their investments to highly rated products. The ratings agencies are thus in effect selling a license to invest for these firms.²⁰¹ The Act should end this reality. Here is an example of a major harmful unintended

197. Dodd-Frank Wall Street Reform & Consumer Protection Act § 941.

198. *Id.* at § 944.

199. A caveat: if this requirement causes lawyers to balk at issuing “true sale” opinions, it could cause serious problems for the securitization markets.

200. Dodd-Frank Wall Street Reform & Consumer Protection Act §§ 939, 939A.

201. *See* Partnoy, *supra* note 32.

consequence of past rules, and the Act does as it should: namely, it eliminates those rules.

The Act also exposes credit rating agencies to a greater risk of securities fraud liability.²⁰² The Act forces more public disclosure by ratings agencies²⁰³ and imposes qualification standards on credit rating analysts.²⁰⁴ These efforts to increase transparency in the securities market are a traditional approach within U.S. security regulation. This transparency is intended to help financial markets function more efficiently. Both of these features are highly desirable to CIers.²⁰⁵ The Act does not take on the issuer-pays model of financing ratings agencies, which creates troubling conflicts of interests. It does not do so in part because no one has yet come up with a convincing alternative financial model. Instead, this is another area that the Act consigns to further study.²⁰⁶ Given the importance but thorniness of the issue, and the current lack of a good alternative, that seems about the best that can be done. Thus, the Act takes a variety of plausible steps aimed at some of the problems underlying ratings agencies, while deferring for study other problems for which we do not yet have a solution. CIers should approve, although directing regulators to stop using credit ratings is a risky move, because it is not at all clear that regulators have better measures to use in their place.

4. Derivative Clearinghouses

Credit swaps and other derivatives used in asset-backed securities markets also helped to create systemic risk through counter-party risk. The lack of transparency was a major part of the problem: no one knew which major financial institutions were in trouble from this source of risk, and this led to a bank run-like panic on many institutions.

The Dodd-Frank Act puts in place an attempted solution to this problem that has been widely discussed in the aftermath of the crisis.²⁰⁷ Most swaps and similar derivatives must now go through regulated clearinghouses, and even most of those which do not must still be publicly reported.²⁰⁸ It is hoped that this will do several things. It will

202. Dodd-Frank Wall Street Reform & Consumer Protection Act § 933.

203. *Id.* at § 932.

204. *Id.* at § 936.

205. But CIers should also expect the kinds of unintended consequences that those traditional methods have created. For instance, expect to see ratings agencies charge more for their services now that they are subject to securities liability.

206. Dodd-Frank Wall Street Reform & Consumer Protection Act § 939D.

207. For a discussion, including some criticism of the approach taken in Dodd-Frank, see Zach Gubler, *Regulating the Financial Innovation Process*, 35 SEATTLE U. L. REV. (forthcoming 2011).

208. See Dodd-Frank Wall Street Reform & Consumer Protection Act §§ 701-74.

increase transparency, so that we know where such risks lie—as previously noted, increased transparency is a traditional and market-friendly regulatory strategy. The clearinghouses should also help reduce systemic risk by reducing counterparty risk. The clearinghouses themselves guarantee payment, so that if the original party does not pay, payment will still be made. To protect against having to do this, the clearinghouses will impose margin requirements and other safeguards to decrease the likelihood of defaults. The various private actors that are part of these clearinghouses have some incentive to monitor the clearinghouses to ensure that they are doing an adequate job with these safeguards.

There is a potential catch here: the clearinghouses themselves could become potential sources of systemic risk. If they do not adequately anticipate and price the risk of many parties getting into financial trouble at once, the clearinghouses could face collapse and possibly would need to be rescued. The prospect of such a bailout may indeed cause the clearinghouses to do too little to avoid such risk. The Act recognizes this problem and directs regulators to impose standards to guard against this risk.²⁰⁹ One hopes that will be enough, but one worries it will not be. Still, on balance, the clearinghouses seem a worthwhile innovation. They are an attempt to work with and buttress markets rather than eliminate them: a properly cowardly innovation.²¹⁰

5. Corporate Governance

Corporate governance and compensation practices within many financial institutions have also been blamed for the crisis. Various practices may have encouraged too much risk-taking, as those taking the risks gained a lot but did not bear the costs when investments failed. In Part II, I suggested that this was not one of the most significant causes for the crisis, but it was partially responsible.

The Dodd-Frank Act has a variety of measures aimed at corporate governance. Some of these are aimed at all public corporations.²¹¹

209. *Id.* §§ 804-05.

210. I meant to write “cowardly intervention” here, but I like the mistake. Another unintended consequence of the clearinghouses is that they may limit entry and enforce oligopolies. See Louise Story, *A Secretive Banking Elite Rules Trading in Derivatives*, N.Y. TIMES, Dec. 11, 2010, at A1.

211. Stephen Bainbridge rightly asks why these reforms aim at all public corporations following a crisis within the financial sector. Stephen M. Bainbridge, *Dodd-Frank: Quack Corporate Governance Round II*, 95 MINN. L. REV. 1779 (2011). It is a very good question, but excessive risk by companies outside the financial sector may have contributed to making the economy more vulnerable to a sharp downturn once the credit cycle swung down, as indebted companies struggled to pay debts and cut back on

These include advisory “Say on Pay” votes on executive compensation.²¹² Evidence from the UK, which adopted Say on Pay in 2004, suggests this will do both little harm and little good.²¹³ Indeed, doing little harm and little good probably describes most of the Act’s corporate governance provisions. The Act does authorize the SEC to institute rules granting certain shareholders proxy access so that they may use corporate proxy statements to nominate board of director candidates.²¹⁴ The SEC very quickly acted on this authority.²¹⁵ In general, proxy access is a useful accountability device, although the SEC’s rule errs by setting a mandatory floor which shareholders cannot alter to make less generous.²¹⁶ But I doubt this has much to do with the risk of a future financial crisis. Indeed, given that shareholders tend to like risk too much due to limited liability, it is not necessarily true that we want financial company managers to be more responsive to shareholders.

