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## Unrisky Business: Asset Management Cannot Create Systemic Risk

By Peter J. Wallison

*In a September 2013 report, the Office of Financial Research (OFR), a US Treasury agency set up by the Dodd-Frank Act, suggested that the asset management industry could be a future source of systemic risk. OFR's position was based on the assumption that losses in collectively managed funds of various kinds—including mutual funds, hedge funds, and pension funds—could produce a systemic event similar to the mortgage market crash in 2008. If so, that would be a basis for designating investment managers and the funds they manage as systemically important financial institutions (SIFIs). However, OFR missed a vital difference between financial institutions such as banks and entities such as managed funds. Unlike banks, losses in collective funds of various kinds flow through immediately to their investors and thus are spread among and absorbed by millions of investors and trillions of dollars in equity capital. Because of this difference, the chances that an asset manager could trigger a systemic event is vanishingly small. The FSOC should spend its time elsewhere.*

In 2010, as the Dodd-Frank Act was moving toward enactment in Congress, I asked a friend who was a senior officer of a hedge fund why the industry was not alarmed by the act. After all, I pointed out, a hedge fund could be declared by the Financial Stability Oversight Council (FSOC)—a regulatory body established by the act and headed by the Secretary of the Treasury—as a systemically important financial institution (SIFI) and turned over to the Federal Reserve for what the act calls “stringent” regulation. “Well,” he said, “we don’t really think their target is hedge funds.”

My friend and his hedge fund colleagues might seem particularly optimistic, but the fact is that most of the financial industry regarded the Dodd-Frank Act as a problem for banks. It was their fight, and everyone else could afford to watch from the sidelines. Even insurers, which have now been caught up in the toils of the FSOC, seemed largely inert as the act moved through the legislative process. Although AIG was virtually certain to be an FSOC target, most insurers did not consider themselves likely

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candidates for a SIFI designation. Nevertheless, the fact that the larger members of their industry might in effect be declared “too big to fail”—the practical meaning of a SIFI designation—did not seem to stir

### Key points in this *Outlook*:

- A recent Office of Financial Research (OFR) report targets the asset management industry as a potential source of systemic risk.
- This notion is disproved by the 2008 mortgage meltdown; those losses were absorbed by a few financial institutions that carried the assets with debt, causing a financial crisis.
- The collapse of the dot-com bubble in 2000, with perhaps greater losses, did not cause a financial crisis because losses to collective investment funds instead flow through to their investors.
- The chances that asset management firms could cause a systemic event is vanishingly small. The FSOC should abandon this issue.

any concerns among the thousands of property and casualty or life insurers who would be competing with these giants, which could plausibly tell customers that the federal government would not let them fail.

To be sure, there was a slight flurry of concern in the financial industry when the FSOC threatened to tighten regulation on money market mutual funds (MMFs) if the Securities and Exchange Commission (SEC) did not promptly impose more controls on them. But during the financial crisis one such fund had not been able to redeem all its shares at a fixed \$1 per share, a situation known as “breaking the buck,” and the Treasury had found it necessary to create a special insurance fund to stop runs on that and other MMFs. The idea that the FSOC could push aside the SEC, the statutory regulator of MMFs, was something that many in the financial industry had not contemplated. Still, given the fact of the run and the Treasury insurance program, MMFs could be seen as a special case.

But in September 2013, the Office of Financial Research (OFR), an agency in the Treasury Department also established by Dodd-Frank, responding to a request from the FSOC, issued a report entitled *Asset Management and Financial Stability*.<sup>1</sup> This brought most of the financial industry to attention, for several reasons. First, the report was solicited by the FSOC, suggesting that it could be the beginning of an FSOC effort to designate a number of asset managers as SIFIs. Second, the report was strikingly superficial and conclusory, reflecting a limited understanding of the asset management industry and the huge differences among regulated mutual funds, unregulated funds, hedge funds, private equity funds, insurance separate accounts, and others. The OFR was supposed to be the government’s expert adviser on financial industry data, but this paper was not good enough for government work. Finally, the existence of the report forced the financial services industry to recognize that no legal standards stood in the way of whatever the FSOC might want to do. Even though the OFR report was not of good quality, nothing in Dodd-Frank prevented the FSOC from acting on it.

