

DAMPENING FINANCIAL REGULATORY CYCLES

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Abstract

Financial regulation should be countercyclical, strengthening during speculative booms to contain excessive leverage and loosening following crises so as to not limit credit extension in hard times. And yet, financial regulation in fact tends to be procyclical, strengthening following crises and loosening during booms. This Article considers competing descriptive and normative analyses of that procyclical tendency. All of the models and arguments considered are rooted in a public choice perspective on financial regulation, i.e., rational choice ideas drawn from economics and applied to politics, but with that perspective modified to take account of behavioralist biases in rationality, particularly the availability bias. That bias helps explain the procyclical tendency in financial regulation, as both the public and regulators ignore the threat of financial crises during boom times and become very focused on that threat when crises actually occur. The normal dominance of concentrated interest groups temporarily shifts as public attention turns to financial regulation following a crisis.

The models considered here differ greatly in their normative conclusions; some mainly criticize the deregulation that occurs during booms, some mainly criticize the regulation that occurs following crises, and some criticize the timing of both. The models differ in how they understand the balance of interest groups outside of crises and how likely that balance is to lead to outcomes that reflect the public interest; in how well they think the crisis-related public attention can be channeled to reflect the public interest; and in how they analyze the underlying vulnerability of financial institutions and markets and the intellectual difficulty of regulation. After analyzing these differing models, this Article considers historical evidence to determine the best approach, and then considers various administrative mechanisms that might help dampen the procyclical tendencies of financial regulation. This Article considers procedures such as bicameralism and the committee system in Congress, notice-and-comment rulemaking, hard-look judicial review, independent agencies, sunset clauses, mandated agency studies, regulatory “contrarians,” and automatic triggers for

* For helpful comments, I thank Victor Fleischer, Jose Gabilondo, Erik Gerding, Harvey Goldschmid, Zachary Gubler, Claire Hill, Howell Jackson, Daniel Pi, Paul Rubin, Andrew Schwartz, Dan Schwarcz, Danny Sokol, and participants in the Canadian Law and Economics Association and Midwestern Law and Economics Association annual conferences, the conference on the Political Economy of Financial Regulation at George Washington University Law School, and seminars at the University of Colorado, Florida State, and University of Minnesota Law Schools.

various rules.

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INTRODUCTION

Financial markets tend to experience cycles. After periods of relative calm and good news, one sees speculative bubbles. Investors crowd into favored markets and assets, often financing their investments with ever-increasing levels of debt. The bubbles eventually burst, and that debt helps lead to contagious panics. These crises frequently bring entire economies into recession, and those recessions are often painful and long lasting, as institutions try to dig out from under their debts.¹

Governments' responses to these cycles also tend to follow a pattern, but the pattern is not ideal. Insofar as governments regulate financial markets and institutions to reduce speculative bubbles and avoid crises, such regulation should kick in or become stronger during the boom times, when restraint on markets is (arguably) needed. Strengthened regulation during and immediately following financial crises, in contrast, risks further reducing credit precisely when credit has collapsed and needs to expand to help finance recovery. In short, optimal financial regulation should be countercyclical.²

1. See CHARLES P. KINDLEBERGER & ROBERT Z. ALIBER, *MANIAS, PANICS, AND CRASHES: A HISTORY OF FINANCIAL CRISES* 9–10 (5th ed. 2005); CARMEN M. REINHART & KENNETH S. ROGOFF, *THIS TIME IS DIFFERENT: EIGHT CENTURIES OF FINANCIAL FOLLY* 224 (2009).

2. See *infra* note 29 and accompanying text.

Alas, in practice, regulation appears to be procyclical.³ That is, major new regulatory initiatives, both statutory and administrative, happen most frequently during or immediately following financial crises. The leading, prototypical examples are the extensive financial regulatory statutes enacted during the New Deal.⁴ In contrast, during boom times there appears to be a tendency for politicians, judges, and regulators to share the optimism that helps fuel the booms, with the result that they tend to deregulate precisely when regulation should strengthen.⁵ The gradual loosening and then elimination of the separation of commercial and investment banking is an important example.⁶

What causes financial regulation to be procyclical, and is there anything we can do to reverse, or at least reduce, the trend? This Article addresses these questions. A number of scholars have noticed this problem, and this Article discusses some of them. Review of their work, though, shows a split in how scholars evaluate the procyclical regulation problem. Some think the main concern is governments' tendency to overregulate following crises; these scholars see deregulation in good times as a useful corrective.⁷ Others think the main concern involves deregulation in good times and see crises as the only time that needed regulation is politically feasible.⁸ Still others think we get things quite wrong in both phases.⁹ Which diagnosis one believes greatly affects which prescriptions look most attractive.

Part I describes the basic character of financial markets and regulatory cycles. Part II analyzes some of the leading scholarly narratives addressing procyclical regulation and categorizes these narratives into three models. Model 1 sees overregulation following crises and excessive deregulation in boom periods. However, compared to the other two models it does see a bright side; it describes the average level of regulation over time as roughly correct, even if its cyclical variations are out of optimal phase. Model 2 is more concerned with overregulation following crises, which it believes leads to a long-run pattern of overregulation. Model 3 is more concerned with excessive deregulation occurring in boom times, believing that this helps lead to a long-run pattern of overly weak regulation.

3. See *infra* Section I.B (discussing how new financial regulations are typically not enacted until after the passage of a financial crisis). This Article uses the term “procyclical” as a contrast to “countercyclical,” and uses the latter term in the conventional way to refer to policy that acts to counteract financial cycles.

4. See *infra* 110–16 and accompanying text.

5. ERIK GERDING, BUBBLES, FINANCIAL REGULATION, AND LAW 11 (forthcoming 2013).

6. *E.g.*, Gramm-Leach-Bliley Act, Pub. L. No. 106-102, 113 Stat. 1338 (1999) (codified as amended in scattered sections of 12 U.S.C. and 15 U.S.C.).

7. See *infra* Section II.B.

8. See *infra* Section II.C.

9. See *infra* Section II.A.

All models considered here are rooted in a classical public choice analysis¹⁰ in which more concentrated interest groups (as opposed to diffuse groups) are more capable of organizing to promote their preferred policies. The models are compared on three dimensions: the regulatory demand side, the regulatory supply side, and normative foundations.

The “regulatory demand side” refers to how the models understand the usual organizational success of differing interest groups focused on financial regulation. The models differ somewhat in their analyses of competing groups. Models 1 and 3 see most financial regulation as characterized by one-sided organization, with financial insiders well organized and consumer groups and the general public poorly organized. Model 2, on the other hand, sees more divergence among organized interests within financial markets, and hence more balanced political competition. All of the models see a fundamental change occurring during financial crises, as the general public and ordinary politicians suddenly focus on financial regulation, which they usually ignore. However, Models 1 and 2 see this as leading to impulsive, uninformed, and overly restrictive (or else empty) new rules, while Model 3 thinks there are actors who can help guide the new rules in a more positive way (although their efforts sometimes meet only limited success).

The “regulatory supply side” refers to how regulators and politicians respond to interest group pressures. All three models see both legislators and regulators as heavily influenced by the best organized group, but wanting to at least appear responsive to the general public when public attention focuses on financial regulation. Model 2 adds emphasis on the tendency for bureaucrats to favor rules that extend the power of their agencies.

The third dimension of comparison is “normative foundations,” which refers to concepts of how well lightly regulated financial markets and institutions are likely to function and how intellectually demanding effective financial regulation will likely be. Model 2 sees markets as functioning relatively well and regulation as extremely challenging conceptually, while Model 3 is more distrustful of markets and less distrustful of regulation.

10. See generally DANIEL A. FARBER & PHILLIP P. FRICKEY, *LAW AND PUBLIC CHOICE: A CRITICAL INTRODUCTION* 1 (1991) (providing an overview of public choice theory); DENNIS C. MUELLER, *PUBLIC CHOICE III*, at 1–2, 6 (2003) (surveying the field of public choice theory and its impact on positive and normative understandings of politics); MAXWELL L. STEARNS & TODD J. ZYWICKI, *PUBLIC CHOICE CONCEPTS AND APPLICATIONS IN LAW* 1–2, 45–46 (2009) (contrasting public interest, pluralism, and modern public choice models); D. Daniel Sokol, *Explaining the Importance of Public Choice for Law*, 109 MICH. L. REV. 1029, 1029–30 (2011) (reviewing *PUBLIC CHOICE CONCEPTS AND APPLICATIONS IN LAW*, a casebook devoted to public choice in legal settings).

Table 1 summarizes the three models:

	<u>Model 1</u>	<u>Model 2</u>	<u>Model 3</u>
Period of cycle of most concern	Both overregulation after crisis and excessive de-regulation in boom	Overregulation after crisis	Excessive de-regulation in boom
Long term trend	Roughly right level of regulation	Overly strong regulation	Overly weak regulation
Regulatory demand side	Industry groups favor weak regulation in boom; populist pressure for strong regulation after crisis	Balanced interest groups in boom; ignorant populist pressure after crisis	Industry groups favor weak regulation in boom; populist pressure reflects public interest after crisis
Regulatory supply side	Interest group capture	Interest group capture and bureaucratic aggrandizement	Interest group capture
Normative foundations	Lightly regulated markets are unstable but regulation is hard	Lightly regulated markets work well, regulation is very hard	Lightly regulated markets are deeply unstable, regulation isn't all <i>that</i> hard

Table 1

Part III briefly surveys the historical experience with financial regulation in the United States, in order to sort out which of the three models best describes that experience. All models suggest some real insights, and can point to historical examples and data that support them. But all in all, this Article argues that Model 1 best explains the central tendencies of the American historical experience. Moreover, although Model 1 sees significant dysfunction in the timing of regulatory innovation, in comparison with the other two models there is a silver lining. At least the long-term level of regulation is more or less optimal, not too long or short of the mark. Over time we have created a

system for regulating financial institutions and markets that, on balance, seems better than the much more laissez-faire approach of the nineteenth century. We have achieved greater stability without much less efficiency and innovation. The core of that regulatory system was instituted following financial crises, above all in the New Deal. Strengthening the rules in boom times and loosening them following a crisis would be better, yes, but doing so mostly exceeds our political and cognitive capacities.

Part IV nonetheless tries to learn from the models and the historical evidence to consider ways to smooth out the financial regulatory cycle, and encourage sensible new rules while weeding out overregulation. Which procedures look best will depend of course on which model one thinks best fits our experience—Model 2 will tend to encourage procedures that limit new rules and help undo past mistaken rules, while Model 3 will try to stop existing rules from being undone. Many existing elements of administrative procedure already help achieve some of these goals, and there are a variety of proposals for other procedures that might further help. Some of the procedures this Article considers include bicameralism and the committee system in Congress, notice-and-comment rulemaking, hard-look judicial review, independent agencies, sunset clauses, mandated agency studies, regulatory “contrarians,” and automatic triggers for various rules.

I. THE BASIC CHARACTER OF FINANCIAL MARKET AND REGULATORY CYCLES

A basic premise of this Article is that financial market cycles and financial regulatory cycles are closely tied to each other. Similar psychological factors help drive each, and each helps cause the other.¹¹ This Part quickly sketches some of the basic characteristics and causes of each kind of cycle, starting with financial market cycles. Later parts will both build and elaborate upon these characteristics and causes.

A. *Financial Market Cycles*

This Article’s account of financial market cycles follows that of Hyman Minsky.¹² Financial bubbles begin after a period of economic

11. GERDING, *supra* note 5.

12. Compare HYMAN P. MINSKY, *STABILIZING AN UNSTABLE ECONOMY* 197–220 (1st ed. 1986), with José Gabilondo, *Dodd-Frank, Liability Structure, and Financial Instability Cycles: Neither a (Ponzi) Borrower nor a Lender Be*, 46 WAKE FOREST L. REV. 469, 469–70 (2011), Brett McDonnell, *Don’t Panic! Defending Cowardly Interventions During and After a Financial Crisis*, 116 PENN ST. L. REV. 1, 27 (2011) [hereinafter McDonnell, *Don’t Panic!*], and Brett H. McDonnell, *Of Mises and Min(sky): Libertarian and Liberal Responses to Financial Crises Past and Present*, 34 SEATTLE U. L. REV. 1279, 1301–02 (2011) [hereinafter McDonnell, *Of Mises and Min(sky)*].

quiet has caused investors and businesses to forget the pain and lessons of the last bust. Some new developments spur new investments. Optimism grows and starts feeding on itself as more new investors get into the game, inflating asset prices and helping assure good returns for the early investors. Investors take on increasing amounts of debt; a great way to multiply profit so long as things go well, but a source of serious risk if things go badly and they are unable to pay off the debt.¹³ Debt grows, and the whole system becomes increasingly unstable as the boom enters its final period of frenzy. Eventually expectations shift—even very small pieces of bad news can set off the end of the bubble and the beginning of the bust. With debt so high, once expectations start turning, investors start trying to get out of their investments to pay off their debt. But as growing numbers try to sell off, asset prices start to plummet. A vicious cycle of falling prices and bankruptcies leads to a crash.¹⁴ The financial crisis feeds into the real economy as businesses are unable to fund operations. A major contraction follows. It typically takes years to recover, as financial companies and businesses hoard cash and try to rebuild their shattered financial status.¹⁵

As mentioned, Minsky was the key innovator in developing an economic model of financial market booms and busts. Minsky, in turn, built on the work of Keynes.¹⁶ But these ideas are not limited to liberal Keynesians—a somewhat similar story can be found in Mises and Hayek’s Austrian business cycle theory.¹⁷ Minsky’s theory underlies Charles Kindleberger’s pathbreaking work on the history of manias and panics.¹⁸ It also fits well with the more recent and systematic history of

13. See MINSKY, *supra* note 12, at 211–14.

14. See MINSKY, *supra* note 12, at 214–17; see also KINDLEBERGER & ALIBER, *supra* note 1, at 9–11.

15. See KINDLEBERGER & ALIBER, *supra* note 1, at 9–11; Irving Fisher, *The Debt-Deflation Theory of Great Depressions*, 1 *ECONOMETRICA* 337, 342 (1933); see also MINSKY, *supra* note 12, at 219–20.

16. Compare JOHN MAYNARD KEYNES, *THE GENERAL THEORY OF EMPLOYMENT, INTEREST, AND MONEY* 46–47 (1936) (describing the dependence of producers’ business decisions on their expectations of consumer demand), with HYMAN P. MINSKY, JOHN MAYNARD KEYNES (1976), and MINSKY, *supra* note 12, at 172 (“The fundamentals of a theory of financial instability can be derived from Keynes’s *General Theory* . . .”).

17. FRIEDRICH A. HAYEK, *PRICES AND PRODUCTION* 75–101 (2d ed. 1935) (“[I]ndustrial fluctuations consist essentially in alternating expansions and contractions of the structure of capital equipment”); F.A. HAYEK, *THE CONSTITUTION OF LIBERTY* 4 (1960); F.A. Hayek, *The Use of Knowledge in Society*, 35 *AM. ECON. REV.* 519, 526–27 (1940) [hereinafter Hayek, *The Use of Knowledge in Society*] (discussing how individuals with limited knowledge can communicate relevant information in the marketplace via prices); McDonnell, *Of Mises and Min(sky)*, *supra* note 12, at 1288–89 (noting the similarities between the Austrian and Keynesian theories); see also Larry E. Ribstein, *Commentary, Bubble Laws*, 40 *HOUS. L. REV.* 77, 79–83 (2003) (describing the “boom-bubble-bust-regulate” cycle of financial regulation).

18. KINDLEBERGER & ALIBER, *supra* note 1, at 21–32.

crises by Reinhart and Rogoff.¹⁹

Recent work on behavioral economics²⁰ and behavioral finance²¹ reinforces Minsky's story. People vary systematically from the sort of rational behavior usually assumed by economists in a variety of ways. Perhaps most central to our story is the availability bias—people give too much emphasis to recent and salient events.²² Thus, as the boom develops, market participants forget busts in the past, and are beguiled by recent good market news. Also important are rational herding²³ and the social nature of expectations.²⁴ People tend to follow the beliefs of others around them, making both bubbles and busts self-reinforcing. One important objection to behavioral finance is that even if many people suffer from such deviations from rationality, with so much money at stake, markets should correct mistakes, as more rational investors find ways to benefit from the mistakes of others.²⁵ But as economic theorists and empirical researchers have developed behavioral finance, they have put forward a number of reasons why such market corrections may frequently be weak and delayed.²⁶

Of course, not everyone buys into the Minsky-style story of financial market instability. Believers in the efficient capital market hypothesis typically maintain that financial markets are better behaved than Minsky would suggest, although even within an efficient markets approach, some significant instability is possible.²⁷ Given the extensive history of unstable markets, this view seems hard to maintain.²⁸ At any rate, this

19. REINHARDT & ROGOFF, *supra* note 1 (providing a quantitative analysis of different types of financial crises throughout history).

20. See Christine Jolls, Cass R. Sunstein & Richard Thaler, *A Behavioral Approach to Law and Economics*, 50 STAN. L. REV. 1471, 1476–77 (1998); see also Amos Tversky & Daniel Kahneman, *Judgment Under Uncertainty: Heuristics and Biases*, 185 SCI. 1124, 1124–30 (1974).

21. See ANDREI SHLEIFER, *INEFFICIENT MARKETS: AN INTRODUCTION TO BEHAVIORAL FINANCE* 113–14, 154–55 (2000).

22. See Amos Tversky & Daniel Kahneman, *Availability: A Heuristic for Judging Frequency and Probability*, 5 COGNITIVE PSYCHOL. 207, 208–09 (1973) (proposing and analyzing the availability heuristic).

23. See Andrea Devenow & Ivo Welch, *Rational Herding in Financial Economics*, 40 EUR. ECON. REV. 603, 603–05 (1996) (noting the significance of herding in the financial realm).

24. See Claire A. Hill, *Justification Norms Under Uncertainty: A Preliminary Inquiry*, 17 CONN. INS. L.J. 27, 28–29, 34–35 (2010) (identifying herding and social norms as influential on decision making).

25. See SHLEIFER, *supra* note 21, at 2–5.

26. *Id.* at 23–27.

27. See Karl Shell, *Sunspot Equilibrium*, in THE NEW PALGRAVE DICTIONARY OF ECONOMICS (Steven N. Durlauf & Lawrence E. Blume, eds., 2d ed. 2008), available at http://www.dictionarofeconomics.com/article?id=pde2008_S000325 (subscription required) (describing different extrinsic sources of market volatility in economic outcomes).

28. KINDLEBERGER & ALIBER, *supra* note 1, at 21–32; REINHARDT & ROGOFF, *supra* note 1 (providing an empirical analysis of the boom–bust cycle of financial crises using data from

Article will not relitigate that dispute. This Article will assume a Minskyan understanding of financial markets.