Perhaps the best corporate governance regulatory development in the wake of the crisis has occurred outside of the Dodd-Frank Act, as the banking regulators have reviewed compensation practices, issued guidelines, and are now taking such practices into account in evaluating the riskiness of financial companies.²¹⁷ Insofar as compensation practices, at both CEO and trader levels, encouraged too much risk, compensation is clearly something that bank examiners should review. Since examiners cannot directly determine and evaluate all risks themselves, they should consider the incentives of those making decisions at the bank. If those decision-makers have incentive to take on substantial risk, the examiners should assume that they will act on those incentives, even if the examiners cannot themselves observe all of the resulting increased risk. Many have proposed more specific and extensive executive compensation reforms, but past reform attempts in

expenditures. Or, it may be that the corporate governance reforms are plausible laws on other grounds, even if they have little to do with the financial crisis.

212. Dodd-Frank Wall Street Reform & Consumer Protection Act § 951.

213. Fabrizio Ferri & D. Maber, Say On Pay Votes and CEO Compensation: Evidence from the UK (March 11, 2011) (working paper), *available at* <http://ssrn.com/abstract=1420394>.

214. Dodd-Frank Wall Street Reform & Consumer Protection Act § 971.

215. Facilitating Shareholder Director Nominations, Exchange Act Release No. 33-9136, 75 Fed. Reg. 56668 (Aug. 25, 2010). The new rules have since been stayed in response to a lawsuit. Business Roundtable, Exchange Act Release No. 33-9149 (Oct. 4, 2010), *available at* <http://www.sec.gov/rules/other/2010/33-9149.pdf>.

216. Brett McDonnell, *Setting Optimal Rules for Proxy Access*, 43 ARIZ. ST. L.J. 67 (2011).

217. *Federal Reserve, OCC, OTS, FDIC Issue Final Guidance on Incentive Compensation*, BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM (June 21, 2010), <http://www.federalreserve.gov/newsevents/press/bcreg/20100621a.htm>.

this area have been subject to severe unintended consequences such that cowardice seems wise. The supervision process may give a way of nudging companies toward better practices, however. A Hayekian concern is that this gives too much discretionary power to bank supervisors. But discretionary power for bank supervisors is an old, and hence conservative, phenomenon. To provide more predictability and guidance, regulators could list certain practices as good and others as bad, giving companies notice as to how their compensation systems will affect their regulatory burden.

C. Addressing Future Problems: Studies, Reports, Rulemaking, and Contrarians

As we have already seen at several points in our whirlwind tour of the Dodd-Frank Act, the Act leaves much discretion for future agency regulation. Even where the Act does take specific positions, it generally does so only by putting in place a broad framework with directions to the relevant agency to write rules. On a number of matters, the Act does not take any position at all, but rather directs agencies to conduct studies and decide what to do after examining the results of those studies. One analysis found that the Act dictates 243 new rulemakings, 67 studies, and 22 periodic reports.²¹⁸

Many of the Act's critics are concerned by the uncertainty all of this creates. Some argue that the uncertainty is keeping businesses from investing, and thus lengthening the recession.²¹⁹ That does seem quite possible. And yet, what else was Congress to do? Most of the studies and rules concern areas where there are real problems, and where the answers to those problems are far from clear. Congress could have delayed making rules until it was ready to engage in more detailed rulemaking itself, but that would have meant even more uncertainty and would have risked nothing being done as political will diminished and the crisis receded from view. Perhaps Congress could have just ignored the many problems where it had no detailed answers available, but that would have meant not addressing dozens of very real and serious problems. Further, maybe Congress could have written more detailed rules even though it did not know what to do, but that would likely have resulted in a number of bad rules.

218. *What the Dodd Frank Act Means for the Regulators?*, THECORPORATECOUNSEL.NET (July 13, 2010), <http://www.thecorporatecounsel.net/Blog/2010/07/see-page-344-hooray-kirkland.html>.

219. See Robert Higgs, *Regime Uncertainty: Why the Great Depression Lasted So Long and Why Prosperity Returned After the War*, 1 INDEP. REV. 561 (1997).

Indeed, if we assume that the crisis has revealed major regulatory gaps that must be filled, then the open-textured quality of much of the Act may well be an ingenious design. As we have seen,²²⁰ one of the conundrums of the political economy of regulation is that both regulators and the general public are most likely to push for strong regulation during a crisis, but that it is during crises when strict regulations are likely to do the most damage. Stricter regulation is best enacted when bubbles are starting to develop, but that is the time when regulators and the public are least inclined to regulate. The Act goes some way towards squaring this circle.²²¹ During the crisis, when there was pressure to act, Congress enacted major changes to the structure of financial regulation. We now know the general contours of where this regulation is headed. Further major changes are unlikely until the next crisis. A large amount of uncertainty has been eliminated. But the details will emerge only over a number of years. Regulatory uncertainty will thus continue to reduce over time, and restrictive new rules will come online as the financial system recovers (one hopes!).²²²

There is a major fly in the ointment for this strategy, however. One should be very worried that as time passes, the crisis recedes, and regulators write their rules and studies, public attention will shift to other matters and normal industry capture of the regulators will return. Will all of these new rules become toothless?