## FSOC’s Authority Threatens the Asset Management Industry

The Dodd-Frank Act gave the FSOC a special gift—the ability to define its own jurisdiction. Although the courts generally frown on this unchecked reach, there has not

yet been a successful legal challenge to the FSOC’s extraordinary authority. When Prudential Financial was designated as a SIFI, it threatened to take the issue to court but, unfortunately, later backed off. Dodd-Frank is almost unique among statutes that confer jurisdictional authority on administrative agencies, and a legal challenge by a financial institution that has been designated as a SIFI has a significant chance of success.

Indeed, it would be correct to say that no standards under the Dodd-Frank Act in any way cabin the FSOC’s discretion. Under section 113 of the act, the FSOC is granted authority to designate any nonbank financial firm as a SIFI “if the Council determines that material financial distress at the U.S. nonbank financial company, or the nature, scope, size, scale, concentration, interconnectedness, or mix of the activities of the U.S. nonbank financial company, could pose a threat to the financial stability of the United States.”

In other words, the FSOC can designate as a SIFI any firm that it, in its sole discretion, decides “could pose a threat to the financial stability of the United States” if the firm were to encounter “financial distress.” These words have no definitive meaning; the FSOC can apply them any way it wants. The references to size, scale, interconnectedness, and so forth are only examples of the factors the FSOC can use to determine if the firm’s financial distress could cause systemic risk; they do not in any way restrict the FSOC’s range of discretion.

And there is one other element. For years, Fed chair Ben Bernanke and other bank regulators have been arguing that something artfully named “shadow banking” should be regulated. They have never been particularly clear about what, exactly, shadow banking is, and there was always a suspicion that what they meant was the securities industry in general.<sup>2</sup> But now we know. If asset management, the heart of the securities business, is considered a source of systemic risk, then the entire securities industry is in jeopardy.

In early January, the Financial Stability Board (FSB), a largely European group of bank regulators, issued a proposal that would subject all asset managers with more than \$100 billion under management to bank-like prudential regulation. The FSB is another group that has been vaguely warning of the dangers of “shadow banking” and has now revealed what it had in mind.

It should be no mystery how this has occurred. It all follows from a false narrative about the causes of the 2008

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financial crisis that was conjured after the crisis, endorsed by the Financial Crisis Inquiry Commission (from which I dissented) and became the widely accepted conventional view of what happened in 2008. This narrative posits that the crisis was caused by insufficient regulation of the financial system and thus could have been prevented by better and more comprehensive regulation. The story fit well with the views of the Obama administration (Remember “never let a good crisis go to waste”?) and the large Democratic majority in Congress after the 2008 election. The result was the enactment of the Dodd-Frank Act, the establishment of the FSOC, and finally the FSOC’s power to designate financial institutions as SIFIs.<sup>3</sup>

A completely different view, well known to readers of the *Financial Services Outlook* series, is that the financial crisis was caused by the US government’s housing policies, which—principally through the affordable housing goals imposed on Fannie and Freddie in 1992—forced reductions in US mortgage underwriting standards. By 2008, 58 percent of all mortgages in the US financial system were subprime or otherwise weak, and 76 percent of these risky mortgages were on the books of US government agencies, principally Fannie and Freddie, showing incontrovertibly where the demand for these mortgages originated. When the housing bubble deflated in 2007 and 2008, these risky mortgages defaulted in unprecedented numbers, driving down housing prices throughout the US, weakening financial institutions that held mortgage-backed securities based on these subprime and other low-quality loans, and setting up the financial crisis.<sup>4</sup>

Almost immediately after the financial crisis, banking regulators worldwide realized that the new narrative about the causes of the crisis provided a basis for extending their authority beyond bank regulation to the regulation and supervision of all large financial firms. The groundwork was laid by referring to nonbank financial institutions as “shadow banks.” If you can imagine banks lurking ominously in dimly lit streets, you have the idea.