Given this understanding, there is clearly conceptual room for welfare-improving financial regulation. One would want that regulation be countercyclical. That is, regulation should become more strict during boom times, working to lean against the wind of euphoria and to help keep bubbles from inflating as far and as fast as they would in the absence of regulation. When busts hit, the regulation should lighten up, so that it does less to inhibit financial companies from extending credit during a time when credit is tight anyway.²⁹

B. *Financial Regulatory Cycles*

And yet, that is not what we typically observe. Major new financial rules, both legislation and agency regulations, tend to occur in the wake of financial crises. The most dramatic example in American history is the New Deal financial regulation.³⁰ In the last decade we have seen the Sarbanes-Oxley Act following the dot-com bust,³¹ and then the Dodd-Frank Act following the financial crisis of 2007–2008.³²

These are not isolated examples. Stuart Banner has studied the history of securities regulation over the last several hundred years.³³ In an article summarizing some of that research, Banner writes that “[i]f new technology doesn’t cause new securities regulation, what does? In a nutshell, crashes.”³⁴ Of course, as Banner notes, this is not a universal rule, but it is a strong one:

This is just a general trend, not an absolute rule. There have been sharp price declines without subsequent regulation, and of course there has been regulation without immediately

sixty-six countries over eight centuries).

29. See Amitai Aviram, *Countercyclical Enforcement of Corporate Law*, 25 YALE J. ON REG. 1, 8–9 (2008) (noting that the availability bias justifies enforcement of corporate fraud in economic upturns and limited enforcement in downturns); Samuel G. Hanson, Anil K. Kashyap, & Jeremy C. Stein, *A Macroprudential Approach to Financial Regulation*, 25 J. ECON. PERSPS. 3, 5–8, 17 (2011) (“We have argued . . . imposing substantially higher capital requirements on financial firms, particularly in good times.”); Michal Kowalik, *Countercyclical Capital Regulation: Should Bank Regulators Use Rules or Discretion?*, FED. RES. BANK KAN. CITY ECON. REV., no. 2, 2011, at 63, 66–69 (2011) (arguing in favor of “countercyclical capital requirements”).

30. See *infra* notes 110–16 and accompanying text.

31. See *infra* notes 158–64 and accompanying text.

32. See *infra* notes 128–33 and accompanying text.

33. See generally STUART BANNER, *ANGLO-AMERICAN SECURITIES REGULATION: CULTURAL AND POLITICAL ROOTS, 1690–1860* (1998) (analyzing regulation of securities markets from 1690 England to 1860 United States).

34. Stuart Banner, *What Causes New Securities Regulation? 300 Years of Evidence*, 75 WASH. U. L.Q. 849, 850 (1997).

preceding price declines. But most of the major instances of new securities regulation in the past three hundred years of English and American history have come right after crashes.³⁵

Banking regulation also shows a marked tendency for innovation and strengthening in response to crises.³⁶

Meanwhile, in boom times there is some tendency for a loosening of financial regulation. Regulators fail to respond to new market developments and risks. A good example is the opposition to the Commodity Futures Trading Commission's proposal to regulate derivatives in the 1990s. Agencies become less vigorous in enforcing existing rules by interpreting rules in ways that lessen their bite. The gradual erosion of the Glass-Steagall separation of commercial and investment banking is a leading example. Sometimes, regulators may amend or repeal regulations or legislation completely, as eventually happened to Glass-Steagall in 1999. Governments may affirmatively subsidize financial frenzies in a variety of ways.³⁷

As the next Part explains, scholars differ in how they describe the pattern and its causes, and in the normative consequences they draw.

II. COMPETING MODELS OF REGULATORY CYCLES

Many scholars have noted the procyclical tendency of financial regulation. They have analyzed both its causes and the normative consequences. There is some significant overlap in these analyses. Some of the judgment heuristics and biases that cause market cycles also help explain the regulatory cycle.³⁸ Most importantly, the availability bias has a particularly strong effect on the general public and the media.³⁹ Most of the time, financial regulation is not a subject that interests the average citizen. But during a financial crisis, this changes. Frauds committed during the boom typically come to light during the bust, many people feel deep pain due to the crisis, and

35. *Id.*

36. See JILL M. HENDRICKSON, REGULATION AND INSTABILITY IN U.S. COMMERCIAL BANKING: A HISTORY OF CRISES 14 (2011).

37. See GERDING, *supra* note 5, for numerous examples of all of these.

38. *E.g.*, HENDRICKSON, *supra* note 36; Stephen J. Choi & A.C. Pritchard, *Behavioral Economics and the SEC*, 56 STAN. L. REV. 1, 5, 44–45 (2003); David Hirshleifer, *Psychological Bias as a Driver of Financial Regulation*, 14 EUR. FIN. MGMT. 856, 865–67 (2008); Jeffrey J. Rachlinski & Cynthia R. Farina, *Cognitive Psychology and Optimal Government Design*, 87 CORNELL L. REV. 549, 553–55 (2002).

39. See Tversky & Kahneman, *supra* note 22; Timur Kuran & Cass R. Sunstein, *Availability Cascades and Risk Regulation*, 51 STAN. L. REV. 683, 711–15, 735–36 (1999) (discussing the relationship between the availability heuristic, government regulation, and media attention).

ordinary people expect politicians to react. Politicians are quite aware of this pressure to act.⁴⁰ Even more informed actors within the financial industry and financial regulatory agencies are affected by the availability bias (indeed, its effect on industry participants is a leading source of the underlying financial cycle), and their own assessments of the need for a regulation shift.⁴¹ Thus, during and for a while after a financial crisis, there is both significant political pressure to act to prevent future crises and some willingness on the part of industry insiders to allow regulation. This pressure following crises is hardly unique to financial regulation, but as this Article argues below, the linkages between regulation and the phenomenon being regulated are tighter here than for other forms of regulation.⁴²

These factors reverse themselves during a boom period. The general public and most politicians pay little attention to financial regulation. Thus, financial market participants' and regulators' perceptions and interests dominate the politics of regulation.⁴³ While things are going well, everyone is making money, and financial companies appear healthy, there is little appetite for major new regulation and often quite significant desire for loosened regulation. New financial products and markets appear, and regulators do little to address them.

Since financial regulation should optimally be countercyclical, it should come as no surprise that commentators have found much to dislike in this procyclical pattern of financial regulation. Regulators must be getting some things wrong during at least one phase in the cycle, and quite possibly both.

Despite many similarities, commentators have differed sharply in their analyses of procyclical financial regulation. This is true even for those who work within an economic understanding of politics. The public choice tradition can be seen as considering both the demand for and supply of regulation. On the demand side are a variety of interest groups.⁴⁴ Analysts differ on the incentives and balance of power among these groups, and how that balance changes over the course of market and regulatory cycles. On the supply side are politicians and regulators. Analysts also differ over the incentives they face and how those shift over the course of a cycle.⁴⁵ Finally, there is much debate over the normative conclusions to be drawn from the analysis. Those with a more pro-market slant are typically more concerned with overregulation

40. See HENDRICKSON, *supra* note 36, at 13–14; Choi & Pritchard, *supra* note 38, at 39.

41. See, e.g., Choi & Pritchard, *supra* note 38, at 5.

42. See *infra* p. 16.

43. See Choi & Pritchard, *supra* note 38, at 24–25; cf. HENDRICKSON, *supra* note 36, at 13–14.

44. See *infra* notes 46–60 and accompanying text.

45. See *infra* notes 61–67, 71 and accompanying text.

following a market crisis, while those with a more pro-regulatory slant are more concerned with loosened regulation during good times.

This Article sorts these differing analyses into three different models. Model 1 sees regulators overreacting in both phases—during busts they overregulate; during booms they loosen regulation too much. Model 2 is more concerned about overregulation in the wake of market busts. Model 3 is more concerned about excessively loose regulation during market booms.

These models are stylizations. No one scholar may fit exactly within any of them. The world is messier than any of the models, and good scholars recognize that mess, at least in the nooks and crannies of their analyses. Still, the models help impose some analytical order, and highlight some of the crucial questions on which scholars differ.

A. *Overreaction in Both Phases (Model 1)*

In a sense, Model 1, finding overreaction in both phases, is the most natural framework that emerges once one recognizes the basic procyclical nature of financial regulation. One can arrive at variants of Model 1 by recognizing all of the competing political forces analyzed in Models 2 and 3 and the competing normative elements, and concluding that they all roughly balance one another, leading to less condemnation of bust overregulation than Model 2 and less condemnation of boom underregulation than Model 3. For expository simplicity, though, this section will focus on the core forces that tend to drive overregulation following a crisis, leaving Model 3 to describe forces that may counteract them, and will focus on the core forces that tend to drive underregulation during a boom, leaving Model 2 to describe forces that may counteract them.

The basic story of loosened regulation during boom times follows from Mancur Olson's theory of interest groups.⁴⁶ On most political issues, one should generally expect effective lobbying to be dominated by relatively small, concentrated interest groups.⁴⁷ Each member of these groups has a strong interest in the outcome of regulation, and the strength of those interests combined with relatively small numbers allow the members to overcome the "free rider" problem inherent in lobbying for regulations that will affect all members of the group, whether they contributed to the lobbying effort or not. In contrast, consumers and the general public are large and diffuse groups.⁴⁸ Each member has relatively small stakes in regulation on a particular topic,

46. See generally MANCUR OLSON, JR., *THE LOGIC OF COLLECTIVE ACTION* (1965) (presenting Olson's theory of groups and organizations).

47. See JAMES M. BUCHANAN & GORDON TULLOCK, *THE CALCULUS OF CONSENT: LOGICAL FOUNDATIONS OF CONSTITUTIONAL DEMOCRACY* 211 (1962).

48. See FARBER & FRICKEY, *supra* note 10, at 1.

and although the collective public interest in good regulation may be quite considerable, free riding prevents effective lobbying from taking place.⁴⁹ Heightening the problem, industry insiders will have much greater expertise than members of the general public, and hence will be better able to provide useful information to regulators.⁵⁰ However, the information they provide is likely slanted.

Olson's story is not specific to financial regulation, but it certainly applies.⁵¹ During boom times, the general public neither understands nor cares about financial regulation.⁵² Financial market insiders do. Business is going well as is. For the most part, insiders are happy with things as they are. They do not want burdensome new rules, which may limit their ability to make money.⁵³ Indeed, they may well want to reduce the burden of existing rules, which have imposed unwanted costs. As noted above, there are a variety of ways of doing this. Some may involve simple regulatory inaction. As markets boom, financial market participants develop new products and markets not clearly addressed by existing rules.⁵⁴ Think, for example, of the development of credit default swaps, particularly those tied to the growing mortgage securitization market from the 1980s on. Generally, those market

49. See OLSON, *supra* note 46, at 14–16; see also BUCHANAN & TULLOCK, *supra* note 47, at 36–38; George J. Stigler, *The Theory of Economic Regulation*, 2 BELL J. ECON. & MGMT. SCI. 3, 13–14 (1971).

50. See John C. Coffee, Jr., *The Political Economy of Dodd-Frank: Why Financial Reform Tends to Be Frustrated and Systemic Risk Perpetuated*, 97 CORNELL L. REV. 1019, 1031–32, 1047 (2012).

51. For applications of public choice theory to financial regulation, see HENDRICKSON, *supra* note 36, at 13; George J. Benston, *Federal Regulation of Banking: Historical Overview*, in DEREGULATING FINANCIAL SERVICES: PUBLIC POLICY IN FLUX 1 (George G. Kaufman & Roger C. Kormendi eds., 1986); Coffee, *supra* note 50, at 1020–23, 1046–47 (applying to the Dodd-Frank Act); Franklin R. Edwards & James Scott, *Regulating Solvency of Depository Institutions: A Perspective for Deregulation*, in ISSUES IN FINANCIAL REGULATION 65, 78 (Franklin R. Edwards ed., 1979); David D. Haddock & Jonathan R. Macey, *Regulation on Demand: A Private Interest Model, with an Application to Insider Trading Regulation*, 30 J.L. & ECON. 311, 311–12 (1987) (applying to SEC rules); Gregg A. Jarrell, *Change at the Exchange: The Causes and Effects of Deregulation*, 27 J.L. & ECON. 273, 284–85 (1984) (applying to the deregulation of the New York Stock Exchange by way of the Securities Acts Amendments of 1975); Edward J. Kane, *Changing Incentives Facing Financial-Services Regulators*, 2 J. FIN. SERVS. RES. 265, 265–66 (1989) (applying generally to decisions by financial services regulators); Jonathan R. Macey, *Administrative Agency Obsolescence and Interest Group Formation: A Case Study of the SEC at Sixty*, 15 CARDOZO L. REV. 909, 922 (1994) (applying to the SEC).

52. See Brett McDonnell & Daniel Schwarcz, *Regulatory Contrarians*, 89 N.C. L. REV. 1629, 1644–45 (2011).

53. When we discuss Model 2 we will consider some counterarguments, examining some interested groups that may want to expand regulation even in good times. See *infra* Section II.B.

54. See Saule T. Omarova, *From Gramm-Leach-Bliley to Dodd-Frank: The Unfulfilled Promise of Section 23A of the Federal Reserve Act*, 89 N.C. L. REV. 1683, 1717 (2010).

participants will not want to see new rules burdening new products and markets and will oppose such proposals. Thus, for example, the securities industry opposed attempts by the Clinton Administration's Commodities Futures Trading Commission to regulate credit default swaps.⁵⁵ This is the most likely form of effective regulatory loosening. More affirmative loosening of existing rules may occur through simple underenforcement.⁵⁶ As markets become larger and more complex, regulatory resources may become more stretched.⁵⁷ Industry interests will oppose attempts to provide more resources to regulators.⁵⁸ Market participants may lobby for liberal agency interpretations of existing rules, which interpret ambiguities in ways that allow them to do what they want—the gradual evisceration of Glass-Steagall is a key instance.⁵⁹ Going further, they may lobby agencies to amend or repeal unwanted regulations, or even lobby Congress to amend or repeal unwanted legislation.⁶⁰

Olson's story focuses on the regulatory demand side, namely the organization of political lobbying. What of the supply side? The most standard public choice story sees politicians focused on reelection. For a policy area in which one side of the issue features concentrated interests and the other side diffuse interests, the way to achieve that is to favor the side with concentrated interests.⁶¹ Those with diffuse interests will pay little or no attention to the rules, while those with concentrated interests will provide votes both directly and, more importantly, through campaign contributions.⁶² A similar story holds for regulators, where public choice analysts speak of "regulatory capture." A variety of mechanisms cause regulators to favor the industry they are regulating. Through the revolving door,⁶³ regulators may either themselves come from the industry or may anticipate getting cushy industry jobs after they leave government. The industry also provides crucial information needed for regulating. This is apparent, for instance, in the detailed comments from banks and their lawyers on the proposed regulation

55. See Coffee, *supra* note 50, at 1033, 1033–34 n.56.

56. See, e.g., *id.* at 1027–28.

57. GERDING, *supra* note 5; Omarova, *supra* note 54, at 1688–91.

58. Again, we shall consider counterforces under Model 2. See *infra* Section II.B.

59. See Saule T. Omarova, *The Quiet Metamorphosis: How Derivatives Changed the "Business of Banking,"* 63 U. MIAMI L. REV. 1041, 1049–52 (2009).

60. GERDING, *supra* note 5.

61. See MICHAEL T. HAYES, *LOBBYISTS AND LEGISLATORS: A THEORY OF POLITICAL MARKETS* 93–95 (1981).

62. Cf. Coffee, *supra* note 50, at 1021–22.

63. See MICHAEL SMALLBERG, *PROJECT ON GOV'T OVERSIGHT, REVOLVING REGULATORS: SEC FACES ETHICS CHALLENGES WITH REVOLVING DOOR* 4 (2011), available at <http://www.pogo.org/our-work/reports/2011/fo-fra-20110513.html>; McDonnell & Schwarcz, *supra* note 52, at 1644.

implementing Dodd-Frank's Volcker Rule, as compared with the emptier although numerous letters from more populist sources.⁶⁴ Those in the industry constantly push for changes favoring them, providing strong expert documentation for their positions, while few have incentive to argue the public interest, so the regulators get biased arguments.⁶⁵ Compounding the tendency for underregulation on both the demand and supply side, the availability bias and other heuristics that drive the markets will also affect market participants and regulators when it comes to thinking about regulation.⁶⁶ Insofar as financial regulation is aimed at avoiding crashes, even well-informed insiders will tend to underestimate the probability of such crashes during a boom, and hence undervalue the benefits of regulation. Indeed, there are fewer arbitrage mechanisms to correct such bias in regulation than there are within markets.⁶⁷

Things change markedly in the wake of a market crash. Most importantly, the general public becomes engaged. The risks that flow from market crashes are suddenly highly salient. There is pressure to both do something about the current contraction and also avoid future crashes.⁶⁸ Crashes will typically reveal a variety of frauds and shady practices that occurred during, and at least arguably helped heighten, the market boom.⁶⁹ The public wants to see something done to reign in the rich, reckless financial manipulators who have brought the economy crashing down. Even financial market participants will have become much more aware of the dangers of lightly regulated financial markets, and may favor at least some new regulation to avoid a repeat—after all, market crashes are disastrous for many of them. So for instance, following the latest crash, the Dodd-Frank Act finally imposed regulations on derivatives such as credit default swaps by implementing clearinghouses and similar mechanisms.⁷⁰

On the regulatory supply side, politicians and regulators will become more aware of the risks of loosely regulated financial markets. For

64. See Kimberly D. Krawiec, *Don't "Screw Joe the Plummer": The Sausage-Making of Financial Reform*, 55 ARIZ. L. REV. 53, 58–59, 84 (2013).

65. See *id.* at 80.

66. See Kuran & Sunstein, *supra* note 39, at 710 (“[V]arious characteristics of risks affect lay judgments about whether they call for public regulation.”).

67. Although, there may be some mechanisms for a political analog to arbitrage. See Aviram, *supra* note 29, at 17–18.

68. See HENDRICKSON, *supra* note 36; Zachary J. Gubler, *Public Choice Theory and the Private Securities Market*, 91 N.C. L. REV. 745, 779 (2013); Hirshleifer, *supra* note 38, at 861, 865.