Quite possibly, but there is at least some reason to hope that these rules will have bite. The Dodd-Frank Act contains a variety of mechanisms to try to keep the regulators on their toes. Various new offices are created in the Act to inspire some independent pressure on new regulations: the Financial Stability Oversight Council,²²³ an Office of Financial Research,²²⁴ an Investor Advisory Committee²²⁵ and Office of the Investor Advocate within the SEC,²²⁶ a new council of Inspectors Generals of the major financial agencies,²²⁷ and the new Bureau of Consumer Financial Protection,²²⁸ which includes a Consumer Advisory Board.²²⁹ Dan Schwarcz and I have argued that these new offices may

220. *See supra* notes 150-54 and accompanying text.

221. Though as that metaphor suggests, true success in the task is impossible.

222. The hope here refers both to the emergence of new rules and to economic recovery. Early signs are not promising, though.

223. Dodd-Frank Wall Street Reform & Consumer Protection Act, Pub. L. No. 111-203, § 111, 124 Stat. 1376, 1392-94 (2010).

224. *Id.* §§ 151-56.

225. *Id.* § 911.

226. *Id.* § 915.

227. *Id.* § 989E.

228. *Id.* §§ 1011-18.

229. Dodd-Frank Wall Street Reform & Consumer Protection Act § 1014.

create contrarians within the agencies, which at least force attention on problems that regulators might otherwise avoid.²³⁰ All those studies and reports mean the regulators will constantly be going before Congress to explain and defend themselves. Hopefully there will at least be a few members of Congress who will use the opportunity to expose problems with existing regulations.

Some of these structures may also help address one of the deepest problems for any system that must regulate a constantly evolving and complex system like financial markets. Financial markets are always changing, with new innovations leading to potential new problems that may be very hard to foresee and analyze. The temptation is always to regulate for the last crisis rather than the next crisis. To a considerable extent this is an inevitable consequence of the limits of human reason. But we can at least push the regulators to try to anticipate what is coming next. The many studies inspired by the Act may assist in this process, as may the rulemaking processes regulators will face. Perhaps more promising, the Office of Financial Research provides a possible locus for sustained thinking about the future of financial regulation.²³¹ The Financial Stability Oversight Council may assist as well by requiring all of the major regulators to meet periodically with the charge of discussing the major current and emerging threats to the stability of America's financial system. And note that this should not be simply a call for more regulation. These new institutions also give a chance to reflect upon the existing regulations that have proven unnecessary or counterproductive.²³² Thus, not only does most of the substance of the Dodd-Frank Act consist of appropriately cowardly interventions, but at a more structural level, with its use of contrarians, delaying tactics, and incentives to further thought and action, the Act follows *Cler* strategies, recognizing the difficulties of the problems facing regulators and striving to build in mechanisms that keep regulators on their toes.

D. What's Missing?

The previous section concludes my quick tour of the major features of the Dodd-Frank Act. It covers a lot, and if I am right, most of those features are fairly sensible and should on balance do more good than harm. Of course, I will almost certainly turn out to be wrong about some of those features,²³³ and we will then face the tough task of revising or eliminating existing rules. Ill-advised rules often become entrenched as

230. McDonnell & Schwarcz, *supra* note 138.

231. Not promising, though, is how long it has taken to set up this new Office.

232. McDonnell & Schwarcz, *supra* note 138.

233. No kidding.

some parties, including the regulators themselves, benefit from the rules and fight to protect them. Then again, the pattern of extensive financial deregulation ever since the 1970s suggests that deregulation is certainly possible in this area, so we are not necessarily stuck with bad new rules forever.

But now we must ask two questions: does the whole package go too far, or does it not go far enough? One might argue that even if each individual element of the Act makes sense for the reasons given above, the combination creates too much uncertainty for financial markets during a troubled time and too many chances for unintended consequences. The crisis revealed many major flaws in financial markets that were the results of four decades of deregulation going back to the nineteen-seventies as well as decades of financial innovations to which regulators had not responded. Given the political realities of financial regulation, any flaw left unaddressed now would not be addressed until the next crisis. Which of the above problems would one choose to leave festering? Surely not shadow banking—the core provisions aimed at shadow banking are essential, even if incomplete. Credit rating agencies? The incentives of MBS originators? The risks spread by derivatives? Were one to insist on dropping a major element of the Act, the leading candidate would be the Bureau of Consumer Financial Protection, but as argued above, on balance the Bureau addresses a major problem. We could do without most if not all of the corporate governance provisions of the Act, but most of these provisions are not about financial markets, and they probably do not add appreciably to the uncertainty created for the core part of the economy that the Act regulates. The restriction on card-swipe fees is unlikely to be a good idea—price controls rarely are.²³⁴

If the Act has not done too much, then how about too little? It would not deserve the title “cowardly intervention” if some major possible changes were not enacted. What are some of the major reforms that have been argued for but not included? And is the Act seriously hurt by their absence?

1. Shadow Banking

Has the Act done enough to address the core problem of the explosion of entities that look economically like banks (taking short-term

234. There may be a real monopoly problem in the credit card industry. If so, the better solution is not price setting, but rather a rule that allows retailers to set different prices for different payment forms as they see fit. That way, consumers will bear the costs of expensive payment systems, discouraging them from using them, which in turn should encourage banks to lower fees that do not reflect costs.

debt and investing it in long term illiquid assets) but are not regulated like banks? Addressing shadow banking is the most critical task for regulators after the crisis. As noted above, the Dodd-Frank Act extends prudential regulation to companies designated as posing systemic risk, and it also allows for FDIC resolution of such institutions when they fail.