The first proposal was broached by an international group of bank and financial policymakers known the Group of 30, who outlined a structure in January 2009 that would regulate all “systemically significant” financial institutions. Interestingly, in light of the recent FSB proposal, they also suggested special prudential regulation of systemically significant private pools of capital.<sup>5</sup> It has taken a while, but that proposal is now formally on the table at the FSB, and potentially the FSOC.

## The OFR Report as a Predicate for FSOC Findings

With this background, the OFR report should be viewed as a serious threat to the asset management industry. All through the report are references to actions by asset managers and the funds they manage that “could pose a threat to the financial stability of the United States.” For example, the report states “a certain combination of fund- and firm-level activities within a large, complex firm . . . could pose, amplify, or transmit a threat to the financial system.”<sup>6</sup> Also, herding (many firms piling into the same assets, bidding up their cost) or reaching for yield (buying risky assets to increase earnings) “could contribute to increases in asset prices, as well as magnify market volatility and distress if the markets, or particular market segments, face a sudden shock.”<sup>7</sup> Obviously, either of these statements from the OFR could provide the predicate for the FSOC to determine that asset managers of various kinds, and the funds they manage, create systemic risk and should be subjected to stringent regulation by the Fed.

It would not provide much solace to the asset management business to look back at the earlier decisions of the FSOC when it designated two insurance-related firms—AIG and Prudential Financial—as SIFIs. The analysis there was shallow and conclusory, relying heavily on assertions of “interconnectedness” that were highly implausible and completely unsupported by data or factual analysis. For example: “While exposures to Prudential may be small relative to the capital of its individual counterparties, aggregate exposures are significant enough that they could amplify the risk of contagion among other financial institutions if Prudential were to experience material financial distress.”<sup>8</sup> What these exposures actually were, what would have to happen to Prudential before it would cause losses to its counterparties, and what counterparty losses the FSOC considered “material” were never quantified. The word “significant” was used 50 times in a 12-page decision. Indeed, these vague and dimensionless statements sound very much like the OFR’s analysis of the asset management industry.

The Prudential decision was not unanimous. No federal regulatory agency supervises insurance companies, so no insurance regulatory agency is a member of the FSOC. Instead, the Dodd-Frank Act specifies that one FSOC member should be an “independent member having insurance expertise.” That person is currently S. Roy Woodall, one of the three dissenters from the decision to designate

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Prudential as a SIFI. The fact that Woodall was the only member of the FSOC who had any significant insurance expertise gives his stinging dissent special importance. “Key aspects of [the Council’s] analysis,” Woodall stated, “are not supported by the record or actual experience; and, therefore, are not persuasive. The underlying analysis utilizes scenarios that are antithetical to a fundamental and seasoned understanding of the business of insurance, the insurance regulatory environment, and the state insurance company resolution and guaranty fund systems. . . . [T]he analysis makes it impossible for me to concur because the grounds for the Final Determination are simply not reasonable or defensible.”<sup>9</sup>

Indeed, although a major factor in the FSOC’s Prudential analysis, the whole notion that interconnections among financial institutions was a cause of the financial crisis, or is likely to be a cause of another, is a canard. The underlying concept in interconnectedness is that the distress of one large financial institution could bring down others. Yet, the failure of Lehman Brothers, a \$650 billion firm, did not cause any other large financial institution to fail, even though Lehman’s bankruptcy came at a time when the solvency and stability of many other firms were in doubt. In the panic that followed, as I have noted, the Reserve Primary Fund, an institution-only high-risk MMF, suffered a run and broke the buck, but even so its shareholders’ losses were less than 2 percent. Although a large player in the credit default swap market and a firm on which much credit default swap protection had been written, Lehman’s failure caused no participant in the credit default swap market fail.

A severe panic followed Lehman’s bankruptcy because of what might be described as a common shock (also sometimes called “contagion”)—a fear in the market that many other firms had the same assets as Lehman and as a result would suffer the same fate. Common shock, although a good description of what happened in the markets after the Lehman bankruptcy, was not considered by the FSOC in designating Prudential as a SIFI, probably because it does not involve or require interconnections.