69. See Aviram, *supra* note 29, at 8.

70. See Coffee, *supra* note 50, at 1047, 1062–63. See generally Dodd-Frank Wall Street Reform and Consumer Protection Act, Pub. L. No. 111-203, §§ 721–54, 124 Stat. 1376, 1658–1754 (2010).

politicians, the political calculus changes sharply; suddenly being seen as favoring Wall Street over Main Street risks losing a lot of votes. Agency regulators may feel shame and face blowback from having failed to prevent the crash. Both major new legislation and regulation may follow as a result. Unless it is given delayed effect, this risks imposing new obstacles on financial market participants right when they are already hurting, thereby delaying recovery.⁷¹ The new rules may respond narrowly to the specific problems that cause the crash, failing to anticipate what might cause the next one. Worse, in responding to the problems that caused the last crash, the rules might not even be based on a correct analysis of the causes. Rules passed in great haste in response to pressure from an uninformed public are at risk of being poorly thought through. Financial regulation is difficult even under the best of conditions—trying to do it in a hurry to appease an angry mob does not make the task more likely to succeed.

The effect of visible crises on the politics of regulation is not unique to financial regulation. There is now literature on this phenomenon in a variety of areas.⁷² Many scholars share a concern that crisis-driven regulation will not be well-thought through.⁷³ However, financial regulation may be unique compared to most other areas because similar heuristics are at work in the underlying financial markets being regulated. There is a tighter feedback loop and hence a more pronounced cyclical movement to financial markets and regulation.

Thus, under Model 1 financial regulation tends to go off track at each stage. During financial booms, when regulations could usefully reduce market excesses, politicians and regulators are captured by the financial industry and loosen rules rather than tightening them. Following crashes, when markets are struggling, politicians impose onerous and uninformed new rules in response to public panic and disgust.

Cheerily enough, none of the other two models are really any more optimistic than Model 1. Rather, they focus even greater ire on one part of the cycle. Indeed, the contrast with Models 2 and 3 suggests a hidden silver lining in Model 1. Each of the other two models sees overreaction in one phase leading to a long-run pattern of non-optimal levels of regulation—overregulation remaining in place, according to Model 2, long after the crises which provoke that regulation, and underregulation remaining a problem that new crisis regulation does not adequately resolve according to Model 3. In contrast, in Model 1 the long-run

71. GERDING, *supra* note 5.

72. *See generally* Kuran & Sunstein, *supra* note 39 (discussing the role of availability bias in increasing regulation following a variety of crises and offering a framework for identifying the consequences of availability bias).

73. *Id.* at 736–37.

average level of regulation is roughly right. This suggests a possible long-run trend for political pressure to lead to financial regulation that is within hailing distance, at least, of the optimal level, in line with a minority view within the general public choice literature.⁷⁴ This Article explores this idea further after first sketching Models 2 and 3.

B. *Overregulation Following a Crisis (Model 2)*

Model 2 focuses its ire on the bust phase, when major new regulation occurs. It is relatively laissez-faire and antiregulation in outlook, and vigorously decries the new legislation and regulation that are frequently foolish and usually overly restrictive.⁷⁵ However, unlike Model 1, it is much less concerned about underregulation during financial booms. Model 2 either maintains that such reduced regulation does not occur at all, or if it does, it is limited and temporary and helps counteract a dominant long-term trend toward overregulation.

Model 2 agrees with the basic sketch of bust-period overregulation given above under Model 1. The availability bias induces the public and politicians to push for new regulation, even though they do not know what they are doing. Even more informed private and public actors are acutely conscious of the risks of an unregulated market following a crisis. Regulation happens too quickly, and it is usually underinformed⁷⁶ and overreaching.⁷⁷

Regulation skeptics see a few additional factors that tend to make overregulation following a crisis even more problematic. For one, they tend to see concentrated interest groups as less uniformly antiregulation than the picture sketched earlier under Model 1.⁷⁸ Some well-organized interest groups may favor strong regulation. Incumbent firms may benefit from regulation relative to potential challengers, and hence may favor many regulations as a form of barriers to entry. Some groups may favor regulations that promote their personal interests—e.g., plaintiffs' law firms favoring securities rules that encourage suits; unions and public employee pension funds favoring rules that promote shareholder activism; too-big-to-fail banks favoring bailout provisions; and retailers

74. E.g., Gary S. Becker, *A Theory of Competition Among Pressure Groups for Political Influence*, 98 Q.J. ECON. 371, 383–84 (1983).

75. HENDRICKSON, *supra* note 36, at 246–47; Stephen M. Bainbridge, *Dodd-Frank: Quack Federal Corporate Governance Round II*, 95 MINN. L. REV. 1779, 1818–19 (2011); Paul G. Mahoney, Review, *The Pernicious Art of Securities Regulation*, 66 U. CHI. L. REV. 1373, 1391–92 (1999); Ribstein, *supra* note 17, at 82–83; Roberta Romano, *Regulating in the Dark*, in REGULATORY BREAKDOWN: THE CRISIS OF CONFIDENCE IN U.S. REGULATION 86, 86 (Cary Coglianese ed., 2012).

76. Kuran & Sunstein, *supra* note 39, 736–37; Macey, *supra* note 51, at 925–26; Romano, *supra* note 75, at 86–87; Stigler, *supra* note 49, at 11–12.

77. See Kuran & Sunstein, *supra* note 39, at 742; Ribstein, *supra* note 17, at 83.

78. E.g., Bainbridge, *supra* note 75, at 1818–21; Romano, *supra* note 75, at 97.

favoring the limits on payment card fees in the Dodd-Frank Act. Academics, especially legal academics, are another occasionally influential group that often favors regulation.⁷⁹ Thus, while Model 1 tends to see the sudden public attention following a crisis as temporarily shifting an interest group status quo that usually favors overly weak regulation (a view that is promoted even more strongly in Model 3), supporters of Model 2 see concentrated interest group politics as more balanced, so that in ordinary times both pro and antiregulation arguments should be heard. But when the uninformed public and politicians get involved following a crisis, that balance is tipped strongly in favor of unwise regulation.

Model 2 also presents a somewhat different picture of the regulation supply side. The Model 1 story above focused on industry group capture, detailing reasons why both politicians and agency regulators are likely to favor causes championed by the best-organized interest groups. Model 2 does not at all deny this tendency, but it also points to a different tendency. Regulators may prefer strong regulations because it advances their own interests. This may be seen through a crass personal influence light—regulators in active agencies have more personal clout and influence.⁸⁰ A somewhat more benign variant suggests that regulators are self-selected, overly representing the viewpoint that the regulations in question tend to be helpful.⁸¹ Either way, there is a powerful independent tendency for regulators to push for more regulation. Thus, when the demand side factors align to support more regulation following a crisis, the regulators seize the moment.

Finally, adherents of Model 2 tend to have rather laissez-faire preferences generally. They tend to think that markets, including financial markets, generally work well on their own.⁸² They also stress how intellectually difficult financial regulation is.⁸³ The public choice arguments set out here further strengthen their skepticism concerning regulation. For all of these reasons, adherents of Model 2 are even harsher than adherents of Model 1 in their condemnation of regulatory

79. See Ribstein, *supra* note 17, at 87, 92.

80. WILLIAM A. NISKANEN, JR., *BUREAUCRACY AND REPRESENTATIVE GOVERNMENT* 38–40 (1971). Jonathan Macey argues that this tendency is particularly strong in agencies whose initial public-regarding purpose has ceased to exist. Bureaucrats will find inefficient ways to protect their jobs in such circumstances, and Macey argues that the SEC is such an agency. Macey, *supra* note 51, at 913.

81. Canice Prendergast, *The Motivation and Bias of Bureaucrats*, 97 *AM. ECON. REV.* 180, 188 (2007).

82. This is consistent with recognizing some tendency to non-optimal boom/bust swings. See Ribstein, *supra* note 17, at 79–82 (implying that deregulation in boom periods may lead to non-optimal outcomes). Even so, it is safe to say that Ribstein was in general, throughout his scholarship, pretty optimistic about the functioning of markets if left to their own devices.

83. Romano, *supra* note 75, at 87–89; McDonnell, *Don't Panic!*, *supra* note 12, at 18.

initiatives following market crashes.

Model 2 has a far different understanding than Model 1 of what typically happens during market boom phases. As we have seen, Model 2 identifies a variety of interest groups who will lobby in favor of maintaining or increasing regulation. Thus, even during boom times when the general public and politicians ignore financial regulation, interested groups remain to provide some significant pressure in favor of regulation. Political pressures during a boom are thus more balanced than conceived under Model 1 (or Model 3, as we shall see). The inherent push of regulators for maintained or increased regulation provides another counterforce. The antiregulation normative stance of adherents of Model 2 also makes them tend to favor any trend towards deregulation that may occur. Indeed, a particularly pessimistic strand of Model 2 sees the pressures for regulation as so strong that even during booms little to no deregulation occurs,⁸⁴ while more optimistic versions do expect some welcome (from their perspective) deregulation to occur during boom periods, although quite possibly not enough to undo the damage from crisis regulation.

C. *Excessive Deregulation During Booms (Model 3)*

Model 3 focuses its ire on the deregulation that occurs during financial bubbles. It largely accepts the picture painted above under Model 1 for boom phases. The public and most politicians ignore financial regulation as it loses salience while memories of the last crash fade.⁸⁵ Well-organized interest groups within the financial industry dominate, capturing the regulators who themselves gradually become less afraid of the shame they would feel should a new crash occur.⁸⁶ A general pro-market, antiregulation cultural and political climate takes hold. In this climate, new financial products and markets go unregulated, and restrictions on old products and markets gradually loosen.⁸⁷

Adherents of Model 3 need not completely deny the pro-regulation interest groups identified under Model 2. But they argue that, particularly as bubbles start to accelerate, such interest groups become increasingly weak relative to those advocating weakened regulation. Incumbent firms are either themselves profiting from new products and markets and do not want burdensome regulations imposed on them, or they find their old products and markets under pressure from the new competitors, and respond by pushing to loosen or remove old

84. Romano, *supra* note 75, at 87–88, 94–95.

85. See McDonnell, *Don't Panic!*, *supra* note 12, at 61.

86. See SIMON JOHNSON & JAMES KWAK, 13 BANKERS: THE WALL STREET TAKEOVER AND THE NEXT FINANCIAL MELTDOWN 88–90, 92–97, 118 (2010).

87. Coffee, *supra* note 50, at 1026–28, 1078.

shackles.⁸⁸ A classic example is savings and loans (S & Ls) in the late 1970s, which faced pressure from new savings devices such as money market funds. Rather than push to clamp down on the new devices (which other groups supported), they pushed to remove old limits on interest rates for deposits and products they could sell. This loosening allowed S & Ls to engage in risky strategies, which eventually led to their collapse.⁸⁹ As incumbents become less tied to strong regulations, newcomers strongly push deregulation—their whole strategy is based on identifying new products and markets, and they do not want the government blocking them. As for the interest groups that favor specific regulations, they tend to weaken during booms. Pension funds favoring strong securities laws or retailers favoring limits on card fees are less focused on these issues during booms, as the money is flowing in anyway.⁹⁰ Too-big-to-fail institutions are happy to support deregulation, confident that when the crash hits they will be saved anyway.⁹¹

Adherents of Model 3 also need not completely reject the regulatory supply side analysis put forth under Model 2. Sure, some regulators may tend to favor strong rules either for crass personal influence reasons or because it fits the worldview that makes them become regulators. Still, during bubbles these forces will lessen and the forces favoring regulatory capture increase. The lures of the revolving door become stronger as riches are being made in the private sector. The general cultural and political climate more and more strongly lionizes the market and advocates of strong regulation look more and more like out-of-it old-timers.⁹²

Seeing such a strong tendency for excessive deregulation during booms, adherents of Model 3 pin their hopes on new regulations passed in the wake of crises. They see the public's and politicians' new attention on financial regulation as a potentially very good thing. That attention makes it possible to counterbalance the excessive dominance of concentrated interest groups that characterizes most of the financial and political cycle.⁹³ Yes, it may advance the personal interest of regulators to write new rules during this time, but that just counterbalances the excessive capture and the revolving door that

88. *See id.* at 1027–32 (describing the asymmetrical power, resources, and organization of interest groups versus regulated industries lobbying for weakened regulation); *see also* Ribstein, *supra* note 17, at 79.

89. KATHLEEN C. ENGEL & PATRICIA A. MCCOY, *THE SUBPRIME VIRUS: RECKLESS CREDIT, REGULATORY FAILURE, AND NEXT STEPS* 16 (2011); *see also* George Hane, *The Banking Crisis of the 1980s and Early 1990s: Summary and Implications*, in 1 FED. DEPOSIT INS. CORP., AN EXAMINATION OF THE BANKING CRISES OF THE 1980S AND EARLY 1990S 3, 10, 26 (1997).

90. Coffee, *supra* note 50, at 1030–31.

91. *See* JOHNSON & KWAK, *supra* note 86, at 173, 178–84.

92. *Id.* at 95–97.

93. Coffee, *supra* note 50, at 1021–23, 1036.

corrupts them during good times. However, more pessimistic versions of Model 3 fear that regulators will draft crisis regulation to seem tough to uninformed members of the public, but to actually do little to interfere with the profits of financial industry players who dominate political gift giving and have much more say in the process of drafting rules to implement the legislation.⁹⁴

Adherents of Model 3 on the normative side see more room for socially beneficial regulation than do adherents of Model 2. They are both more distrustful of markets and less distrustful of regulators. They stress the tremendously destructive possibilities of crashing financial markets. To them, the Great Depression is not just an aberration, but is always a looming possibility.⁹⁵ If true, that makes living with the costs of financial crises less attractive than pictured under Model 2. On the other hand, adherents of Model 3 are somewhat more optimistic of the cognitive abilities of regulators, if freed from corrupting influences, to create and enforce rules that will improve on the results of unregulated financial markets. Wise financial regulation may indeed be quite hard, but those who support it naturally believe that it is not impossible.⁹⁶

D. Graphing the Models

A few simple illustrative graphs may help to solidify some of the ideas in the models.⁹⁷ Let us look at how regulation varies over time, before and after a financial crisis. For the most part, this Part pictures regulation as a one-dimensional factor that can vary from lower to higher levels. This is quite a simplification, although for a few specific items of financial regulation it is not that much of a simplification—for instance, capital requirements. At the end of this Part, I will briefly discuss how one might complicate this simple picture.

The graphs compare a posited optimal level of regulation with actual levels given the political economy issues described above. The first set of graphs (Figures 1 through 4) assume that the long-run optimal and actual levels of regulation remain unchanged, with only cyclical variations above and below the long run levels preceding and following a crisis. The second set of graphs (Figures 5 through 11) drop that

94. See Scott Baker & Kimberly D. Krawiec, *The Penalty Default Canon*, 72 GEO. WASH. L. REV. 663, 671–73 (2004); Krawiec, *supra* note 64, at 69–70; see also Coffee, *supra* note 50, at 1079–80.

95. See KEYNES, *supra* note 16, at 381–82 (describing the instability of markets as a cause of war); PAUL KRUGMAN, *THE RETURN OF DEPRESSION ECONOMICS AND THE CRISIS OF 2008* (2008); MINSKY, *supra* note 12, at 94–95; JOSEPH E. STIGLITZ, *FREEFALL: AMERICA, FREE MARKETS, AND THE SINKING OF THE WORLD ECONOMY* 24–26 (2010).

96. See Coffee, *supra* note 50, at 1029.

97. See *id.* at 1029–30, 1040–41 (discussing the sine curve of regulation, which suggests graphs much like many of those that follow).

assumption and allow for upward and downward movement in the long run levels of regulation. In all eleven figures, the optimal level of regulation is shown as a dashed line, and the actual level is shown as a solid line.

Figure 1 starts by showing the optimal level of regulation. We assume there is some long-run optimal average level of regulation, R_{AO} . However, in a boom period preceding a crisis, the optimal level of regulation increases. To simplify, assume that increase is simply a one-time temporary increase from R_{AO} to R_{BO} .⁹⁸ Following a crisis, for a time the optimal level dips below the long run optimum, to R_{CO} . After a while, the optimal level returns to R_{AO} .

Now, let us see how each of the three models sees the actual level of regulation compared with the optimum. Start with Model 1, as depicted in Figure 2. Outside the boom and crisis period, the actual regulation level is at the optimal level, R_{AO} . As noted above, this is the relatively optimistic side of Model 1 as compared with the other two models. However, during the boom period, the actual level of regulation drops to R_{B1} rather than rising to R_{BO} , as it optimally should. Following the crisis, the postcrisis reaction causes the regulatory level to rise above the average level to R_{C1} , rather than dropping to R_{CO} as it should.

Models 2 and 3 are slightly more complicated. Figure 3 shows Model 2. The long-run average level of regulation, R_{A2} , is above the optimal level R_{AO} .⁹⁹ As with Model 1, the boom level falls below R_{A2} and the crisis level rises above it, the opposite of the optimal pattern. The level following the crisis, R_{C2} , is much higher than the optimal level R_{CO} —the difference reflecting both the procyclicality of the actual regulation and also the overly high baseline level of regulation. The analysis gets more complicated in the boom period, though, and Figure 3 shows several possibilities. Although the strength of regulation drops when it should rise, since the starting point is too high, how one evaluates that drop depends upon how large the drop is and how big the gap between average actual and optimal level regulation is. If the level only drops a small amount, to $R_{B21} > R_{BO}$, then the level remains higher than even the optimal level during a boom (which, you will recall, is elevated above the average optimum). At this point, one can simply wish regulation would fall even more. If, however, boom period regulation drops more to R_{B22} , where $R_{BO} > R_{B22} > R_{AO}$, then at that point the level of regulation is weaker than the optimum for that period of time, though still above the long run optimal level. How one

98. One could of course assume the optimal level increases in several stages, or in a smoother upward curve. *See infra* Figures 5–11.

99. Note that “optimal level” refers to the level that proponents of Model 2 find optimal. One area where various models disagree, of course, is what that optimal level is.

evaluates this case is thus a little trickier.¹⁰⁰ Should the boom period regulation fall to $R_{B23} < R_{AO}$, it has become, for this period of time, too weak even by the libertarian standards of Model 2; although if one sees these cyclical changes as affecting long-run average movements in regulation, a temporary period of overly weak regulation may still be beneficial in the long run.

Model 3 is the mirror image of Model 2, as shown in Figure 4. The long run average level of regulation R_{A3} is below the optimal level R_{AO} , reflecting the financial industry's capture of the regulatory and political processes. During the boom period, regulation weakens to R_{B3} rather than strengthening, putting the level even further below the optimal boom level of R_{BO} both because of the procyclical movement and because it is starting from a low baseline. As regulation increases following the crisis, several possibilities exist. The increase may be slight enough, as with R_{C31} , that it remains below the optimal postcrisis level R_{CO} even though regulation has strengthened rather than weakened, given the low baseline level. Or, the strength of regulation may rise more, so that $R_{CO} < R_{C32} < R_{AO}$, so that the strength is more than the optimal level following a crisis but still less than the long run optimum. Finally, one could have $R_{C33} > R_{AO}$, so that regulation temporarily rises above the long-run optimal level.