Much depends upon how far regulators go in extending those provisions. Who will count as posing risk to the stability of our financial system? My concern is that these provisions will be reserved for only the “too big to fail” companies. Indeed, the statutes seem to be written only with such companies in mind. If so, many smaller companies which collectively pose major risks will still go unregulated. That is a big problem—the most pressing task left undone by the Act. Indeed, as a result the Act might actually make matters worse. It imposes many new rules upon regulated entities, and if too much of the shadow banking system is left unregulated, the disparity could push more money into the unregulated shadow system. That would be an awful result.²³⁵

Ideally, all companies that serve similar economic functions should be similarly regulated. But how to put that idea, so simple in the abstract, into practice in a detailed system of regulation is an extraordinarily tough question. Frankly, I do not have any sort of detailed answer available.²³⁶ I sympathize with Congress’s decision to essentially bypass this thorny question and focus more on other questions where it had some answers. But while understandable, that approach will not suffice in the long run. I hope that regulators will use what powers they do have under Title I of the Act to regulate shadow banking companies now, and when the next crisis comes I hope they will use Title II’s power to handle such companies when they fail. I am not holding my breath.

2. Fannie and Freddie

The leading missing element decried by critics from the right is addressing the Fannie Mae/Freddie Mac mess. The government created these entities initially to encourage the mortgage industry, privatized

235. ROUBINI & MIHM, *supra* note 7, at 213-14; RAJAN, *supra* note 7, at 161. For a fairly similar argument which suggests a need to rather radically re-think financial regulation, while recognizing the difficulty of doing so, see Charles K. Whitehead, *Reframing Financial Regulation*, 90 B.U. L. REV. 1 (2010).

236. For one proposal, from two of the sharpest analysts of the crisis, see Gary B. Gorton & Andrew Metrick, *Regulating the Shadow Banking System*, Brookings Papers on Econ Activity, Fall 2010, at 261, available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1676947. Gorton and Metrick suggest strict regulation of collateral used in securitization and the repo market. They argue that § 120 of Dodd-Frank gives the Financial Stability Oversight Council sufficient authority to adopt such regulations as a response to systemic risk.

them with an implicit government guarantee of their debt, and then took them over when they became insolvent during the crisis. Fannie Mae and Freddie Mac are a huge part of the mortgage market. As discussed in Part II, controversy swirls over how much blame they deserve for the crisis.²³⁷ I side with most liberals and centrists in answering that they are not the major cause, but that they certainly contributed. What should we do with them now? The Dodd-Frank Act does not specify.

I say eliminate Fannie Mae and Freddie Mac. They once served a purpose, helping to make mortgages cheaper and develop the securitization market. But now private institutions and markets are well developed and capable of handling the mortgage market. Continued government involvement simply creates moral hazard due to the implicit guarantee of bailouts and leads to too many resources going into the housing market.

It may have made sense to hold off acting upon Fannie and Freddie in the Act itself. Given their huge size and central role in housing finance, and given the current sickness of the mortgage industry, the full-fledged privatization of Fannie and Freddie—presumably by selling off all of their assets—will have to be slow and well-planned. The end goal, however, should be the elimination of Fannie and Freddie as entities tied to the federal government in any way, shape, or form. The only sort of governmental guarantee their successors should have is the same implicit guarantee that all major financial industry participants now have. Given the general strategy of setting broad goals in the Dodd-Frank Act and leaving implementation to later agency action, Fannie Mae and Freddie Mac could have been eliminated by the Act. It was a failure of nerve to not do so. Even cowardly interventions need not be quite so cowardly.

3. Too-Big-To-Fail

The biggest criticism of the Dodd-Frank Act from the left is that it does not eliminate too-big-to-fail financial companies.²³⁸ Similar criticisms can come from those within more of a classical liberal perspective, who fear a cozy relationship between big banks and regulators.²³⁹ The criticism is both economic and political. As to economics, the argument is that too-big-to-fail companies cannot be allowed to fail, and hence can almost certainly anticipate a rescue. As a result, moral hazard is particularly severe for these companies, and they will be encouraged to take on far too much risk, leading to privatized

237. See *supra* note 44 and accompanying text.

238. See JOHNSON & KWAK, *supra* note 7, at 153-88; STIGLITZ, *supra* note 7, at 164-68; ROUBINI & MIHM, *supra* note 7, at 226.

239. See SKEEL, *supra* note 175, at 83-84.

profits but socialized losses. As to politics, the argument is that a few large financial companies have too much political influence, leading to legislation that does too little to regulate.²⁴⁰ These critics say we need to legislate hard limits. Financial companies should not be allowed to grow above a certain size, specified either in absolute dollar figures or tied to the size of the economy.

But there are counter-arguments to both these economic and political arguments. As to economics, we have seen that systemic risk can just as well come from many smaller companies in a market as from a few big ones. Moreover, size may actually reduce risk. With size often comes diversification, such that big financial companies may find that even as some parts of their business go bad, other parts do well enough to stay afloat.²⁴¹ The many atomized banks of the Great Depression era seem to have increased instability, for instance. It is a hard and disputed empirical question whether increased financial industry concentration increases or decreases the stability of the industry. As to politics, it is not clear that a less concentrated industrial structure would actually have less political power. Smaller financial companies, rooted in local communities, may well have more political legitimacy and clout than huge elite Wall Street firms. Even Johnson & Kwak recognize that in earlier days, coalitions of smaller banks dominated Washington.²⁴²

It is thus unclear whether a hard, blanket ban on financial companies above a certain size would on balance do more good than harm. Moreover, any hard ban would provide a strong incentive to creatively structure around limits.²⁴³ In light of these uncertainties, it probably makes sense to discourage too-big-to-fail entities in a variety of ways without banning them outright. The Dodd-Frank Act follows that strategy. At a variety of points it directs regulators to impose, or at least to consider imposing, stricter regulatory limits on larger companies.²⁴⁴ It limits the ability of financial companies above a certain size to merge.²⁴⁵ It mandates a study on the effects of the size and complexity of financial companies on capital markets,²⁴⁶ which could lead to further regulations if the rules that flow from the Act do not do enough. These responses to the too-big-to-fail dilemma may be a bit on the timid side, but

240. See JOHNSON & KWAK, *supra* note 7.

241. *Id.*

242. *Id.* at 6-13.