The SEC posted the OFR’s report, some say out of pique that another agency would tread on its turf, and much of the commentary on the report has been addressed to that agency. Many of the responses of the asset management industry have been disappointing, failing to address the reasons that the FSOC could designate the larger asset man-

agers as SIFIs. The OFR’s report was clear; it is concerned that, in managing the funds under their control, asset managers could create systemic risk—conditions for a systemic meltdown similar to what happened in the financial crisis.

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This is what gives the FSOC jurisdiction to designate an asset manager as a SIFI. For example, the agency expressed concern about “the key factors that make the industry vulnerable to shocks.” It then listed three: “(1) ‘reaching for yield’ and herding behaviors; (2) redemption risk in collective investment vehicles; [and] (3) leverage, which can amplify asset price movements and increase the potential for fire sales.”<sup>10</sup> These are concerns about the possibility not that asset managers themselves might be SIFIs but that asset managers might create systemic risk through the investment decisions they make for the funds they manage.

The OFR’s theory seems to be that, as a result of competitive pressures to produce high returns and despite the restrictions in investment mandates, a large asset manager might acquire substantial amounts of risky equity or debt securities for the funds it manages. This could occur, according to OFR, by “reaching for yield” or by herding behavior. Then, in the event of a market shock or downturn, these high-risk assets could lose substantial value in much the way that mortgages and mortgage-backed securities (MBS) lost value in 2007 and 2008.

In the OFR’s view, activities like this create the possibility of a systemic event, especially in the case of a market downturn: “Any collective investment vehicle offering unrestricted redemption rights could face the risk of large redemption requests in a stressed market if investors believe that they will gain an economic advantage by being the first to redeem. . . . Runs on . . . short-term funds can be self-reinforcing, as investor redemptions further drive down prices, returns, and liquid assets in the fund—spurring more redemptions.”<sup>11</sup>

Another scenario in the OFR report covers the effects of herding: “There are other possible scenarios in which redemption risk could amplify financial or economic shocks. If a number of funds were invested in similar or correlated assets, market events affecting that strategy or set of assets may affect and cause heavier redemptions in a number of funds, and sales of assets from any of those funds could create contagion effects on the related funds, spreading and amplifying the shock and its market impacts.”<sup>12</sup>

Despite this language, many of the asset management industry's responses have focused on the fact that asset managers are agents with very little capital and few interconnections with other firms. The failure of an asset management firm, the argument runs, could not cause the systemic event that the OFR fears. But these arguments may miss the point. By referring to herding and reaching for yield, the OFR is clearly concerned that asset managers will put the funds they manage into risky assets and that these assets will decline in value, causing the same kind of systemic crisis that occurred when mortgages lost their value in 2007 and 2008. If the FSOC chooses to believe that this is a plausible scenario, the larger asset managers in the industry are in jeopardy of being designated SIFIs and subjected to the stringent regulation Dodd-Frank requires the Fed to impose.

If asset managers want to avoid this outcome, they must demonstrate to the FSOC that their management activity is not a source of systemic risk. Few of them seem to have understood that this is the challenge they face. Many argue that they operate under agreements with clients that establish the baselines for how their assets will be managed. This is certainly true, but there is ordinarily enough flexibility in client mandates so that asset managers are held responsible for low returns. In seeking to keep asset management business, it is certainly plausible for the FSOC to believe that an asset manager might reach for yield. Accordingly, while there is some truth in it, this defense is unlikely to be persuasive with the FSOC. In addition, asset managers certainly emphasize investments in areas of the economy that seem to be growing; this could be characterized as herding behavior, and undoubtedly the FSOC will see it that way.

What most asset managers have failed to do thus far, then, is to show that the *outcome* of these behaviors—even if they occur—does not and indeed cannot result in a systemic event, distinguishing the nature of their activities from those by banks and other financial institutions that gave rise to the financial crisis. As I will show, this is entirely possible.