These simple graphs so far treat the long run average levels of regulation, both actual and optimal, as constant. This does not fully capture some of the dynamics underlying the models. That is particularly true for Models 2 and 3, but let us first consider Model 1. Figure 5 illustrates one plausible possibility. It assumes that there is a long run trend of increasing strength in regulation, perhaps reflecting greater complexity and interconnectedness of financial markets. The optimal path of regulation follows an upward sloping line, moving above the trend line at the height of the boom periods and dropping below the trend line after a crisis, then returning to the trend. The actual deviation from trend in Figure 5 is relatively modest—beyond the boom and bust, regulation follows the optimal trend line. It dips below the trend during the height of the boom, then rises and returns to the trend following a crisis.

Figure 6 illustrates a somewhat more episodic dynamic under Model 1. Actual regulation stays largely fixed between bust and boom periods. During the height of the boom, regulation weakens, falling below the optimal trend level. The postcrisis strengthening of regulation greatly increases the level, bringing it well above the optimal level. As the postcrisis stasis kicks in, the optimal level gradually comes to match the

100. It becomes trickier still when we allow the long-run average level to move over time, with the possibility that the cyclical variations help affect that long-run movement. See *infra* Figure 11.

actual level, then the actual level drops below the optimal again as the next speculative boom kicks in. As we shall see, this graph may well come closest to reflecting the core tendencies of American financial regulation. The actual level of regulation diverges from the optimal level most of the time—sometimes too high, sometimes too low. However, over time the level of regulation stays within shouting distance of the optimal level. There is a second-best story here. Increasing regulation during a crisis is not what happens in the first-best scenario. However, that regulatory burst is needed to put in place essential new rules. It may overshoot, and cause some problems during the crisis. However, the overshooting corrects itself over time, as the regulatory level flattens out and then falls during the boom period. That fall is itself an overcorrection, but some pruning of ill-conceived or dated rules is helpful. The second-best nature of this pattern reflects both political problems and inevitable imperfections of human learning.¹⁰¹

Figures 7 and 8 compare two different sorts of scenarios under Model 2. Both scenarios assume that the long-run optimal level of regulation is constant, with cyclical adjustments in the boom and bust periods.¹⁰² In Figure 7, the actual level of regulation is above the optimal level, but at least the gap does not widen over time. As drawn, the deregulatory move during the boom period is clearly a good thing—it brings the level of regulation closer to the optimum, helping to eliminate the excessively strong regulation that occurs following crises. Figure 8 sketches a more pessimistic scenario (pessimistic by the preferences of Model 2 proponents, with their skepticism about regulation). The boom period deregulation is weak and the postcrisis regulation is very strong, leading to an upward ratchet effect over time. The long-run average level of regulation increases over time, even though the optimal level does not.¹⁰³

Figures 9 and 10 compare scenarios under Model 3. These scenarios assume, consistent with this model's pro-regulatory tilt, that the optimal level of regulation trends upward over time.¹⁰⁴ In Figure 9, the actual level of regulation also trends upward over time, but it lags below the optimal level. The postcrisis strengthening, even if not the optimal timing for increased regulation, helps counterbalance the excessive deregulation that occurs during booms. Figure 10 shows a more

101. See McDonnell, *Don't Panic!*, *supra* note 12, at 20–29; McDonnell, *Of Mises and Min(sky)*, *supra* note 12, at 1281.

102. It is of course also possible to have the long-run level of optimal regulation increasing or decreasing under Model 2, but the discussion in the text goes far enough to illustrate the key dynamics.

103. See Romano, *supra* note 75, at 87, 106.

104. A constant or even decreasing trend is also possible, but not illustrated here.

pessimistic scenario. The actual level of regulation trends downward over time. Boom period deregulation brings regulation down, and the postcrisis strengthening is too weak to counterbalance that deregulation, perhaps reflecting a tendency for crisis regulation to look good to the uninformed while in fact allowing industry insiders to stop it from having much effect.¹⁰⁵

E. *Extensions and Summary*

Even the more complicated graphs in Figures 5 through 10 do not do reality anything close to full justice. Consider two further complications. First, as graphed so far, the timing of crises is taken as fixed, being the same for both the optimal and actual paths of regulation. That is not correct. The timing of financial crises is in part endogenous to the path of regulation. Optimal regulatory levels and timing will probably lead to fewer (and more manageable) crises than suboptimal regulatory levels. The word “probably” is included because under Model 2 this may not actually be true—the overly high level of actual regulation may delay the onset of financial crises, but may do so at a cost to innovation and growth in the long run that is not worth paying. But at least under Models 1 and 3, one would expect to see more distantly spaced crises under the optimal regulatory path.

This Article will not inflict on the patient reader alternative versions of all of the below graphs to reflect this possibility. Instead, Figure 11 illustrates how Figure 6 (which may best reflect much reality) might differ once the timing of crises is treated as endogenous. Figure 6, recall, shows a version of Model 1 in which the optimal level of regulation trends up over time; the actual level does as well, but more episodically and procyclically. In Figure 11, the crises, shown by the vertical dashed lines, are now different for the optimal and actual regulatory paths (dashed for the optimal, solid for the actual). The first crisis occurs earlier on the actual path than on the optimal, and indeed in the time period graphed, there is only one crisis on the optimal path while there are two on the actual path.

The second complication this section notes, and tries (inadequately) to address, is that these graphs treat regulation as one-dimensional. That is of course a wild oversimplification; there are obviously many, many dimensions to financial regulation. In a big piece of legislation such as Dodd-Frank, changes may lead to strengthened regulation in some dimensions and loosened regulation in other dimensions.¹⁰⁶ Enforcement of a rule could further be represented as a separate dimension from the formal rule itself. The optimal level of regulation

105. See, e.g., Krawiec, *supra* note 64, at 55–56.

106. See Coffee, *supra* note 50, at 1049–50.

may similarly go up in some dimensions and down in others. This Article does not contain a graph of these dimensions, but suggests one or two new possibilities beyond Models 1 through 3.

The multidimensional state of actual regulation can be represented at time t as a vector, $(R_{A1t}, R_{A2t}, \dots, R_{Ait}, \dots)$, where R_{Ait} is the actual level of regulation at time t along dimension i . The optimal level of regulation is a similar vector with i^{th} element R_{Oit} . Now the deviation of the actual from the optimal level of regulation is more complicated. The actual level may be greater than the optimal level along some dimensions, but less than the optimal level along other dimensions. Consider two measures of the deviation of actual from optimal regulation along the full vector at a given period of time. The average error E is simply the sum of the individual deviations $R_{Ait} - R_{Oit}$, i.e. $E = \sum(R_{Ait} - R_{Oit})$. Note that a positive sum suggests that, collectively, regulation tends to be stronger than optimal, while a negative sum suggests that, collectively, regulation tends to be weaker than optimal.¹⁰⁷ The squared error S is the sum of the squares of these deviations, i.e. $S = \sum (R_{Ait} - R_{Oit})^2$.

Models 2 and 3 translate fairly straightforwardly into the multidimensional world. Model 2 posits a large positive value to E , because most if not all regulation tends to be at or above its optimal level; it also posits a relatively large value to S . Similarly, Model 3 posits a large and negative value to E and a relatively large value to S , the size of S depending upon how much the model favors regulation and how pessimistic it is about political outcomes.

Model 1 becomes more complicated with multiple dimensions, though. Model 1 suggests that over the course of a cycle the average level of E tends to be not far from zero, but that E tends to be significantly positive after new regulation following a crisis and significantly negative as deregulation kicks in during a boom. But what does the model say about S ? One can imagine a more negative and a more positive version of the model. A pessimistic version posits that S is always large and may be trending larger over time. This incorporates the most pessimistic ideas of all of our models. Along some dimensions regulation is much stronger than optimal, reflecting Model 2-type capture by incumbent firms or interest groups such as lawyers. Along other dimensions regulation is much weaker than optimal, reflecting Model 3-type lack of organization by the public and industry capture. The effects roughly cancel out on balance, leading to a small E , but the large S indicates extreme deviation from an optimal world.

A more positive version of Model 1 suggests that during a boom S grows as a result of excessive deregulation, and following a crisis S is

107. More generally, one might want to weight dimensions of regulation by their importance.

again fairly large due to constricting new regulations that inhibit recovery. Still, outside of crises, *S* is not very large and may even tend to shrink, as regulation moves towards its optimal level over many or even most dimensions. This trend could reflect several things. One is simply a process of learning which regulations work and which regulations do not. Furthermore, some argue that bad regulations tend to be less effective over time than good regulations because they create more excessive drag on the economy, which ultimately generates more opposition and more successful attempts to evade the rules.¹⁰⁸ Thus, when we turn to the historical evidence in Part III, even if there does not appear to be a systematic tendency to either over- or underregulate overall, so that Model 1 appears a better fit, it is important to ask whether history provides more support for a large *S* or a small *S* version of Model 1.

Thus, this Article has sketched a variety of possible models for understanding cycles in financial regulation. They share many family resemblances—all presume some degree of endogenous and damaging cycles in financial markets, all are rooted in public choice theories of interest group influence and the interests of legislators and regulators, all recognize how behavioral biases may activate new political players following visible financial crises, and all recognize some room for beneficial regulation given market imperfections but also the great cognitive as well as political difficulty of effective financial regulation. However, there are major differences in how they analyze political demand, political supply, and the normative value of regulation. In each area, Models 2 and 3 stake out the extreme points while Model 1 falls in between. For political demand in boom time, Model 3 sees dominance by concentrated industry groups that oppose regulation while Model 2 sees a mix of concentrated groups, some of which favor strong regulation. For demand following a crisis, Model 3 sees a welcome strengthening of forces favoring the public interest while Model 2 sees dominance by uninformed antimarket forces. On the supply side, Model 2 lays more stress on the self-interest of bureaucrats in strong regulation. In their normative models of markets and financial regulation, Model 2 lays more stress on the general ability of markets to get most matters roughly correct and the intellectual challenge of regulation, whereas Model 3 is less sanguine about markets and more sanguine about regulation. Table 1 above summarizes these similarities and differences.

108. See Becker, *supra* note 74, at 383, 388.

III. HISTORICAL EVIDENCE

Choosing among these competing models is no easy task. They differ greatly in their underlying understanding of financial markets and politics, in their weighing of conflicting empirical evidence, and in deep normative commitments. Ultimately, available empirical evidence is too weak and ambiguous to definitively tell us which model best fits the world. All analysts bring their own preconceptions to the topic, and those preconceptions are strong enough to allow each to see what they are looking for. Still, a quick look at the history of U.S. financial regulation does help shed some light on the competing models.¹⁰⁹

The grandest cycle in financial regulation began with the New Deal financial reforms following the crash that led to the Great Depression. The new regulatory system basically remained—remains—in place, but the deregulatory cycle began several decades later, in the late 1960s or early 1970s.

The New Deal essentially created federal securities regulation. The Securities Act of 1933¹¹⁰ and the Securities and Exchange Act of 1934¹¹¹ created the core of modern federal securities regulation. The 1934 Act also created the Securities and Exchange Commission (SEC), the federal agency that oversees and implements securities regulation.¹¹² Later in the decade, the Investment Company Act of 1940¹¹³ and the Investment Advisers Act of 1940¹¹⁴ added regulation to additional elements of financial markets. These acts were clearly inspired by securities market abuses, which were perceived as having helped bring about the stock market crash. Moreover, the Great Depression helped put into power a Democratic Party willing to enact heavy regulation. Even more crucial were reforms in banking regulation brought about by the Banking Act of 1933: the creation of the FDIC and deposit insurance, and the separation of commercial and investment banking.¹¹⁵ A final pillar of the New Deal system was the Bretton Woods system of fixed exchange rates and international capital controls, which limited the flow of capital around the world.¹¹⁶

109. More illuminating still would be a comparative examination of the history of financial regulation in a number of jurisdictions, but that is beyond the scope of this Article. *See generally* BANCA D'ITALIA, FINANCIAL MARKET REGULATION IN THE WAKE OF FINANCIAL CRISES: THE HISTORICAL EXPERIENCE (Alfredo Gigliobianco & Gianni Toniolo eds., 2009) (examining the regulatory responses to financial crises by a variety of countries in an effort to determine whether such responses form a pattern of regulatory bias).

110. Securities Act of 1933, Pub. L. No. 73-22, 48 Stat. 74.

111. Securities Exchange Act of 1934, Pub. L. No. 73-291, 48 Stat. 881.

112. *Id.* § 4, 48 Stat. at 885.

113. Investment Company Act of 1940, Pub. L. 76-768, 54 Stat. 789.

114. Investment Advisers Act of 1940, Pub. L. 76-768, 54 Stat. 847.

115. Banking Act of 1933, Pub. L. 73-66, §§ 8, 10, 14, 48 Stat. 162, 168, 181, 184.

116. Michael D. Bordon & Barry Eichengreen, *Preface* to A RETROSPECTIVE ON THE

It took several decades for the New Deal system of financial regulation to start to significantly loosen. The first part of the system to collapse was Bretton Woods, which began to wobble in the late 1960s and failed completely in the early 1970s.¹¹⁷

Deregulation of domestic finance began in earnest around the same time, in the early 1970s.¹¹⁸ Inflation and high interest rates stimulated creation of new financial products like mutual market funds.¹¹⁹ Regulators allowed these new products, and the products put pressures on established institutions such as banks and savings and loan companies.¹²⁰ The established institutions, in turn, pushed for lightened rules regulating what products they could offer, markets they could enter, and interest they could charge. Deregulation took the form of lenient interpretation of existing rules, revised regulations, and statutory changes.¹²¹ A nice example of deregulation by agency interpretation, from a slightly later period, is the defanging of the limits on transactions between banks and their affiliates in § 23A of the Federal Reserve Act.¹²²

Deregulation continued in the 1980s and '90s. The market for securitization of mortgages and other financial products took off, with relaxed rules helping to create the possibility. Credit default swaps and other exotic new derivatives were created, and regulators did little or nothing.¹²³ Financial companies diversified in ways previously prohibited, and regulators and politicians responded by increasingly weakening and then repealing the Glass-Steagall Act.¹²⁴ The market for subprime loans took off, and regulators again did little or nothing.¹²⁵ In the area of securities law, the Supreme Court turned to more constrained interpretations,¹²⁶ and then Congress passed the Private Securities Litigation Reform Act of 1995,¹²⁷ both institutions acting out of a

BRETTON WOODS SYSTEM: LESSONS FOR INTERNATIONAL MONETARY REFORM at xi (Michael D. Bordo & Barry Eichengreen eds., 1993).

117. Peter M. Garber, *The Collapse of the Bretton Woods Fixed Exchange Rate System, in A RETROSPECTIVE ON THE BRETTON WOODS SYSTEM: LESSONS FOR INTERNATIONAL MONETARY REFORM* 461, 461–63 (Michael D. Bordo & Barry Eichengreen eds., 1993).

118. ENGEL & MCCOY, *supra* note 89, at 16.

119. *Id.*

120. *Id.* at 65.

121. *Id.* at 16; GERDING, *supra* note 5, at 12.

122. *See* Omarova, *supra* note 54, at 1729.

123. JOHNSON & KWAK, *supra* note 86, at 89; *see also* Coffee, *supra* note 50, at 1033–34 n.56.

124. Gramm-Leach-Bliley Act, Pub. L. No. 106-102, § 101, 113 Stat. 1338, 1341 (1999).

125. ENGEL & MCCOY, *supra* note 89, at 25–32.

126. *See, e.g.*, *Cent. Bank of Denver v. First Interstate Bank of Denver*, 511 U.S. 164, 191 (1994); *Chiarella v. United States*, 445 U.S. 222, 234–37 (1980); *Ernst & Ernst v. Hochfelder*, 425 U.S. 185, 214 (1976).

127. Private Securities Litigation Reform Act of 1995, Pub. L. No. 104-67, 109 Stat. 737.

concern that shareholder class actions were getting out of hand.

The exact role that all of this deregulation played in helping cause the financial crisis of 2007–2008 is heavily debated, but it seems likely it was a major cause.¹²⁸ Several years after the crisis, Congress responded with the most extensive new regulation of financial institutions and markets since the New Deal, the Dodd-Frank Wall Street Reform and Consumer Protection Act (Dodd-Frank).¹²⁹ The Act is quite long and complex, and its merits are highly debated.¹³⁰ Moreover, the ultimate effect of most of the Act depends on rules and studies that are mostly still in progress. So, at this point it is far too soon to evaluate which model best describes Dodd-Frank. Was it an ill-conceived overreaction, as Model 2 would suggest?¹³¹ Was it a needed correction to years of deregulation and new financial products?¹³² Was it a facially liberal reform that will turn out to have no teeth as implemented?¹³³ Time will tell. Maybe.

Less dramatic cycles occurred before the Great Depression. Following the Panic of 1907, Congress created the Federal Reserve.¹³⁴ The Panic of 1907 also caused many states to pass anti-bucket shop laws and a few states to experiment in deposit insurance, and it would not be a surprise if that panic played a role in state adoption of blue sky laws, which started to be enacted shortly afterward.¹³⁵

The story before then looks somewhat different. Most financial regulation in the United States before the twentieth century occurred at the state rather than the federal level, although the great Panics of 1873

128. *E.g.*, ENGEL & MCCOY, *supra* note 89, at 204; JOHNSON & KWAK, *supra* note 86, at 156; RAGHURAM G. RAJAN, *FAULT LINES: HOW HIDDEN FRACTURES STILL THREATEN THE WORLD ECONOMY* 155 (2010); NOURIEL ROUBINI & STEPHEN MIHM, *CRISIS ECONOMICS: A CRASH COURSE IN THE FUTURE OF ECONOMICS* 183, 266–69 (2010); STIGLITZ, *supra* note 95, at 25.

129. Dodd-Frank Wall Street Reform and Consumer Protection Act, Pub. L. No. 111-203, 124 Stat. 1376 (2010); *see also* Omarova, *supra* note 54, at 1685.

130. *E.g.*, VIRAL A. ACHARYA ET AL., *REGULATING WALL STREET: THE DODD-FRANK ACT AND THE NEW ARCHITECTURE OF GLOBAL FINANCE* 5–6, (2011); DAVID SKEEL, *THE NEW FINANCIAL DEAL: UNDERSTANDING THE DODD-FRANK ACT AND ITS (UNINTENDED) CONSEQUENCES* 14–15 (2011); McDonnell, *Don't Panic!*, *supra* note 12, at 47 (“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.”); Arthur E. Wilmarth, Jr., *The Dodd-Frank Act: A Flawed and Inadequate Response to the Too-Big-To-Fail Problem*, 89 OR. L. REV. 951, 954 (2011) (“Dodd-Frank’s provisions fall far short of the changes that would be needed to prevent future taxpayer-financed bailouts and to remove other public subsidies for [‘too-big-to-fail’] institutions.”).