243. RAJAN, *supra* note 7, at 171-72.

244. Dodd-Frank Wall Street Reform & Consumer Protection Act, 12 U.S.C. §§ 1852, 5325, 5331 (2010).

245. *Id.* § 1852(b).

246. *Id.* § 5333.

remember, CIers treat cowardice as a virtue.²⁴⁷ More may need to be done in the future, but let us see how these measures work for now. We can always do more if the next crisis suggests that more is necessary.

4. Glass-Steagall

The New Deal's Glass-Steagall Act separated investment and commercial banks.²⁴⁸ The wall between the two began to crumble in the seventies, and fell completely in 1999 with the Gramm-Leach-Bliley Act.²⁴⁹ A number of commentators have suggested rebuilding this wall.²⁵⁰ The Dodd-Frank Act does not do so; the closest the Act comes is a ban on some forms of proprietary trading by investment banks.²⁵¹

I find the tie between the elimination of the Glass-Steagall Act and the financial crisis rather murky and hard to determine. The same is true for the need of the Glass-Steagall Act in the first place based on the events of the Great Depression. To some extent this is a repeat of the argument over too-big-to-fail, as the end of the Glass-Steagall Act did aid the growth of huge financial conglomerates. But it also allowed those conglomerates to diversify, which should have worked to decrease rather than increase risk. The repeal of the Glass-Steagall Act did allow the financial giants to engage in underwriting, buying, and selling mortgage-backed securities while continuing to own commercial banks as well. But even if the Glass-Steagall Act had not been repealed, huge non-bank financial companies would still have engaged in those activities, only not while owning commercial banks. It is not clear what serious harm came from allowing investment and commercial banks to combine. Insofar as this was a problem, the ban on proprietary trading partially addresses it, though there are large holes in that ban. The fact that the Glass-Steagall Act was a key part of our system for decades of stability and that the crisis occurred not long after its repeal in 1999 does argue in favor of resurrecting that Act. But the repeal was not actually

247. Rajan argues for a similar measured response to the too big to fail problem. RAJAN, *supra* note 7, at 169-76. Perhaps one could do somewhat more while still not banning all financial companies above a set size. For a few ideas not yet heeded, see Arthur E. Wilmath, *The Dodd-Frank Act: A Flawed and Inadequate Response to the Too-Big-To-Fail Problem*, 89 OR. L. REV. 951 (2011). The best idea, also stressed heavily in ACHARYA ET AL., *supra* note 7, at 121-42, is a liquidation reserve funded by risk-based premia. The risk-based premia, if measured relatively well, would force companies to internalize the risk they impose on the system.

248. Glass-Steagall Act, Pub. L. 73-66, 48 Stat. 162 (1933).

249. Gramm-Leach-Bliley Financial Modernization Act, Pub. L. 106-102 113 Stat. 1338 (1999).

250. ROUBINI & MIHM, *supra* note 7, at 210.

251. Dodd-Frank Wall Street Reform & Consumer Protection Act, 12 U.S.C. § 1851 (2010).

sudden—it was phased in over decades, beginning in the seventies. In the end, the cowardice towards the Glass-Steagall Act seems justified, if for no other reason than the fact that, given how much the Dodd-Frank Act already contains, we should be wary of adding more.

5. Regulatory Agency Reorganization

In recent years, both the Treasury Department²⁵² and other parties²⁵³ proffered a variety of grand plans to consolidate American financial regulatory agencies. Our regulatory system is quite complicated, with dozens of agencies at the federal level and much regulation done at the state level. Critics of this system suggest not only that it is confusing, but also that it allows companies to search for the most lenient regulators.²⁵⁴

The Dodd-Frank Act does very little on this front. The Act does eliminate the Office of Thrift Supervision,²⁵⁵ which had a bad reputation and little political capital, but it also created a major new agency, the Bureau for Consumer Financial Protection.²⁵⁶ Rather than consolidate agencies, it created the Financial Stability Oversight Council to improve coordination between agencies.²⁵⁷ That is not a major change, but I suspect that is for the best. Major consolidations of federal agencies threaten to create a new layer of bureaucracy without actually bringing the underlying agencies closer together.²⁵⁸ There is already a lot going on within the Dodd-Frank Act, creating serious uncertainty. There is little point in creating even more uncertainty with bureaucratic reshuffling.

That said, one place where more reshuffling may have been in order is merging the Securities and Exchange Commission (SEC) with the Commodities Futures Trading Commission (CFTC). The differences between their subject areas are merely historical; in essence, both

252. Press Release, Department of the Treasury, *Blueprint for a Modernized Financial Regulatory Structure* (March 2008), available at <http://www.treasury.gov/press-center/press-releases/Documents/Blueprint.pdf>.

253. See CONG. OVERSIGHT PANEL, *SPECIAL REP. ON REGULATORY REFORM* (Jan. 29, 2009); GROUP OF THIRTY, *FINANCIAL REFORM: A FRAMEWORK FOR FINANCIAL STABILITY* (Jan. 2009).