## The Vital Difference between the Debt and the Equity Contract

In his recent book, *The Map and the Territory*, Alan Greenspan asks, “Why did the bursting of the housing bubble set off an avalanche of financial failures when the deflation of the dot-com bubble in 2000 left so mild an imprint on the financial system and on the macroeconomy?”<sup>13</sup> He answers that question by noting that “debt matters” and adding, “There can be little doubt that

escalating defaults of securitized subprime mortgages were the trigger of the recent financial crisis. . . . In contrast, on the eve of the dot.com stock market crash of 2000, highly leveraged institutions held a relatively small share of equities, and an especially small share of technology stocks, the toxic asset of that bubble.”<sup>14</sup>

This is an exceedingly important point that OFR missed entirely, and even the asset management industry may thus far have failed to use it effectively. According to one account, relying on the Fed's flow of funds data, the losses in the dot-com collapse and the financial crisis were roughly the same: “The value of corporate equities owned by households went from \$9 trillion in 1999 to \$4.1 trillion in the third quarter of 2002. The value of household real estate dropped from \$22.7 trillion in 2006 to \$17.1 trillion by 2009.”<sup>15</sup> Using different tables in the Fed's flow of funds data and a different time frame, a group of economists concluded that the total losses in the dot-com bubble's collapse were \$10 trillion, while the losses in the financial crisis were only \$3 trillion through the third quarter of 2008.<sup>16</sup> The specific numbers are not important. Both raise the same question: How could the dot-com bubble's collapse have caused only a mild recession while equivalent or even smaller losses in the mortgage meltdown threatened a global financial breakdown?

The answer lies in the fundamental difference in the way declining assets in each case were supported. In the dot-com bubble, the declining assets, to the extent they were held in collective investment funds of various kinds, were supported by contractual arrangements that required asset managers, upon a redemption request, to return to clients only the value of their beneficial interest at the time of the redemption. One way of expressing this, although somewhat opaque, is that the assets in a collective investment fund are supported by equity—the client's equity interest in the collective fund.

In the financial crisis, in contrast, as Greenspan suggested, the declining assets were supported by debt. The debt contract is fundamentally different from the equity contract. It requires the holder of the declining assets to return the principal amount of the loan at the time specified in the debt contract, regardless of the value of the assets at that time. This difference explains both why the dot-com collapse was so different from the 2008 financial crisis and why asset-management arrangements in general do not create systemic risk.

The 2008 financial crisis was caused by a precipitous decline in the value of assets—mortgages and MBS—that were supported by borrowed funds at two levels. First, at the

homeowner level; as described earlier, mortgage underwriting standards had been degraded by US government housing policies, principally the affordable housing goals that were first imposed on Fannie Mae and Freddie Mac in 1992. These policies, together with a sharp increase in the number of home buyers, caused the largest housing bubble in US history, and when that bubble began to deflate in 2007 housing prices throughout the United States declined as much as 30–40 percent. Unprecedented numbers of homeowners defaulted, driving down the values of the MBS backed by these mortgages.

In turn, the financial institutions that held MBS backed by subprime and other low-quality loans could not sell these securities for anything close to the value of the loans they had used to acquire and carry them; the resulting decline in the net assets of these firms sharply reduced their capital, making them appear insolvent or unstable. The losses to the financial institutions that held MBS were also magnified by “common shock,” discussed earlier. Accordingly, even healthy firms suffered severe losses if they were required to sell assets at a loss to meet the requests for cash by depositors and short-term creditors. In the panic immediately after the failure of Lehman Brothers in September 2008, banks and others—to be sure that they had the funds to meet these requests—hoarded cash and refused to lend to one another, even overnight. This phenomenon distinguished the 2008 financial crisis from others in the past.

Thus, although the aggregate losses in 2007 and 2008 may have been the same as or even smaller than the losses in the 2000 dot-com collapse, a financial crisis resulted because the mortgage assets that lost their value were carried with borrowed funds in highly leveraged financial institutions. Because of the nature of the debt contract, the 2008 mortgage losses concentrated the mortgage and MBS losses at the financial institution level, where they were borne by a relative few large banks and other financial firms, creating a financial crisis.