131. *See* Bainbridge, *supra* note 75, at 1782–83; Romano, *supra* note 75, at 86.

132. *See* Coffee, *supra* note 50, at 1048–49; McDonnell, *Don't Panic!*, *supra* note 12, at 63–64.

133. *See* Krawiec, *supra* note 64, at 83–84.

134. Federal Reserve Act, Pub. L. No. 63-43, 38 Stat. 251 (1913).

135. HENDRICKSON, *supra* note 36, at 96 (deposit insurance).

and 1893 led to proposals for reform at the federal level. The nation's first stock crash in 1792 led two leading commercial states, New York and Pennsylvania, to enact legislation to regulate securities trading.¹³⁶ The National Bank Act of 1864 implemented a federal system of banking regulation.¹³⁷ It was mainly a response to the government's need to raise money during the Civil War, but it was also affected by the Panics of 1857 and 1860. The Panic of 1893 did not result in major national reforms, but it helped spur reform movements and progressivism. William Jennings Bryan became the Democratic nominee based on his Cross of Gold speech in 1896,¹³⁸ several years earlier, as a congressman, he proposed federal deposit insurance.¹³⁹

Even this brief history suggests that some extreme versions of Models 2 and 3, which see little movement in their preferred direction even during the most favorable phases, are not generally accurate. Some Model 2 advocates see little tendency to deregulate even during booms,¹⁴⁰ but the extensive deregulation that began in the 1970s strongly suggests that this version of Model 2 is wrong. Roberta Romano, the best proponent of Model 2, downplays the amount of deregulation that occurred, and points to how long it took. For instance, over six decades passed from the passage of Glass-Steagall to its repeal.¹⁴¹ But the gradual erosion of Glass-Steagall began several decades before its complete repeal. The collapse of Bretton Woods came earlier still,¹⁴² and by the mid-1970s rules on usury and limits on new financial products began to seriously loosen.¹⁴³ Another major form of deregulation, which Romano ignores, occurred as regulators failed to respond to new financial innovations.¹⁴⁴ The almost immediate backlash against Dodd-Frank also suggests that the latest round of regulatory tightening will see some loosening before long.¹⁴⁵

And yet, there does seem to be a related truth that this version of

136. BANNER, *supra* note 33, at 171–74.

137. National Bank Act of 1864, 13 Stat. 99 (1864).

138. *William Jennings Bryan, 1860-1925*, NEB. STATE HIST. SOC'Y, <http://www.nebraska.history.org/lib-arch/research/manuscripts/politics/bryanwj.htm> (last updated Feb. 25, 2011).

139. Eugene N. White, *Dodd-Frank, Meet William Jennings Bryan*, WALL ST. J., July 13, 2010, at A17, available at <http://online.wsj.com/article/SB10001424052748704075604575356931846676058.html> (acknowledging that Congressman William Jennings Bryan proposed deposit insurance in response to the Panic of 1893).

140. See Romano, *supra* note 75, at 96.

141. *Id.* at 87.

142. See Garber, *supra* note 117, at 461.

143. See ENGEL & MCCOY, *supra* note 89, at 16.

144. GERDING, *supra* note 5, at 13.

145. Indeed, after I wrote the first draft of this Article, Congress passed the JOBS Act, which loosened securities regulation in a number of dimensions. Jumpstart Our Business Startups Act, Pub. L. No. 112-106, 126 Stat. 306 (2012). This occurred close enough to the last crisis that it is indeed a rather striking counterexample to my core procyclicality claim.

Model 2 gestures towards. Although the strength and effectiveness of financial regulation may ebb and flow with market cycles, there does seem to be an upward tendency. Even with the significant deregulation of the last few decades, before Dodd-Frank a much stronger and more extensive set of rules were in place than before the New Deal. During the boom period we cut back on rules created in the Great Depression, but we were very far from eliminating those rules completely.

So, how should we evaluate the effectiveness of the major regulatory initiatives following crises? Dodd-Frank is still too recent, but what about the reforms that followed the crises of 1907 and 1929? The Federal Reserve was the main response to the Panic of 1907.¹⁴⁶ Many strong criticisms of the Fed can be made. Its performance during the Great Depression was poor.¹⁴⁷ It has been a spotty banking regulator, getting far too caught up in the deregulatory movement that preceded the latest crash.¹⁴⁸ Some might think we would be better off with no Federal Reserve at all.¹⁴⁹ But not many would think so. On balance, the Federal Reserve looks like a quite useful response to financial crisis.

As for the New Deal legislation, deposit insurance and the FDIC have ended contagious runs on conventional banks. Deposit insurance does create some moral hazard, and banking regulation and supervision do not fully eliminate increased risk-taking. But, on balance, the FDIC seems to have created much more stability; its benefits clearly seem to outweigh its costs. Few people are calling for the elimination of deposit insurance for banks; there is a reason for this.

The net benefits of securities regulation have been somewhat more debated. Some empirical studies have suggested that regulation has been, on balance, ineffective or harmful.¹⁵⁰ Other studies have suggested positive effects.¹⁵¹ Studies also differ on the net benefits of the efforts of the Private Securities Litigation Reform Act of 1995 to

146. MILTON FRIEDMAN & ANNA JACOBSON SCHWARTZ, *A MONETARY HISTORY OF THE UNITED STATES, 1867–1960*, at 168–72 (1963).

147. *Id.* at 407–11, 418–19.

148. See ENGEL & MCCOY, *supra* note 89, at 19–20.

149. For example, Congressman and presidential candidate Ron Paul. See *About the Audit, AUDIT THE FED: A COALITION FOR GREATER TRANSPARENCY*, <http://www.auditthefed.com/about-the-audit> (last visited May 19, 2013) (proposing a bill that mandates unrestricted audits of the Federal Reserve by the Government Accountability Office).

150. *E.g.*, George J. Benston, *Required Disclosure and the Stock Market: An Evaluation of the Securities Exchange Act of 1934*, 63 AM. ECON. REV. 132, 153 (1973); George J. Stigler, *Public Regulation of the Securities Markets*, 37 J. BUS. 117, 121–24 (1964).

151. *E.g.*, Irwin Friend & Edward S. Herman, *The S.E.C. Through a Glass Darkly*, 37 J. BUS. 382, 382 (1964); Michael Greenstone, Paul Oyer & Annette Vissing-Jorgensen, *Mandated Disclosure, Stock Returns, and the 1964 Securities Acts Amendments*, 121 Q.J. ECON. 399, 412–13, 446–47 (2006).

scale back securities fraud litigation.¹⁵² The most persuasive evidence is a body of comparative quantitative research that suggests that U.S.-style protections of shareholders and creditors help lead to deeper financial markets.¹⁵³ Most of the developed world has copied American securities regulation. Maybe everyone has gotten it wrong, but the pattern is at least suggestive.

The most important part of the New Deal financial legislation that is hard to justify is Glass-Steagall. The link of that provision to the causes of the Great Depression does not seem very plausible, nor is there a strong story tying the end of Glass-Steagall to the latest crisis. If anything, evidence suggests that engaging in securities activities helped banks diversify, which made them safer. Thus, increased securities activities did not make banks more likely to fail.¹⁵⁴ Glass-Steagall prevented the development of universal banks, which have been useful in countries such as Germany and Japan.¹⁵⁵ Still, it must be noted that some extraordinarily good economists disagree and do see the end of Glass-Steagall as one of the causes of the crisis.¹⁵⁶

Even harder to justify is Regulation Q (promulgated in 1933 to implement elements of the Banking Act of 1933), which limited the amount banks could charge on various kinds of deposits.¹⁵⁷ Most economists find almost all price ceilings, including usury laws, hard to justify.

Before the great crisis of 2007–2008, we had the smaller crisis of the

152. *E.g.*, Ashiq Ali & Sanjay Kallapur, *Securities Price Consequences of the Private Securities Litigation Reform Act of 1995 and Related Events*, 76 ACCT. REV. 431, 456 (2001) (demonstrating that shareholders in “high-litigation-risk industries react *negatively* to the [Act’s] restrictions on their ability to bring securities-related lawsuits” (emphasis in original)); Stephen J. Choi, *Do the Merits Matter Less After the Private Securities Litigation Reform Act?*, 23 J.L. ECON. & ORG. 598, 598 (2007) (demonstrating that the Act reduced nuisance litigation, meritorious claims that were unprofitable, and non-meritorious claims that lacked hard evidence); Marilyn F. Johnson, Ron Kasznik & Karen K. Nelson, *Shareholder Wealth Effects of the Private Securities Litigation Reform Act of 1995*, 5 REV. ACCT. STUD. 217, 218 (2000) (finding that the Act was wealth-increasing for shareholders of high-technology firms; produced a more positive market reaction for firms that are at a greater risk of litigation; and decreased the incremental probability of a firm being sued for committing fraud); Michael A. Perino, *Did the Private Securities Litigation Reform Act Work?*, 2003 U. ILL. L. REV. 913, 976 (demonstrating that just as many class actions were filed after the Act was passed as before, but the Act improved the overall case quality when the key provisions were strictly interpreted).

153. Thorsten Beck, Asli Demigüç-Kunt & Ross Levine, *Law and Finance: Why Does Legal Origin Matter?*, 31 J. COMP. ECON. 653, 673 (2003); Rafael La Porta, Florencio Lopez-de-Silanes & Andrei Shleifer, *The Economic Consequences of Legal Origins*, 46 J. ECON. LITERATURE 285, 298–99, 310, 327 (2008).

154. HENDRICKSON, *supra* note 36, at 161.

155. *See* Brett McDonnell, *Banks and Venture Capitalists: Are the New Rules Too Tough, Too Weak, or Just Right?*, 1 MINN. J. BUS. L. & ENTREPRENEURSHIP 13, 14–15 (2002).

156. *E.g.*, STIGLITZ, *supra* note 95, at 15.

157. Regulation Q, 12 C.F.R. § 217.2 (1938).

dot-com boom and bust, which initiated a small recession in the early 2000s.¹⁵⁸ In the wake of that crisis and related scandals such as Enron and WorldCom, Congress enacted the Sarbanes-Oxley Act (SOX).¹⁵⁹ To some extent the jury is still out on SOX. At least one element, the auditor internal control certification requirement,¹⁶⁰ seems to have been a costly mistake.¹⁶¹ Other rules, such as a new regulatory system for auditors and independence requirements for auditors and directors, do not seem to have been as clearly misguided and costly, although it is also unclear whether they did much good. Overall opinion on the effectiveness of SOX is mixed, with some arguing that it did some modest good,¹⁶² others arguing that it is hard to tell if its costs were greater than its benefits,¹⁶³ and yet others arguing that it did much harm.¹⁶⁴

On balance, the evidence on the effects of major crisis-related regulatory innovations is ambiguous and debated. A staunch skeptic of regulation would condemn all of the New Deal financial regulation and the Federal Reserve Act to boot. Jill Hendrickson, for instance, argues that most banking regulation actually leads to increased risk-taking and fragility in the system.¹⁶⁵ There is some evidence to support such a claim, but on balance it seems implausible. Although surely there are problems with parts of the New Deal legislation, and the Federal Reserve is far from perfect, still financial markets are much more stable and less damaging in their crises than they would likely be without that legislation. And yet, regulation does seem to go too far at times. Glass-Steagall and elements of SOX (at least § 404(b)) are arguably evidence of this. The extensive barriers to entry and price ceilings that characterized much bank regulation in the decades after World War II are clearer evidence. At least some of the deregulation that occurred in recent decades was justified. Thus, the basic story of Model 1 seems to find a good deal of support in the history of American financial

158. Lawrence A. Cunningham, *The Sarbanes-Oxley Yawn: Heavy Rhetoric, Light Reform (And It Just Might Work)*, 35 CONN. L. REV. 915, 923 (2003).

159. Sarbanes-Oxley Act of 2002, Pub. L. No. 107-204, 116 Stat. 745; see also Roberta Romano, *The Sarbanes-Oxley Act and the Making of Quack Corporate Governance*, 114 YALE L.J. 1521, 1523 (2005).

160. Sarbanes-Oxley Act of 2002, Pub. L. No. 107-204, § 404(b), 116 Stat. 745, 789.

161. Larry E. Ribstein, *Market vs. Regulatory Responses to Corporate Fraud: A Critique of the Sarbanes-Oxley Act of 2002*, 28 J. CORP. L. 1, 31–32 (2002).

162. E.g., Cunningham, *supra* note 158, at 987–88; Donald Langevoort, *The Social Construction of Sarbanes-Oxley*, 105 MICH. L. REV. 1817, 1853 (2007); Brett H. McDonnell, *SOx Appeals*, 2004 MICH. ST. L. REV. 505, 533.

163. E.g., John C. Coates IV, *The Goals and Promise of the Sarbanes-Oxley Act*, 21 J. ECON. PERSP. 91, 92 (2007).

164. E.g., Ribstein, *supra* note 161, at 61; Romano, *supra* note 159, at 1602–03.

165. HENDRICKSON, *supra* note 36, at 15, 161.

regulation over the past century.

If, as suggested at the end of Part II, regulation is multidimensional, does it trend towards the right level in most dimensions, or is it too high in some and too low in others? In other words, does the world reflect a high S or low S version of Model 1?¹⁶⁶ Surely the answer is a mixed bag. The pessimistic high S story has some plausibility, and fits elements of the historical record. Yet, maybe over the long run, the more pernicious types of regulation do tend to disappear and the more helpful types remain, perhaps because clearly bad rules ultimately generate greater costs and more opposition.¹⁶⁷ Perhaps, too, it is simply a good thing to have periodic strong changes in the balance of political lobbying power over financial regulation—it allows for more innovation and variation in rules than would otherwise occur, and thus allows for learning over time, which is particularly valuable given the difficulty of getting such regulation right. There is at least some broad historical evidence of bad rules disappearing while good rules remain. Limits on branch banking and interest rates have largely disappeared in banking law, and activity limits like Glass-Steagall have been reduced, while regulation has come to focus more on capital requirements, soundness supervision, deposit insurance, and resolution of failed institutions. That regulatory scheme seems relatively well-focused on the real risks that banks pose.

Ideally, expanded regulation would occur during boom times and the cutbacks would occur following crises. However, political realities tied in part to underlying human limitations of cognition and attention stop that from happening. If we are going to achieve needed regulation, it is mostly going to have to happen following crises. If we are going to cut back on unnecessary regulation, it is mostly going to have to happen during booms. At least under Model 1 (unlike Models 2 and 3) the long-run average for the level of regulation is roughly optimal, even if the timing of changes is not. This is not the first-best scenario; it is at most third best. But that beats sixth best.

IV. ADMINISTRATIVE RESPONSES

This Part surveys a variety of procedural responses that we already use or that we could use to try to dampen financial regulatory cycles. First, it is useful to consider procedures that tend to slow down the passage of new statutes and regulations. Why start here? If the problems are deregulation during booms and overregulation following crises,

166. Recall that a high S indicates high levels of variation from the optimal level in many dimensions, with overregulation along some dimensions and underregulation along other dimensions, while a low S indicates that regulation is relatively close to the optimal level along most dimensions. *See supra* Part II.E.

167. Becker, *supra* note 74, at 373, 396.

putting in place some road bumps to slow down change may well make sense. However, this Article's analysis also suggests a problem with efforts to impede change: in many instances, changes may be beneficial, even if the particular regulation or deregulation is not ideal. In particular, new rules following crises are often more helpful than harmful. Procedures that go too far in blocking change would risk blocking such beneficial new rules.

American law is filled with ways in which we slow down new rules. As for federal statutes, the constitutional requirements of bicameralism and presentment require the approval of a majority of senators and representatives, and the President.¹⁶⁸ Congressional rules such as the committee process, the control of house leadership over the agenda, and the filibuster in the Senate, put further roadblocks in place.¹⁶⁹ For administrative regulations, the notice-and-comment process, judicial review of both procedure and substance, and required cost-benefit analyses, among other things, create obstacles to passage of new regulations.¹⁷⁰ All three of our models appreciate the presence of such obstacles during at least one phase of the regulatory cycle. Model 1 appreciates the presence of obstacles in both phases, since it sees a tendency to overregulate during a crisis and then to deregulate too much during booms. Model 2 supports limiting new rules following a crisis, while Model 3 supports limiting deregulatory initiatives during a boom. But the effects of roadblocks are ambiguous. For Model 2, new initiatives should be encouraged during booms when they tend to lead to deregulation, while for Model 3 new rules should be encouraged during a crisis when they tend to lead to effective new regulation. Moreover, insofar as one buys Part III's conclusion that Model 1 may be a second- or third-best process given underlying human limitations, then perhaps we do not really want to hinder new rules. The timing of the rules may be all wrong, but at least the rules do in the long run make needed changes in the regulatory system. In contrast, if one tends to believe Model 2, then obstacles look more promising—yes, they may block useful deregulatory initiatives during booms, but since such deregulation tends to only partially undo the damage wrought by crisis rules, that cost is likely outweighed by the benefits of blocking misguided rules following a crisis.

What one really wants are *intelligent* roadblocks, which tend to block bad new rules but not beneficial ones. That is of course hard, but we do try. Within Congress, one hopes that the committee system will tend to sift through conflicting arguments and sort out those proposals

168. U.S. CONST. art. I, § 7, cl. 2.

169. See Kuran & Sunstein, *supra* note 39, at 747.

170. Administrative Procedure Act, Pub. L. No. 79-404, 60 Stat. 237 (1946); see also Krawiec, *supra* note 64, at 55–56.

with the best chances of producing good results. The expertise of committee members and their staff, combined with the chance for interested parties to present evidence and arguments at hearings, may increase the intelligence of the process. On the other hand, the specialization of committee members is also more likely to lead to their capture by special interests, either through focused lobbying or through the selection bias that determines who winds up on which committee. The committee hearing process presents a vital path for getting important information to congressional decision makers, but it also provides a way for financial industry insiders, who have most of that information, to unduly influence decision makers.

Similar advantages and disadvantages appear during the process of notice-and-comment rulemaking by specialized agencies. Agency specialization allows for useful expertise, and the comment process can generate useful information for evaluating proposals.¹⁷¹ But those specialized agencies are also subject to capture, and the comment process is often dominated by informed industry insiders.¹⁷²

Hard-look review. Judicial review of administrative regulations seems a promising strategy for intelligently weeding out the worst of new rules. Courts may strike down regulations that are arbitrary and capricious.¹⁷³ One might hope that this works as an intelligent roadblock in both phases of the regulatory cycle, blocking both the worst of expanded regulation following a crisis and the worst of deregulatory rule changes during boom periods. Courts have varied as to how much scrutiny they engage in, but sometimes they have engaged in hard-look scrutiny, which examines fairly closely how agencies justify new regulations. There has been much debate among administrative law scholars as to the effects of hard-look scrutiny.¹⁷⁴ There is a tradeoff. If courts engage in only weak scrutiny, they will screen out few regulations. On the other hand, if they engage in stricter scrutiny, there is a risk of striking down worthy regulations. Arguably this has already happened for one important new regulation under Dodd-Frank, the SEC's proxy access rule. The D.C. Circuit's decision striking down the

171. Krawiec, *supra* note 64, at 56.

172. *Id.* at 82.