254. ROUBINI & MIHM, *supra* note 7, at 216.

255. Dodd-Frank Wall Street Reform and Consumer Protection Act, 12 U.S.C. § 5413.

256. *Id.* at § 5301. It is not clear if the bad reputation of OTS was really earned. See Dain C. Donelson & David Zaring, *Requiem for a Regulator: The Office Thrift Supervision's Performance During the Financial Crisis*, 89 N.C. L. REV. 1777 (2011).

257. Dodd-Frank Wall Street Reform and Consumer Protection Act, 12 U.S.C. §§ 5321, 5322(a)(2). Recall that the FSOC is not a new agency, but rather a coordinating body composed of the heads of the major financial regulatory agencies.

258. Can you say Department of Homeland Security?

agencies regulate securities trading. There is really no reason for both agencies to exist aside from turf wars both between the agencies and their congressional committee overseers.²⁵⁹ In the Dodd-Frank Act, the resulting awkwardness shows in the regulation of swap markets. Parallel structures and rules are created for securities-based swap markets, regulated by the SEC,²⁶⁰ and regular swap markets, regulated by the CFTC.²⁶¹ At best, this dual machinery is cumbersome and unnecessary; at worst, it will lead to regulatory arbitrage as market participants look for the less strict regulator. The agencies are supposed to coordinate,²⁶² but that may not work as well as one would hope.

In short, the Dodd-Frank Act is perhaps even more cowardly than optimal on agency reorganization, but on the whole its cowardice on this front is warranted.²⁶³

6. International Cooperation

There are a few desultory calls for agency consultation with agencies from other countries in the Dodd-Frank Act.²⁶⁴ Yet on the whole the Act says little and does less about the international dimension of financial regulation. That is an important hole. As capital flows quickly around the world, even the best of national regulatory regimes risks failure if markets simply avoid that regulation by moving to other countries with lighter rules. Thus, some international cooperation is essential. The Basel process whereby major national bank regulators agree on a basic framework for capital requirement rules is by far the most important example of such regulation to date. Work is well-advanced on Basel III, which so far seems to be a real advance over Basel II. Basel II went too far in relying on banks' own internal risk models.²⁶⁵ The Basel III rules set minimum standards that are more vanilla and should be harder for banks to avoid. They should thus play a

259. ROUBINI & MIHM, *supra* note 7, at 202-03.

260. Dodd-Frank Wall Street Reform & Consumer Protection Act, Pub. L. No. 111-203 §§ 761-74, 124 Stat. 1376, 1754-1802 (2010).

261. *Id.* §§ 721-54.

262. Dodd-Frank Wall Street Reform & Consumer Protection Act, 15 U.S.C. § 8302(a) (2010).

263. For a pre-Dodd-Frank article that similarly cautions against overly sweeping reorganization and in favor of incremental adjustments, see Lawrence A. Cunningham & David Zaring, *The Three or Four Approaches to Financial Regulation: A Cautionary Analysis Against Exuberance in Crisis Response*, 78 GEO. WASH. L. REV. 39 (2009).

264. Dodd-Frank Wall Street Reform & Consumer Protection Act, Pub. L. No. 111-203 §§ 175, 217, 752, 929Y (2010).

265. Erik F. Gerding, *Code, Crash, and Open Source: The Outsourcing of Financial Regulation to Risk Models and the Global Financial Crisis*, 84 WASH. L. REV. 127 (2009).

helpful role in limiting undue leverage. They even make some attempt at encouraging counter-cyclical requirements.²⁶⁶ However, Basel III may not go far enough—its capital requirements are probably too low, and its risk weighting of assets still probably allows for too much gaming. A letter from some of the leading finance economists in the world makes that case.²⁶⁷ But it is an improvement, and going a lot further given lobbying by bankers and the difficulties of international negotiations would have been difficult.

Basel is probably not enough for international cooperation, however, and for the same reason that our domestic banking regulations are not enough: the banking rules do not address the shadow banking world. How should international cooperation address shadow banking? I have little clue—after all, even the best domestic approach is far from clear, and the international picture is more complicated still. Regulators are also going to have to cooperate more in devising a resolution process for multinational financial companies.

Still, I am not convinced that more international cooperation is necessarily a good thing. Such cooperation comes with a dark side. It makes the global financial system more uniform, which means that if something goes wrong, it is more likely to hit each country in the same way at the same time, which is largely what happened in the recent crisis.²⁶⁸ Thank goodness, some major countries operated differently, including China, whose very different financial and economic system weathered the crisis better than Western economies.²⁶⁹ There is a lot to be said for having a more diverse set of financial systems, such that if some collapse others keep going, and so that we have more experimentation and learning over time.²⁷⁰ It is, however, hard to know how to have such diversity while still allowing free international capital flows. A move towards more diverse systems would probably need to be accompanied by some limits on cross-border capital flows.

266. Press Release, Basel Committee on Banking Supervision, Group of Governors and Heads of Supervision Announces Higher Global Minimum Capital Standards (Sept. 12, 2010), available at <http://bis.org/press/p100912.htm>.

267. Anat Admati et. al., Letter to the Editor, *Healthy Banking System is the Goal, Not Profitable Banks*, FIN. TIMES, Nov. 9, 2010, available at <http://www.gsb.stanford.edu/news/research/admatiopen.html>.

268. See Charles K. Whitehead, *Destructive Coordination*, 96 CORNELL L. REV. 323 (2011).

269. So far, at least. There's still time for a Chinese collapse. Chinese banks and real estate markets have some serious problems. A Chinese collapse in the world's current fragile state would be terribly exciting. We seem doomed to live in exciting times.