To further illustrate the difference between the debt contract and the equity contract, imagine how the outcome might have been different if the mortgage assets that declined so precipitously in 2007 and 2008 had been held in collective investment funds of various kinds. Because the asset management contract requires the manager to return to its clients only the value of the assets at the time of the request, if MBS value had fallen to distress levels—as it had for many issues of MBS—asset managers would have returned substantially reduced values to fund investors. Accordingly, while the fund would have suffered losses initially, the investors would have borne the losses. This might

have caused a recession—even a severe one as the wealth effect worked in reverse—but it would not have caused a financial crisis in which financial institutions hoarded funds for fear of panicked withdrawals by depositors and creditors. In addition, while the phenomenon of common shock or contagion could still occur—that is, as the OFR has suggested, if one fund suffers severe losses, investors could rush to redeem their beneficial interests in other funds in the hope of gaining a first-mover advantage—the losses from this activity, too, would fall ultimately on the other investors in those funds, not on the funds themselves.

The effect in all cases, then, would have been to spread the losses widely through the economy, where they would be absorbed by millions of investors, and not relatively few large and leveraged financial institutions, as occurred in the 2008 financial crisis. Indeed, the OFR estimates that the total principal amount of assets under management is \$54 trillion, far more than enough capital to absorb the blow of any conceivable downturn in asset values. That is why, as Greenspan and many others have noticed, the substantial declines in asset values in the dot-com collapse generated only a mild recession, while losses in the 2008 financial crisis, which were no greater than those in 2000 (and may have been less), caused what many have called a worldwide financial crisis.

## OFR’s Error

The OFR report appears to assume that a sharp break in the value of the assets generally held in collective investment funds of various kinds—usually corporate equity and debt securities—could produce common shock and failures among collective investment funds that would be similar to the effect of the 2007–08 mortgage meltdown on banks and other financial institutions. If so, the OFR has made a serious conceptual error. As I have outlined, it was not the decline in value of a particular asset—mortgages—that caused the 2008 financial crisis; it was the fact that these assets were carried with borrowed funds in relatively few highly leveraged financial institutions.

That there was no discernible systemic effect from the 2000 crash, but a striking systemic effect in 2008, shows a major difference in outcomes when assets are funded with client equity—as is true with virtually all collective investment funds managed by asset managers—and when the same assets are funded by debt. In the latter case, systemic effects are possible; in the former, they are not.

The same result occurs even if the manager of a collective fund of some kind uses leverage to increase returns to

clients. The OFR also gets this wrong: “The recent crisis . . . illustrated that leverage, particularly short-term leverage, can subject borrowers to margin calls and liquidity constraints that increase the risk of fire sales. In addition to borrowing, asset managers obtain leverage for their funds and accounts through derivatives (futures, options, and swaps), securities lending and repurchase agreements.”<sup>17</sup> This statement is partially correct but misses the essential fact that, in effect, the “borrowers” in collective investment funds are the investors in the funds and not the funds themselves; after all, it is the clients in collective funds who ultimately reap the gains and suffer the losses associated with their investments. It is certainly true that when asset managers use leverage to increase returns this can also increase the size of fund losses if asset values decline sharply, but the losses, although initially absorbed by the funds, actually fall on the fund investors. And this means, as I have noted, that the losses are spread widely through the economy and financial system and not concentrated in the relatively few collective investment funds that were holding the assets.

As a result, it seems clear that if the FSOC is truly looking to control sources of systemic risk in the financial system, it should abandon any further investigation of the asset management business. The chance that the asset management industry could be a source of systemic risk or a systemic event is vanishingly small.

## Conclusion

The largest firms in the asset management business have a powerful case that they do not—indeed, cannot—create systemic risk. Unfortunately, however, even if the asset management industry makes the case outlined in this *Outlook*, there can be no assurance that the FSOC will not conclude that some of the larger asset managers could, through their activities, “cause a threat to the financial stability of the United States.” Moreover, as the FSB proposal suggests, we may be dealing with an effort to extend bank-like regulation to the securities industry, rather than simply an effort to prevent systemic risk.