173. 5 U.S.C. § 706(2)(A) (2012).

174. *E.g.*, Thomas O. McGarity, Response, *The Courts and the Ossification of Rulemaking: A Response to Professor Seidenfeld*, 75 TEX. L. REV. 525, 528–29 (1997); Mark Seidenfeld, *Demystifying Deossification: Rethinking Recent Proposals to Modify Judicial Review of Notice and Comment Rulemaking*, 75 TEX. L. REV. 483, 486–87 (1997); Matthew C. Stephenson, *A Costly Signaling Theory of “Hard Look” Judicial Review*, 58 ADMIN L. REV. 753, 754–56 (2006); Kathryn A. Watts, *Proposing a Place for Politics in Arbitrary and Capricious Review*, 119 YALE L.J. 2, 12–13 (2009); Jason Webb Yackee & Susan Webb Yackee, *Testing the Ossification Thesis: An Empirical Examination of Federal Regulatory Volume and Speed, 1950–1990*, 80 GEO. WASH. L. REV. 1414, 1420–21 (2012).

proxy access rule is rather arbitrary and capricious in its characterization of the SEC's justification of proxy access as arbitrary and capricious.¹⁷⁵ If the D.C. Circuit were to behave like this in reviewing many of the new regulations that agencies must write under Dodd-Frank, it is not at all clear how those agencies, inundated with rulemaking mandates, will ever be able to adequately justify their work product. One hopes that the proxy access case is an aberration. On the other hand, for an advocate of Model 2, the case gives hope that courts will protect us from a series of rushed and sloppy new rules under a mostly misguided statute.¹⁷⁶ This illustrates the trickiness of administrative fixes to the regulatory cycles. Yes, we do want to dampen the excessive procyclical nature of the cycle. And yet, given the inevitable cognitive and political limits of regulation, both phases of the cycle serve useful purposes, even if their timing is not optimal. Procedures, like hard-look review, that impose too harsh a limit on either phase of the cycle risk throwing out much good along with some bad.

Agency independence. Creating independent agencies is a standard procedural strategy for insulating regulators from political pressure. Examples in U.S. financial regulation include the Federal Reserve and the SEC. By insulating agencies from political influence, independence can help reduce some of the procyclicality that flows from the demand for regulation. The Federal Reserve's setting of monetary policy is an interesting example—achieving countercyclical policy is a particularly crucial goal in monetary policy, and the Fed's independence is seen as a critical component of its relative success.¹⁷⁷ Of course, even in monetary policy the Fed has not always been successful in making its actions countercyclical,¹⁷⁸ and it has been less successful in the area of

175. *Bus. Roundtable v. SEC*, 647 F.3d 1144, 1156 (D.C. Cir. 2011). For critiques of the case, see James D. Cox & Benjamin J.C. Baucom, *The Emperor Has No Clothes: Confronting the D.C. Circuit's Usurpation of SEC Rulemaking Authority*, 90 TEX. L. REV. 1811, 1813 (2012); Grant M. Hayden & Matthew T. Bodie, *The Bizarre Law and Economics of Business Roundtable v. SEC*, 38 J. CORP. L. 101, 120–22 (2012); J. Robert Brown, Jr., *Shareholder Access and Uneconomic Economic Analysis: Business Roundtable v. SEC*, DENV. U. L. REV. ONLINE, (Sept. 30, 2011, 2:57 PM), <http://www.denverlawreview.org/online-articles/2011/9/30/shareholder-access-and-uneconomic-economic-analysis-business.html>.

176. Kuran and Sunstein suggest greater judicial scrutiny as a way to protect against ill-conceived crisis-driven laws. See Kuran & Sunstein, *supra* note 39, at 758–59.

177. As Federal Reserve chair William Martin purportedly said: “The Federal Reserve, as one writer put it, after the recent increase in the discount rate, is in the position of the chaperone who has ordered the punch bowl removed just when the party was really warming up.” Yoram Bauman, *Martin's “Punch Bowl” Quote: A Semi-definitive Citation*, STAND-UP ECONOMIST (Mar. 27, 2011), <http://www.standupeconomist.com/blog/martins-punch-bowl-quote-a-semi-definitive-citation>.

178. Many cite overly low interest rates as a primary cause of the housing bubble that led to the latest financial crisis. See, e.g., Jeff Holt, *A Summary of the Primary Causes of the*

financial regulation, in part because it seems to have seen regulation as less central to its identity than monetary policy.

Interestingly, and perhaps disturbingly, across many countries, including the United States, the reaction to the latest financial crisis has somewhat *decreased* the importance of independence among financial regulators.¹⁷⁹ It appears that politicians want regulators to be more directly accountable to them given the renewed focus on the importance of financial regulation. In the United States, this tendency appears in the decision to make the Secretary of the Treasury the chair of the new Financial Stability Oversight Council, which coordinates federal financial rulemaking.¹⁸⁰ However, agency independence still appears as an important strategy in parts of the Dodd-Frank Act, most importantly in the new Consumer Financial Protection Bureau (CFPB).¹⁸¹ The CFPB has a budget that is independent of Congress,¹⁸² one of the most important elements of agency independence. However, its budgetary independence has come under attack from opponents—congressional Republicans have vowed to block appointments to the CFPB unless its budgetary independence is reduced, among other conditions.¹⁸³ Greater accountability to Congress presumably serves some worthy purposes. However, from the perspective of smoothing the regulatory cycle and making it less procyclical, decreasing the budgetary independence of the CFPB is clearly a bad idea. Indeed, preferred reforms would seem to move in the opposite direction, strengthening the power of independent agencies.¹⁸⁴ For instance, from the perspective of the issues considered

Housing Bubble and the Resulting Credit Crisis: A Non-Technical Paper, 8 J. BUS. INQUIRY 120, 121–23 (2009). Even if that is right, though, it is not at all clear that the explanation for that monetary policy is political. Indeed, I'm inclined to agree with Scott Sumner: "[W]e were all taught in grad school that central banks needed to be independent to resist public pressure to inflate. I'm inclined to discount most public choice explanations of monetary policy failure, and fall back on the 'It's the stupidity, stupid.' explanation." Scott Sumner, *Four Short Posts*, THEMONEYILLUSION (Apr. 4, 2012), <http://www.themoneyillusion.com/?p=13805>.

179. Stavros Gadinis, *From Independence to Politics in Financial Regulation*, 101 CAL. L. REV. 327, 332 (2013).

180. Dodd-Frank Wall Street Reform and Consumer Protection Act, Pub. L. No. 111-203, § 111(b)(1)(A), 124 Stat. 1376, 1392–93 (2010).

181. *Id.* §§ 1001–1100H, 124 Stat. at 1955–2113.

182. *Id.* § 1017(a), 124 Stat. at 1979.

183. *44 U.S. Sens. to Obama: No Accountability, No Confirmation*, RICHARD SHELBY, UNITED STATES SENATOR OF ALABAMA (May 5, 2011), http://shelby.senate.gov/public/index.cfm/newsreleases?ContentRecord_id=893bc8b0-2e73-4555-8441-d51e0ccd1d17. While this Article was in the editing process, a deal concerning the use of filibusters for executive appointments led to the Senate confirming Richard Cordray as director of the CFPB. Binyamin Appelbaum, *Vote Ushers in New Era of Oversight of Lending Practices*, N.Y. TIMES (July 16, 2013), http://www.nytimes.com/2013/07/17/business/cordray-confirmed-as-head-of-financial-watchdog-after-long-wait.html?_r=0.

184. However, I do believe that one of the other suggested Republican reforms makes sense. They suggest that a five-person commission, rather than a single director head the

in this Article, it would be better to have the Financial Stability Oversight Council¹⁸⁵ chaired by the Chair of the Federal Reserve rather than the Secretary of the Treasury.

Sunset clauses. Roberta Romano has recently suggested sunset clauses as part of all new financial regulation.¹⁸⁶ Under this proposal, a review panel would evaluate crisis-driven financial regulation after a set period (Romano mentions five or six years).¹⁸⁷ The proposal appears in Romano's suggestion that Congress would need to reauthorize the legislation after receiving the panel's report, or else the legislation would lapse. This proposal is attractive from the perspective of Model 2 (Romano is a leading Model 2 proponent). Since crisis regulation is likely to be inefficient according to Model 2, and since that Model views the political process as least trustworthy immediately following crises, the sunset proposal would lead to a welcome pruning of mostly bad new rules.¹⁸⁸

The sunset proposal is obviously problematic from the perspective of Model 3. It would undermine good crisis rules, and put them at risk during boom periods, which feature a tendency to deregulate in excess.¹⁸⁹ Romano argues that even if one accepts this perspective (which she of course does not), having review of a regulation performed publically is better than subverting the rule in the dark through a captured agency process.¹⁹⁰ From the perspective of Model 1, there is some value to having a public, more transparent review process, both to shed a light on industry involvement and also to scrutinize crisis rules that do tend to overshoot. However, if the sunset proposal creates a default whereby the rule will terminate without new congressional action, the critique of agency capture during boom periods shared by Models 1 and 3 does create great concern. By the time a rule comes up for review, Congress is likely to face strong pressure to favor the financial industry. Expecting Congress to renew even good but tough rules during such times seems foolhardy. It is more defensible to simply require a study at some point after a rule takes effect. Indeed, the many mandated reports to Congress under Dodd-Frank are a variant of this

agency. Responsible Consumer Financial Protection Regulations Act of 2011, S. 737, 112th Cong.; see also *S.737—Responsible Consumer Financial Protection Regulations Act of 2011*, OPENCONGRESS, <http://www.opencongress.org/bill/112-s737/show> (last visited May 19, 2013). That might well be a useful way to include more viewpoints within the agency's decision making.

185. Dodd-Frank Wall Street Reform and Consumer Protection Act, Pub. L. No. 111-203, §§ 101–176, 124 Stat. 1376, 1391–1442 (2010).

186. Romano, *supra* note 75, at 95–96.

187. *Id.* at 95.

188. *Id.* at 96.

189. See Coffee, *supra* note 50, 122–23.

190. Romano, *supra* note 75, 96–99.

more modest idea. One could give these reports more oomph than they possess under Dodd-Frank by setting up a panel of independent experts, rather than the implementing agency, to review the law after (say) five years, and giving clear criteria to that panel, as Romano suggests.¹⁹¹ The review requirement could also stipulate that the review panel should formulate proposed amendments to the legislation, including the possibility of complete repeal, if its review suggests such amendments would be desirable.

Contrarians. Dan Schwarcz and I have called for the increased use of “regulatory contrarians.”¹⁹² Regulatory contrarians are defined by three features: affiliation with a particular regulatory body while simultaneously enjoying meaningful independence from that body, persuasive influence over the agency by virtue of its position, and being limited to no regulatory authority of their own.¹⁹³ These regulatory contrarians can review both existing and proposed new rules as well as financial market developments, and suggest areas where current rules do not seem to respond adequately to market risks. They can be a way of combating destructive deregulation during boom periods while also promoting useful regulation following crises—their independence and the fact that they themselves do not write rules help limit their exposure to political pressure. The hard part, though, is finding ways to increase the chances that agencies will actually listen to the recommendations of regulatory contrarians. Existing examples of contrarian institutions include the Taxpayer Advocate Service within the IRS, offices of public counsel in some states, inspectors general, and the Center for Insurance Policy and Research.¹⁹⁴ Schwarcz and I argue that Dodd-Frank includes a number of potentially useful contrarian institutions. Perhaps most significant is the new Office of Financial Research (OFR).¹⁹⁵ Other

191. *Id.* at 95.

192. McDonnell & Schwarcz, *supra* note 52, at 1681–82 (2011). For similar suggestions, see JAMES R. BARTH, GERARD CAPRIO, JR. & ROSS LEVINE, *GUARDIANS OF FINANCE: MAKING REGULATORS WORK FOR US* 215–24 (2012) (describing a proposal for a new institution called the “Sentinel” to “improve the system for selecting, interpreting, implementing, and adapting regulations”); Saule T. Omarova, *Bankers, Bureaucrats, and Guardians: Toward Tripartism in Financial Services Regulation*, 37 J. CORP. L. 621, 642 (2012).

193. McDonnell & Schwarcz, *supra* note 52, at 1645–46.

194. *Id.* at 1654–66.

195. Dodd-Frank Wall Street Reform and Consumer Protection Act, Pub. L. No. 111-203, §§ 151–56, 124 Stat. 1376, 1412–20 (2010). I can’t say I am thrilled with what I have seen of the OFR’s start in life. In particular, the initial membership of the Financial Research Advisory Committee does not fill me with great hope. *Membership of the Financial Research Advisory Committee*, U.S. DEPT. OF THE TREASURY (Nov. 2012), http://www.treasury.gov/initiatives/ofr/about/Documents/OFR_FRAC_Member_Bios_FINAL.pdf. For one thing, it is all economists, whereas a more interdisciplinary group would bring a wider range of perspectives to the table. Moreover, the list of economists seems strikingly industry-dominated, and does not contain a large number of known contrarian thinkers likely to ask serious and deep questions

examples within the Act include the Federal Insurance Office, the Council of Inspectors General on Financial Oversight, the Investor Advisory Committee and the Office of the Investor Advocate within the SEC, and the Consumer Advisory Board within the CFPB.¹⁹⁶ To similar effect is the suggestion of outside peer review of agency rules.¹⁹⁷

Mandated studies. Dodd-Frank mandates that administrative agencies conduct dozens of studies concerning various perceived problems. One analysis found that the Act dictates 243 new rulemakings, 67 studies, and 22 periodic reports.¹⁹⁸ These serve a potentially useful role in displacing the regulatory energy that immediately follows a financial crisis. Regulating too soon can lead to misguided rules, if those setting them do not fully understand what they are doing, and can also restrict financial markets during a time when they are already suffering. Mandated studies give the agencies time to reflect, gather more information, and research possible ways to address problems revealed by the latest crisis. They also push into the future any new rules which may result from the crisis, which reduces or eliminates the problem of implementing new restrictions when markets are struggling.¹⁹⁹

The biggest challenge for this strategy is that the political will to support new rules may have disappeared by the time the mandated studies are completed. But at least sometimes, bureaucrats' interest in strong rules may combine with some lingering populist pressure to regulate. Most of the mandated studies are combined with a requirement to report to Congress on the results; these reports may provide a way for those with an interest in new regulation to help prolong general political attention and pressure.²⁰⁰ The new regulatory contrarians may also champion possible rules suggested by studies.²⁰¹ There is a careful balance required for this strategy to succeed—the time for studies must be long enough to allow for meaningful reflection and learning and to let markets recover, but not be so long that the will to regulate has completely disappeared by the time the studies appear.

Automatic triggers. Dodd-Frank requires regulators to make capital requirements for certain regulated institutions countercyclical.²⁰² The

about existing rules.

196. McDonnell & Schwarcz, *supra* note 52, at 1671–73.

197. Kuran & Sunstein, *supra* note 39, at 754.

198. Broc Romanek, *What the Dodd-Frank Act Means for the Regulators?*, THECORPORATECOUNSEL.NET (July 13, 2010, 7:38 AM), <http://www.thecorporatecounsel.net/Blog/2010/07/see-page-344-hooray-kirkland.html>.

199. McDonnell, *Don't Panic!*, *supra* note 12, at 66–67.

200. *Id.* at 61–62.

201. *Id.*

202. Dodd-Frank Wall Street Reform and Consumer Protection Act, Pub. L. No. 111-203, § 616(a)(2), 124 Stat. 1376, 1615 (2010).

new Basel Committee on Banking Supervision's regulatory framework also calls for countercyclical capital requirements.²⁰³ Obviously, this is a direct attack on the procyclical regulation problem.²⁰⁴ The question is: How are regulators supposed to implement this idea? If requirements vary at the discretion of regulators, one would fear that the sorts of political and cognitive stresses analyzed in this Article would frustrate the aim of this requirement.²⁰⁵ So it would seem to be better to tie countercyclical capital requirements to a rule that is more or less clear and automatic.²⁰⁶ The obvious, and difficult, question is, of course, what measure such requirements should be tied to. We need measures that are not (very) gameable and that accurately reflect what is going on in financial markets. That is not easy, not by a long shot.²⁰⁷ Spotting emerging financial bubbles is intrinsically difficult. Indeed, if it were easy, the bubbles would generally not occur. Are there really automatic measures that can serve as a good proxy?²⁰⁸

CONCLUSION

Despite their many differences, all of the models and arguments considered here are rooted in a public choice perspective on financial regulation, i.e. rational choice ideas drawn from economics and applied to politics. But that perspective is modified to take account of behavioralist biases in rationality, particularly the availability bias. The availability bias helps explain a procyclical tendency in financial regulation, as both the public and regulators ignore the threat of financial crises during boom times and become very focused on that threat when crises actually occur. The normal dominance of concentrated interest groups temporarily shifts as public attention turns to financial regulation following a crisis.

The models differ in how they understand the balance of interest groups outside of crises and how likely that balance is to lead to outcomes that reflect the public interest; in how well they think the crisis-related public attention can be channeled to reflect the public interest; and in how they analyze the underlying vulnerability of financial institutions and markets and the intellectual difficulty of

203. BASEL COMM. ON BANKING SUPERVISION, BANK FOR INT'L SETTLEMENTS, *BASEL III: A GLOBAL REGULATORY FRAMEWORK FOR MORE RESILIENT BANKS AND BANKING SYSTEMS* ¶ 149 (rev. 2011).

204. See Gabilondo, *supra* note 12, at 486–89.

205. See Kowalik, *supra* note 29, at 72–73.

206. *Id.* at 74.

207. See *id.*; Mathias Drehmann, Claudio Borio & Kostas Tsatsaronis, *Anchoring Countercyclical Capital Buffers: The Role of Credit Aggregates*, 7 INT'L J. CENT. BANKING 189, 191 (2011).

208. I explore proposed rules implementing the countercyclical trigger in Brett H. McDonnell, *Designing Countercyclical Capital Buffers*, N.C. BANKING INST. (forthcoming).

regulation.²⁰⁹ This leads to differing critiques of either underregulation in booms or overregulation in crises.