270. Brett H. McDonnell, *Convergence in Corporate Governance—Possible, But Not Desirable*, 47 VILL. L. REV. 341 (2002).

E. The Act on Balance

The previous section discussed the biggest alleged holes in the Dodd-Frank Act: areas where there was serious support for more action than Congress was willing to take. For some of these areas, more action indeed seems justified—the Act is even a bit more cowardly than Ciers would prefer. But in other areas, the failure to act was prudent. On balance, the Act takes action in a number of ways that appear to be useful and well aimed at real problems revealed in the crisis, and it does not have a lot of glaring holes (with the possible severe exception of the shadow banking world, depending upon how rulemaking evolves). My early assessment is that the Dodd-Frank Act is a rather exemplary exercise in the applied philosophy of cowardly intervention.

And yet, a voice within me does call out that the crisis has suggested future disasters looming, and that the Act is far from bold enough to turn us off a path leading to those disasters. I ponder this voice in the Conclusion.

VII. CONCLUSION

This crisis has been serious, and the resulting recession will be deep and long. But we seem to have averted a true disaster.²⁷¹ It could have been worse. The initial shocks to the system in 2007-08 were arguably as severe as those of 1929-30. This could have become the Second Great Depression. The series of bailouts, the discretionary stimulus, and the automatic stabilizers put in place by a federal government that is much bigger and more pervasive than that of the Hoover era all helped stave off a much worse crisis.

And yet, many of the factors that led to the crisis still exist. The shadow banking system remains in place, and the Dodd-Frank Act does not fully address it. The financial industry remains hugely powerful, albeit politically unpopular for the moment. Financial industry participants still receive huge bonuses, luring much talent into this industry that could probably be more socially productive elsewhere and giving that talent incentive to take high risks and invent new and more complicated products. Our financial system remains incredibly complex, tightly coupled, and rapidly evolving. And the bailouts needed to stop the collapse have made the moral hazard problem far worse than it was before.

Even more fundamental economic problems may lie behind these remaining risks. The global economy is unbalanced. Emerging countries like China save huge amounts of money and have invested that

271. At least as of the time of this writing. But it's not over yet.

money in the world's most advanced economy, that of the U.S. This huge influx of capital into the U.S. played a major role in driving up the asset bubbles, first internet companies and then the housing market.²⁷² More debatably, rising inequality in the U.S. may have led policymakers to encourage a financial system that provides easy credit, diverting the pain of stagnant incomes for middle class families. But this diversion of pain is unsustainable in the long run.²⁷³ The U.S. financial system and economy are becoming ever more unstable and unbalanced. The Dodd-Frank Act applies some band-aids, but it does not cure what ails us.

Perhaps the uncertainty that I have emphasized combined with some possibility of a truly catastrophic and irreversible²⁷⁴ financial crisis suggests that we should invoke the precautionary principle,²⁷⁵ which would dictate much stricter regulations than I advocate or than the Dodd-Frank Act requires. There is much debate over whether the precautionary principle is ever justified, and if so, under what circumstances. It seems to me that one necessary (but not sufficient) condition for a plausible justification is that there is some realistic (if perhaps not quantifiable) chance of a truly irreversible catastrophic outcome in the absence of regulation.²⁷⁶ In the area of environmental regulation, the main home of the precautionary principle, catastrophe predictions commonly invoke the end of civilization as we know it.

Is such a catastrophe a possible outcome of inadequate financial regulation? It may help to distinguish black swans from white swans in this area.²⁷⁷ Roubini and Mihm point out that financial crises are not rare and hard to predict. They are in fact quite common, occurring regularly in all advanced economies over the last several centuries.²⁷⁸ Roubini and Mihm thus argue that financial crises are white swans, not the rare events that Taleb popularized as black swans.²⁷⁹ These garden-variety financial crises, including the one we are now living through, are not the kind of catastrophe that may justify invoking the precautionary principle. They are painful, but few people die, and after some time economies do recover and progress go on. Economic capacity may never fully get back

272. ROUBINI & MIHM, *supra* note 7, at 127.

273. RAJAN, *supra* note 7, at 21-45.

274. On the importance of irreversibility, see Yair Listokin, *Learning through Policy Variation*, 118 YALE L.J. 480 (2008).

275. See David Dana, *The Contextual Rationality of the Precautionary Principle*, 35 QUEEN'S L.J. 67 (2009); Daniel A. Farber, *Uncertainty*, 99 GEO. L.J. 901 (2011); Katie Steele, *The Precautionary Principle: A New Approach to Public Decision-Making?*, 5 L. PROB. & RISK 19 (2006).

276. See Listokin, *supra* note 274.

277. NASSIM NICHOLAS TALEB, *THE BLACK SWAN: THE IMPACT OF THE HIGHLY IMPROBABLE* (2007).

278. See REINHARDT & ROGOFF, *supra* note 17.

279. ROUBINI & MIHM, *supra* note 7, at 14-15.

to where it would have been in the absence of the crisis, but that is no catastrophe.

One great financial crisis looks worse than the typical white swan event: the Great Depression. The Great Depression included an unprecedented decline, lasted many years, was worldwide in scope, and seemed to bring society to the brink of a true catastrophe. Indeed, to the extent that the Depression led to Hitler, the growth of communism, and World War II, the consequences were awful. Yet the world did recover. Some countries left the capitalist system and democracy, but they returned.²⁸⁰ Even this was not quite the sort of catastrophe that would justify invoking the precautionary principle. Call it a grey swan.

But it was this grey swan that gave society a glimpse of a possible black swan financial crisis. Imagine a Great Depression without leaders of the caliber of Roosevelt and Churchill (and Keynes). The U.S. and the U.K. either succumb to totalitarian politics internally (fascism or communism), or else they lose the war and totalitarian regimes reign. Orwell's vision triumphs.²⁸¹ That is a financial crisis black swan that would truly herald the end of market-based, democratic civilization as we know it. If there is some sort of realistic possibility for such an event, perhaps that justifies more urgent measures than the Dodd-Frank Act.