This decision is completely discretionary under the Dodd-Frank Act, and as its Prudential decision shows, the FSOC has the authority to come to this conclusion with no credible evidence. Given the reluctance of regulated firms to attack regulatory actions through litigation, the only recourse may be to change the powers of the FSOC through legislation, which will become possible only after the 2016 presidential election.

## Notes

1. Office of Financial Research, *Asset Management and Financial Stability*, September 2013, [www.treasury.gov/initiatives/ofr/research/Documents/OFR\\_AMFS\\_FINAL.pdf](http://www.treasury.gov/initiatives/ofr/research/Documents/OFR_AMFS_FINAL.pdf).

2. See Peter J. Wallison, “Does Shadow Banking Require Regulation?” *AEI Financial Services Outlook* (May–June 2012), [www.aei.org/outlook/economics/financial-services/banking/does-shadow-banking-require-regulation/](http://www.aei.org/outlook/economics/financial-services/banking/does-shadow-banking-require-regulation/).

3. See Peter J. Wallison, *Bad History, Worse Policy: How a False Narrative about the Financial Crisis Led to the Dodd-Frank Act* (Washington, DC: AEI Press, 2013).

4. A complete summary of this argument is contained in Peter J. Wallison, “The Case for Repealing Dodd-Frank,” *Imprimis* 42, no. 11 (November 2013), [www.aei.org/speech/economics/financial-services/banking/the-case-for-repealing-dodd-frank/](http://www.aei.org/speech/economics/financial-services/banking/the-case-for-repealing-dodd-frank/).

5. Peter J. Wallison, “Regulation without Reason: The Group of 30 Report,” *AEI Financial Services Outlook* (January 2009), [www.aei.org/outlook/economics/financial-services/regulation-without-reason/](http://www.aei.org/outlook/economics/financial-services/regulation-without-reason/).

6. OFR, *Asset Management and Financial Stability*, 7.

7. *Ibid.*, 9.

8. Financial Stability Oversight Council, “Basis for the Financial Stability Oversight Council’s Final Determination Regarding Prudential Financial, Inc.,” September 19, 2013, 2, [www.treasury.gov/initiatives/fsoc/designations/Documents/Prudential%20Financial%20Inc.pdf](http://www.treasury.gov/initiatives/fsoc/designations/Documents/Prudential%20Financial%20Inc.pdf).

9. The Woodall dissent can be found starting on page 12 of this document: [www.treasury.gov/initiatives/fsoc/council-meetings/Documents/September%2019%202013%20Notational%20Vote.pdf](http://www.treasury.gov/initiatives/fsoc/council-meetings/Documents/September%2019%202013%20Notational%20Vote.pdf). For some reason, it was not published by the FSOC with the official basis for the decision.

10. OFR, *Asset Management and Financial Stability*, 2.

11. *Ibid.*, 13.

12. *Ibid.*, 15.

13. Alan Greenspan, *The Map and the Territory: Risk, Human Nature, and the Future of Forecasting* (New York: Penguin, 2013), 49.

14. *Ibid.*, 49, 50.

15. Tim Taylor, “Why Didn’t Dot-Com Crash Hurt Like Housing Crash Did?” *Conversable Economist*, October 6, 2011, <http://conversableeconomist.blogspot.com/2011/10/why-didnt-dot-com-crash-hurt-like.html>.

16. Steven Gjerstad and Vernon L. Smith, “Monetary Policy, Credit Extension, and Housing Bubbles: 2008 and 1929,” *Critical Review* 21, no. 2–3 (2009): 269–300, [www.chapman.edu/research-and-institutions/economic-science-institute/\\_files/vernon-personal/the-crisis-in-perspective.pdf](http://www.chapman.edu/research-and-institutions/economic-science-institute/_files/vernon-personal/the-crisis-in-perspective.pdf).

17. OFR, *Asset Management and Financial Stability*, 17.