It is hard to choose among these competing models by looking at the historical evidence—the evidence is complex and subject to varied interpretations, our empirical tools are relatively weak, and our intellectual and ideological preconceptions are strong and tend to drive the debate. This Article has argued that Model 1, as a whole, best fits U.S. history. This is not great news—after all, it means we are both deregulating too much during booms and regulating too much during crises, relative to the first-best world. But there is a silver lining—at least as compared with Models 2 and 3. It suggests that perhaps over time we are figuring out roughly the right degree and kind of regulation (if one believes the small S version of Model 1), even though the timing of changes in regulation is not right.

If we have trouble finding the right diagnosis, then we will naturally struggle to get the right prescription. That helps explain a certain degree of hesitance in Part IV's discussion of administrative responses that may help dampen financial regulatory cycles. Still, some responses do look promising. Agency independence is an old but important response, and in the face of a tendency in the recent crisis to move away from such independence,²¹⁰ it could use some renewed emphasis. Regulatory contrarians, mandated studies, and automatic triggers are other mechanisms with some promise. Dodd-Frank does experiment with these mechanisms, so over time we may see whether they are effective. Procyclical regulation is too deeply rooted in basic facts of political and economic life to eliminate completely, but with some determination we may be able to dampen the regulatory cycle.

209. See *supra* Table 1 for a summary.

210. See *supra* note 179 and accompanying text.

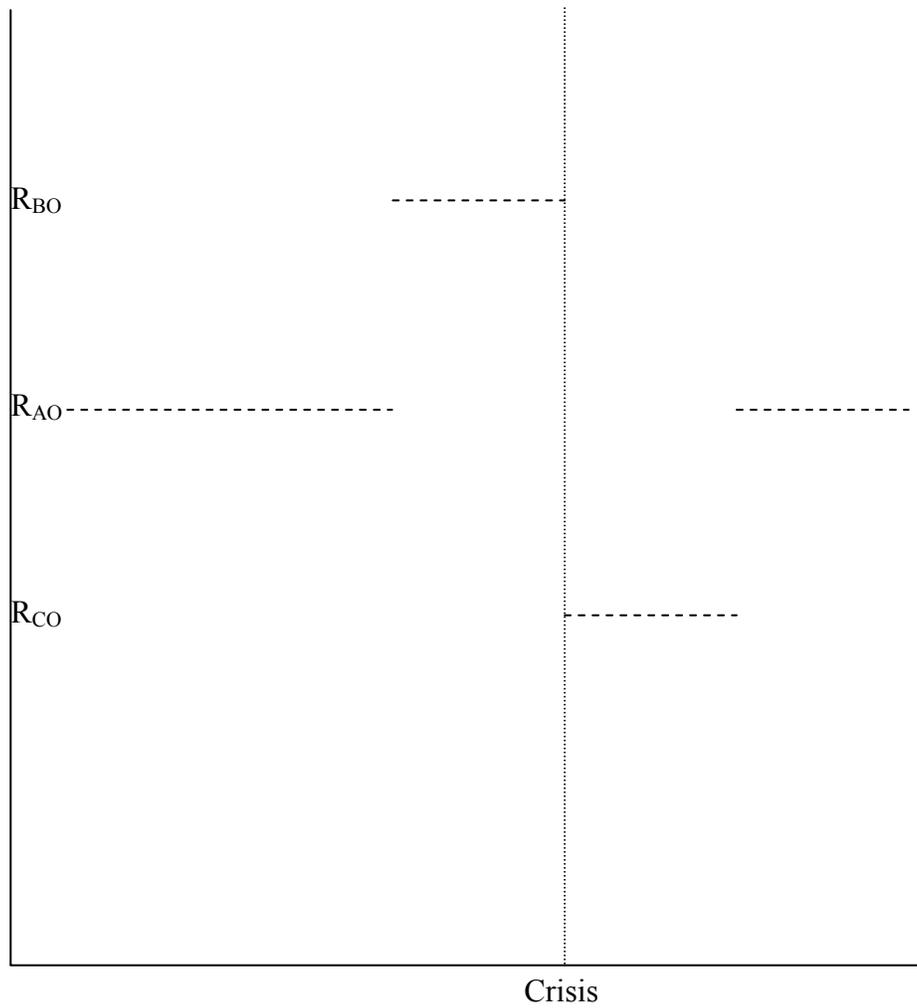


Figure 1
Optimal levels of regulation

Dashed lines give the optimal levels of regulation at different periods relative to a crisis

The vertical line indicates the start of a financial crisis

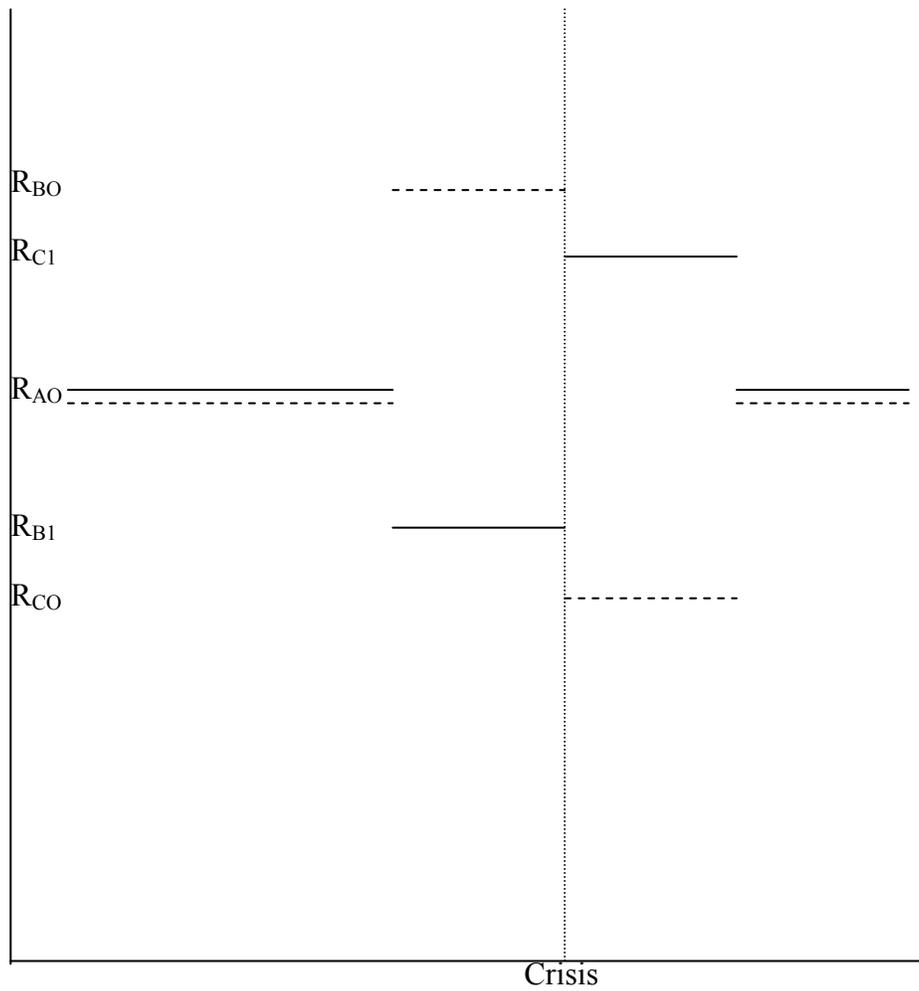


Figure 2
Regulation under Model 1

Dashed lines give the optimal levels of regulation at different periods relative to a crisis

Solid lines give the actual levels of regulation at different periods relative to a crisis

The vertical line indicates the start of a financial crisis

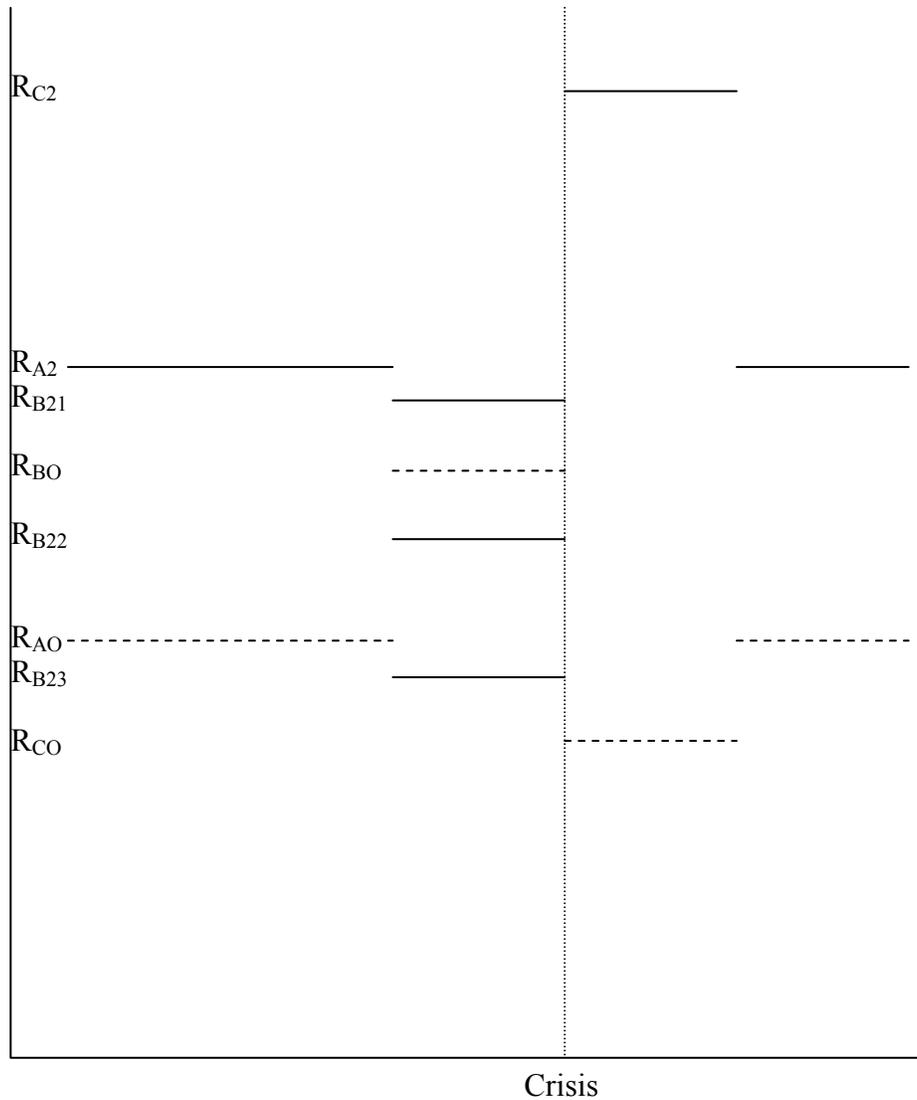


Figure 3
Regulation under Model 2

Dashed lines give the optimal levels of regulation at different periods relative to a crisis

Solid lines give the actual levels of regulation at different periods relative to a crisis; the three solid lines pre-crisis indicate alternate possibilities

The vertical line indicates the start of a financial crisis

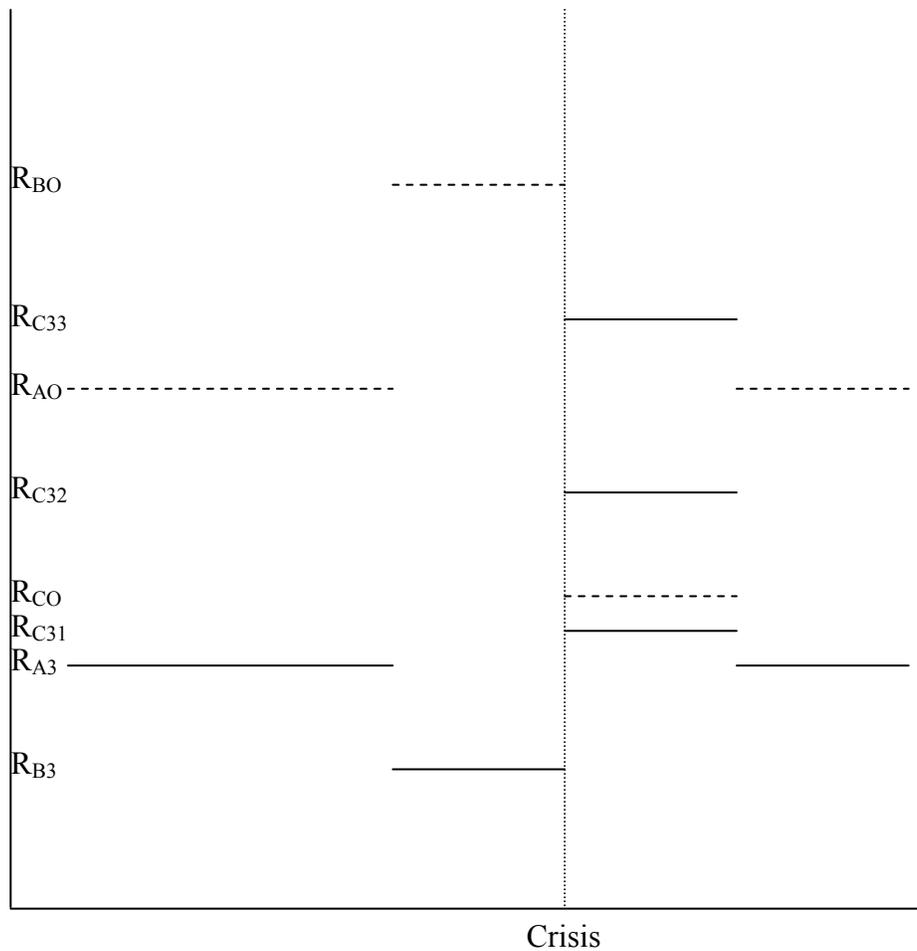


Figure 4
Regulation under Model 3

Dashed lines give the optimal levels of regulation at different periods relative to a crisis

Solid lines give the actual levels of regulation at different periods relative to a crisis; the three solid lines post-crisis indicate alternate possibilities

The vertical line indicates the start of a financial crisis

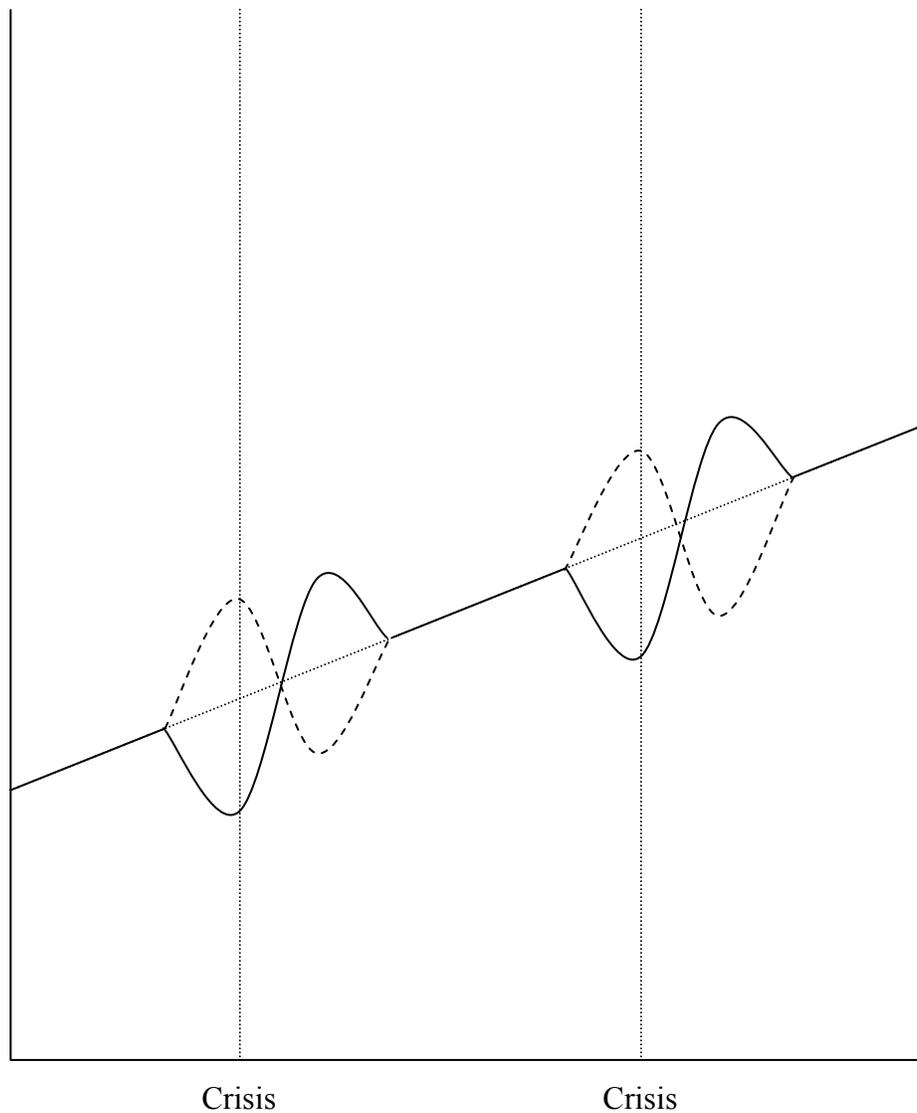


Figure 5
Model 1 with increasing level of regulation

Dashed curves give the optimal levels of regulation at different periods relative to a pair of crises
Solid curves give the actual levels of regulation at different periods relative to a pair of crises
The vertical lines indicate the starts of financial crises