Is such a doomsday outcome possible enough to plausibly invoke the precautionary principle in this realm of regulation? It is debatable, but I suspect the answer is yes.²⁸² I do not find it necessary to further address this question, however, because even if a black swan scenario is plausible, I do not think that, as of now, there is sufficient justification for enhanced regulation beyond the Dodd-Frank Act.

Why not? Because greatly enhanced regulation carries with it its own doomsday scenario. Hayek has already sketched out the basic path in *The Road to Serfdom*. His story needs updating to make it truly plausible for the contemporary world; elements of his story seem quite dated—the sorts of socialist planning which were his primary target seem quaint and obsolete.²⁸³ But still, I think one can sketch a plausible story leading from well-meaning attempts at extensive new regulation today to ever-growing regulation needed to stop attempts to get around prior regulation. Regulators need to keep pushing forward in order to maintain past regulatory growth. To succeed, they need to quash political

280. Cuba and North Korea: still waiting. China: on a return trip.

281. GEORGE ORWELL, *NINETEEN EIGHTY-FOUR* (1949).

282. That is, after all, the pessimist's answer.

283. Outside of Cuba and North Korea.

opposition. The basic logic of *The Road to Serfdom* remains, even if many of the details are changed.²⁸⁴

Indeed, many Americans believe we are heading down that road under the Obama Administration.²⁸⁵ I find that rhetoric incredibly and rather dangerously overblown, and indeed I have here defended one of the President's main regulatory initiatives. But my point does not need to be as alarmist as that of the Tea Partiers. I do not need to show that there is right now a strong possibility that we are heading down the road to serfdom. All I need to do is suggest that there is a non-trivial possibility that strong regulation could eventually send us in that direction. That possibility counter-balances the potential catastrophe that could occur should we regulate too lightly.²⁸⁶

Given that anything we might do could turn out to produce catastrophe, the chance of such disaster cannot really guide us unless we have good reason to believe that one path substantially reduces the risk of catastrophe relative to other paths. I do not believe we have good reason to believe that right now when it comes to the possibility of calamity through financial crisis.²⁸⁷ Moreover, even if there were good reason to believe that one path is safer, and that path involved much more restrictive regulation than I advocate here, for now such regulation does not appear politically feasible. Perhaps if enough people become adequately aware of looming catastrophe, more severe regulation will become feasible.

284. A similar argument could be made within the home of the precautionary principle itself, environmental regulation. Perhaps someone should write an article called "The Road to Eco-Serfdom."

285. Those Americans have made *The Road to Serfdom* the leading economics book on Amazon.com. [Editor's Note: As of August 14, 2011, *The Road to Serfdom* is ranked number 13 on the list of *Bestsellers in Economics*, AMAZON.COM, http://www.amazon.com/gp/bestsellers/books/2581/ref=zg_bs_nav_b_2_53.]

286. My logic here resembles some of my favorite counter-arguments to Pascal's wager. The wager, you will remember, is that we should choose to believe in God rather than not because the payoff to believing should God in fact exist is infinitely positive (heaven) while the payoff to not believing is infinitely negative (hell). Should God not exist, the payoffs are finite, and thus dwarfed by the infinite payoffs should God exist so long as there is any possibility (however small) that God does exist. PASCAL, PENSÉES (1669). But, what if one chooses to believe in the wrong God, and the true God consigns infidels to an even worse hell? 1 DENIS DIDEROT, PENSÉES PHILOSOPHIQUES 167 (1746) (Fr.). Maybe there is an omnipotent Demon which will punish us with infinite pain for believing in a good God. Edward Stein, *God, the Demon, and the Status of Theodicies*, 27 AM. PHIL. Q. 163 (1990). We may suffer infinite harm either way; the mere size of the consequences if things turn out badly is not enough to determine our choice.

287. That is not to say that all options are equal in their likely effects on more predictable crises. I have argued at length that cowardly interventions are best for that purpose. Rather, I claim here that the options before us are roughly similar in terms of their inability to ward off a financial Armageddon.

If we are indeed on the path to disaster unless we drastically reform and tame our financial system, perhaps what it will take to convince us to move off that path is a grey swan like the Great Depression. A mere white swan like the crisis we have just experienced is not enough. If that is our path, let us hope then that we happen upon a grey swan before a black one.

But let me (uncharacteristically) pull back from this complete pessimism and return to the more qualified pessimism that characterizes most of this paper. For now, there is not much we can or should do to guard against true civilization-threatening disaster. What we can and should do is try to delay the onset of the next financial crisis, improve our ability to quickly address the crisis when it does arrive, and do those things without going too far to restrict the dynamic financial markets which are at the center of what is, after all, the most successful economy in history. Even accomplishing these much more modest tasks imposes incredibly hard difficulties given the rapidly evolving complexity of our financial system and the great uncertainty inherent in our limited understanding of that system.

We have looked to three wise guides for guidelines as to how to regulate in the face of such deep uncertainty. They have provided insights, but contradictory directions. An approach of cowardly interventions in the face of financial crisis seems to best integrate their contradictory insights. The Dodd-Frank Act, while imperfect even under this philosophy that emphasizes inevitable imperfection, on balance does pretty well under the circumstances.

Which leads to one last alternative titling attempt.

Final Alternative Title: Long-Run: Possibly Doomed; Short-Run: Yuck; Medium-Run: Maybe Not So Bad.

Or more simply, and I promise my last alternative title: *Alternative Final Alternative Title:* Panic?