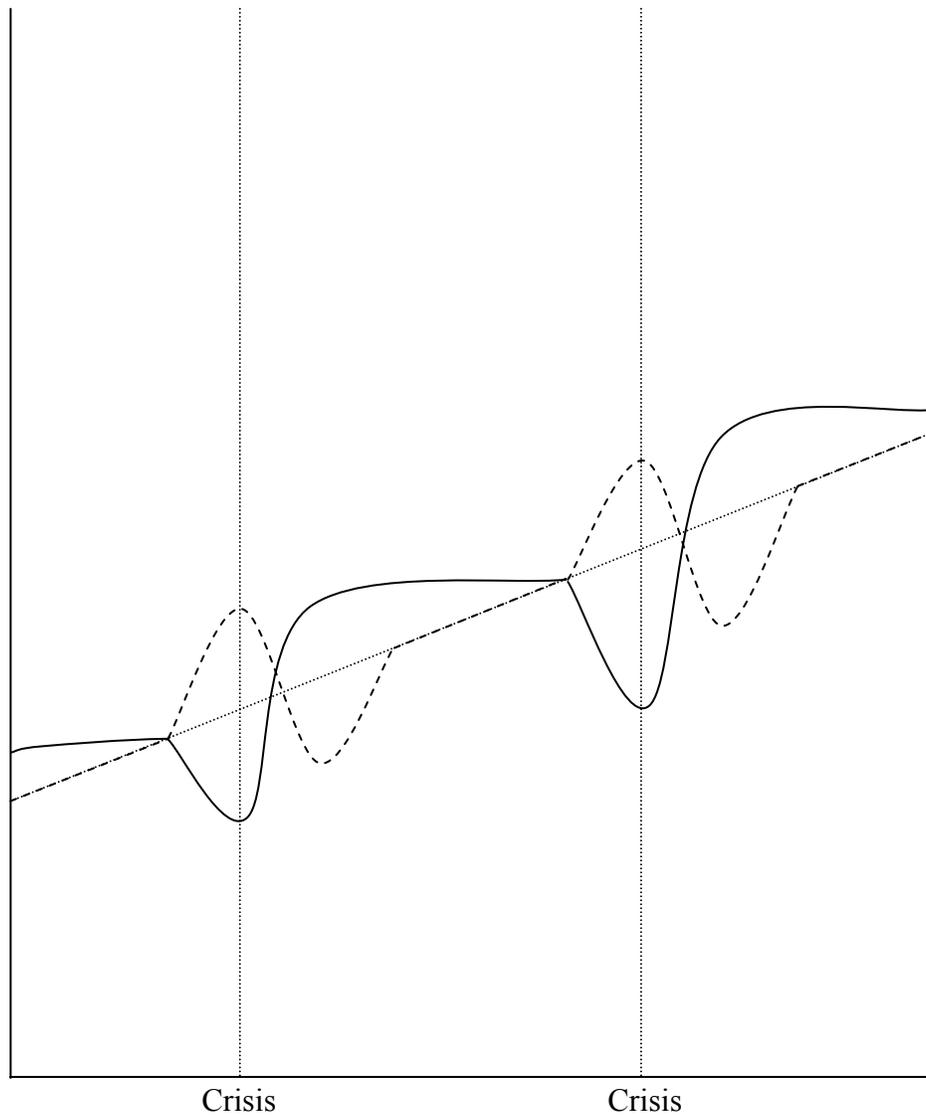


Figure 6
Model 1 with increasing level of regulation

Dashed curves give the optimal levels of regulation at different periods relative to a pair of crises
Solid curves give the actual levels of regulation at different periods relative to a pair of crises
The vertical lines indicate the starts of financial crises

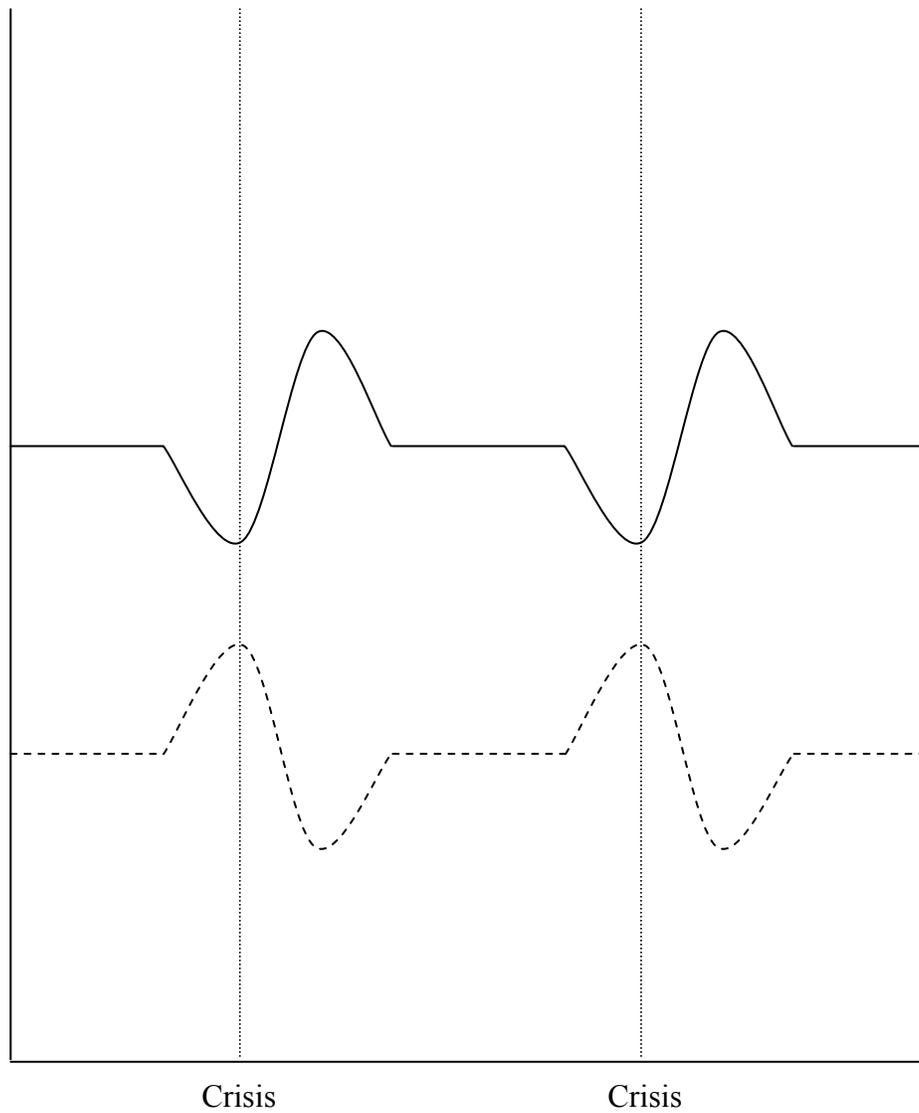


Figure 7
Model 2

Dashed curves give the optimal levels of regulation at different periods relative to a pair of crises
Solid curves give the actual levels of regulation at different periods relative to a pair of crises
The vertical lines indicate the starts of financial crises

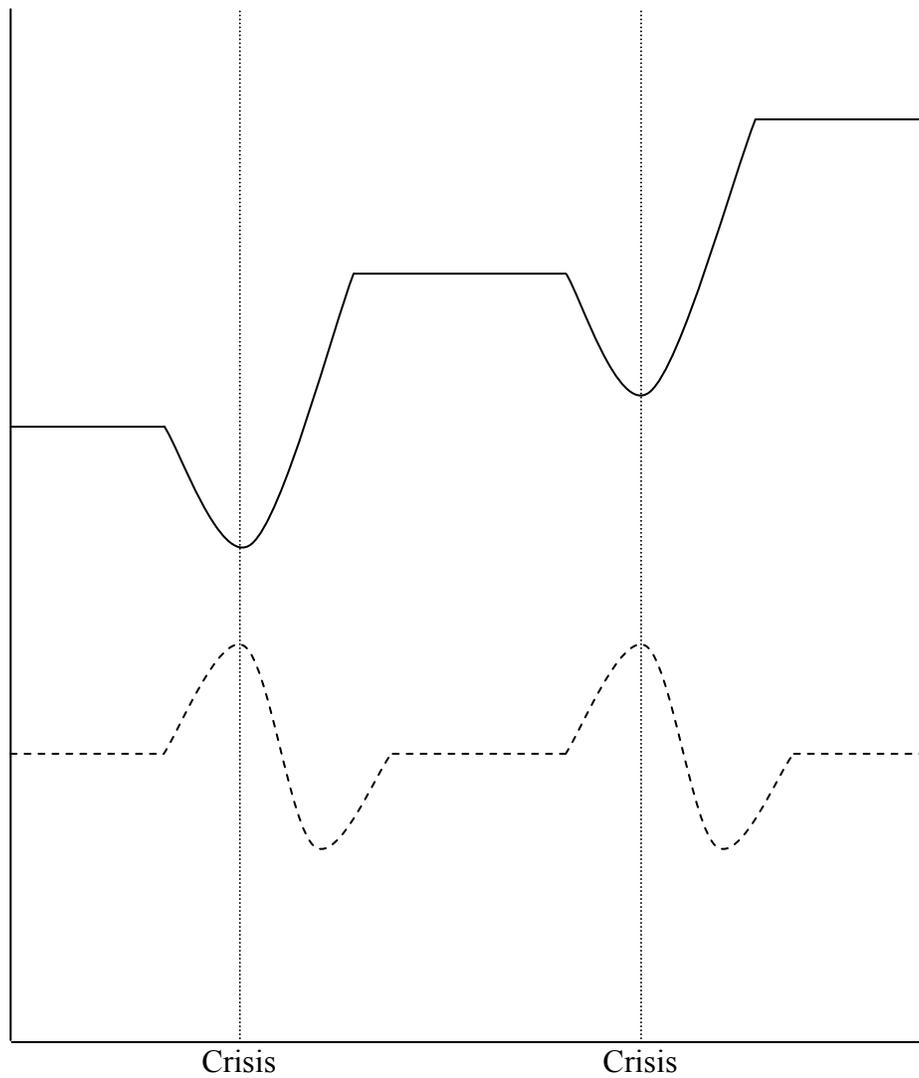


Figure 8
Model 2 with increasing average regulation

Dashed curves give the optimal levels of regulation at different periods relative to a pair of crises

Solid curves give the actual levels of regulation at different periods relative to a pair of crises

The vertical lines indicate the starts of financial crises

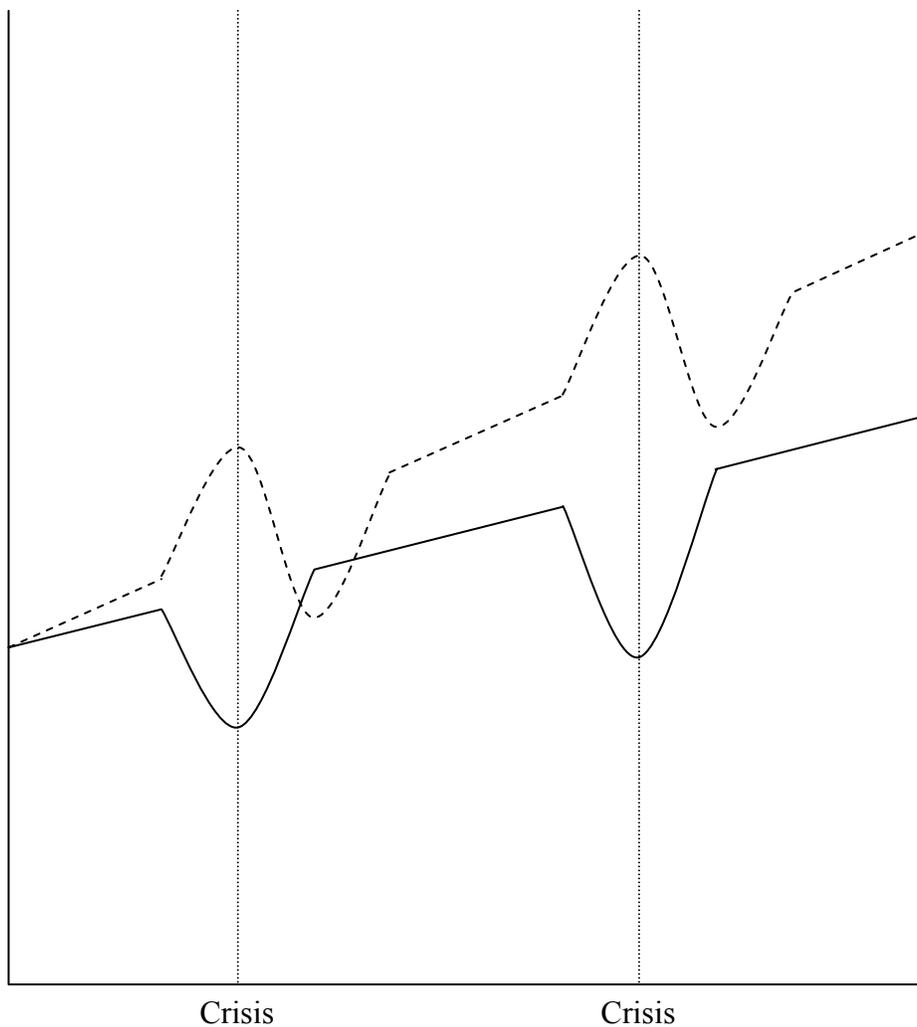


Figure 9
Model 2 with increasing regulation

Dashed curves give the optimal levels of regulation at different periods relative to a pair of crises

Solid curves give the actual levels of regulation at different periods relative to a pair of crises

The vertical lines indicate the starts of financial crises

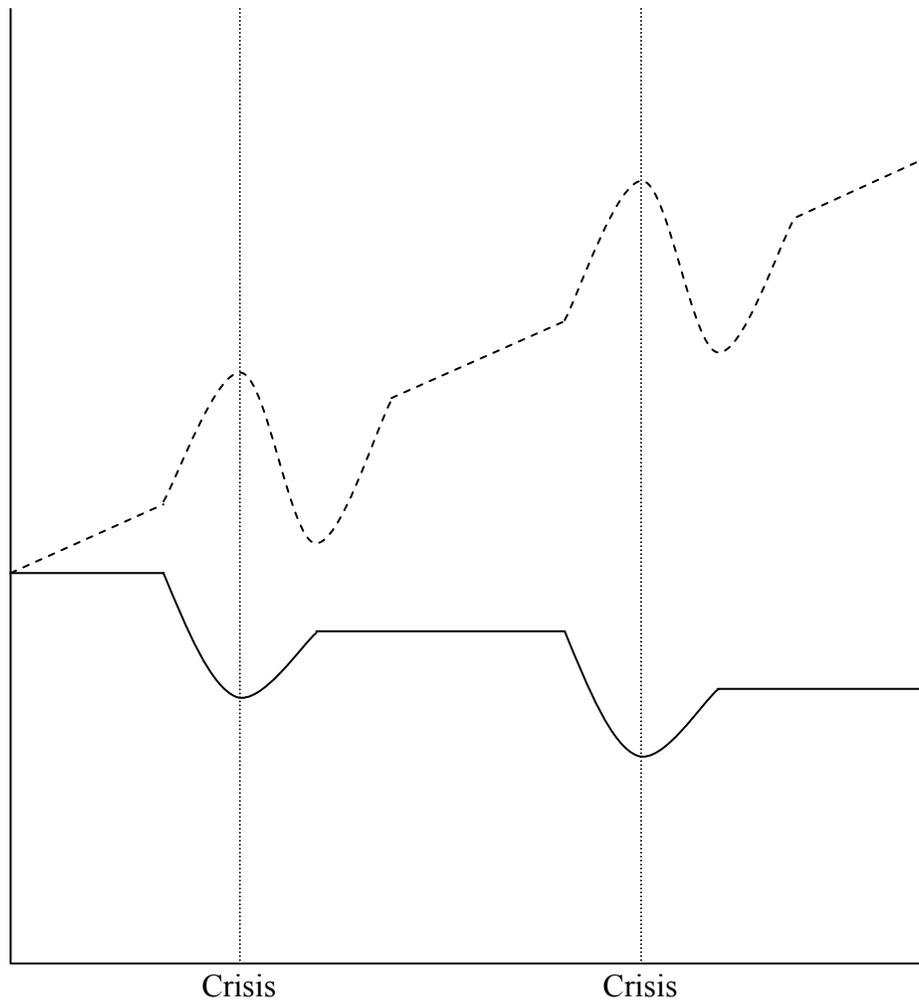


Figure 10
Model 3 with decreasing actual regulation

Dashed curves give the optimal levels of regulation at different periods relative to a pair of crises

Solid curves give the actual levels of regulation at different periods relative to a pair of crises

The vertical lines indicate the starts of financial crises

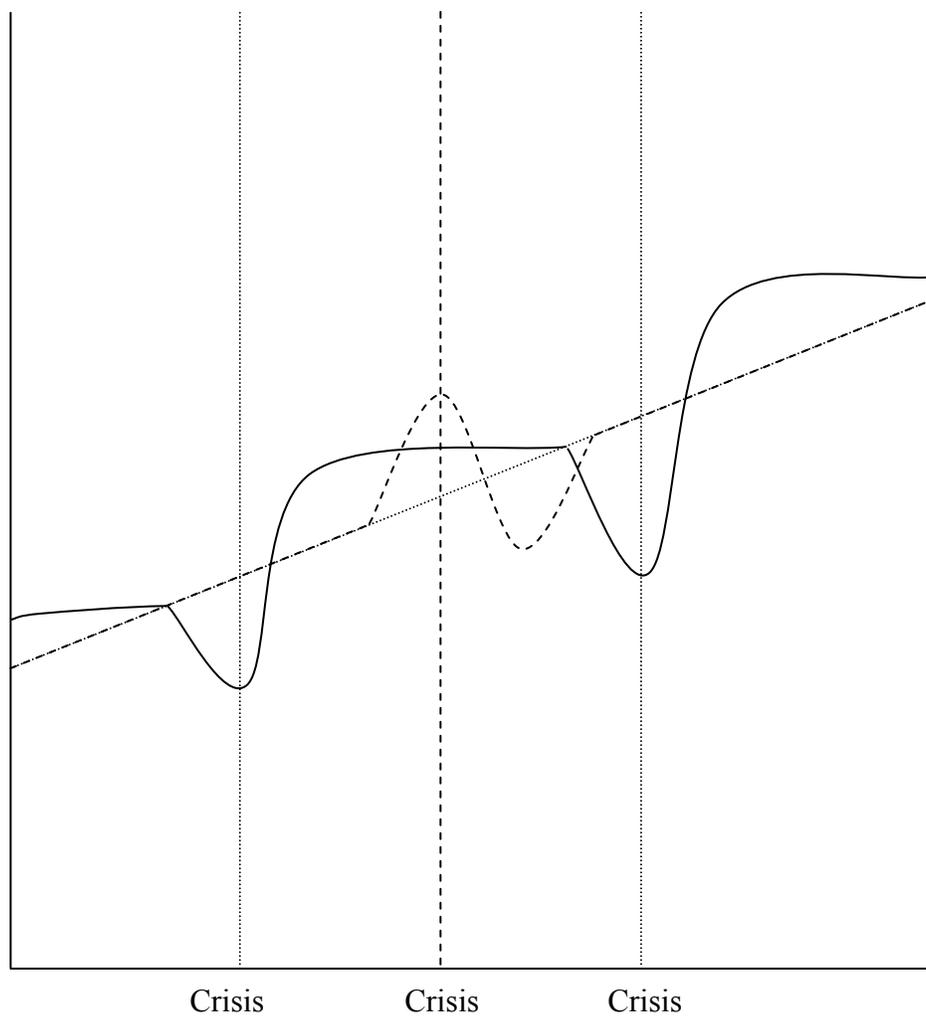


Figure 11
Model 1 with endogenous crisis timing

Dashed curves give the optimal levels of regulation at different periods relative to a crisis

Solid curves give the actual levels of regulation at different periods relative to a pair of crises

The vertical lines indicate starts of financial crises—the two dotted lines for crises given actual regulation; the dashed line for a crisis given optimal regulation