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November 5, 2013

Securities and Exchange Commission  
100 F St. NW  
Washington, DC 20549-9303  
[Rule-comments@sec.gov](mailto:Rule-comments@sec.gov)

Re: Comments on OFR Study

Dear Securities and Exchange Commission:

Here are my comments on the Office of Financial Research (“OFR”) study on *Asset Management and Financial Stability*.<sup>2</sup> First, I would like to commend the SEC for soliciting comments, while the OFR itself did not. Soliciting comments on all major staff studies is a good idea. I suggest that the SEC continue this practice not only for OFR studies, but for all future major SEC studies as well.

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<sup>1</sup> I am also on the boards of directors of the EDGA and EDGX stock exchanges. My comments are strictly my own and don’t necessarily represent those of Georgetown University, the University of Pennsylvania, EDGX, EDGA, or anyone else for that matter.

<sup>2</sup> [http://www.treasury.gov/initiatives/ofr/research/Documents/OFR\\_AMFS\\_FINAL.pdf](http://www.treasury.gov/initiatives/ofr/research/Documents/OFR_AMFS_FINAL.pdf)

## **Background**

OFR was created as part of Dodd-Frank to provide the U.S. government with more analytical horsepower to analyze the financial system and provide information useful for the formation of public policy. OFR's job is to analyze threats to the financial system, provide useful warnings of credible threats, and analyze potential responses to those threats. The OFR was requested by FSOC to examine the asset management industry to inform the FSOC's decision of whether to impose additional prudential regulation by the Fed on some asset managers under §113 of Dodd Frank.

It should be noted that "prudential" regulation generally refers to regulation to promote the safety and soundness of a particular financial firm. For example, much bank regulation is prudential regulation designed to promote the stability of banks through capital requirements and other regulations.

The really important question at hand is "Under what conditions will additional regulation by the Fed of certain asset management firms remove threats to the financial stability of the United States?" This is a tricky question as nonbank financial institutions are regulated by other specialist agencies such as the SEC, CFTC, state insurance commissions, and more. Under what circumstances will the Fed be able to do a better job of prudential regulation of these entities than the specialist agencies that regulate them?

The intent of section 113 of Dodd Frank is for the Fed to regulate massive nonbank financial firms whose failure would seriously affect the economy. This is a direct response to the financial distress at AIG which precipitated massive government intervention to prevent the firm from failing, as well as the failures of Bear Stearns and Lehman Brothers.

It is just as important for OFR to identify areas that do not threaten the financial stability of the United States as it is to identify those that do. Our regulators need to focus their limited resources on the most important areas. It is thus important for such a study to identify the sections of the asset management industry that present no threat as well as to identify firms and practices that do represent a threat. Unfortunately, this study does little to assist regulators in making such a distinction.

### **The study is incomplete.**

As one who studies and teaches about regulation and financial crises, I was looking forward to a serious analysis that would provide objective and sound criteria for making a section 113 designation.<sup>3</sup> Alas, I was disappointed in the result. The study provides a brief overview of the asset management industry, comparable to a chapter in an introductory textbook, along with a generic list of things that could go wrong. Indeed, the 34 page document uses the word "could" 66 times, the word "can" 72 times, and the word "may" 72 times.

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<sup>3</sup> Courses I have taught at Georgetown have included "Regulation in Financial Markets" and "Financial Crises: Past, Present, and Future."

However, there is no attempt to assess the likelihood of these different things that could, can, or may go wrong, or to provide a careful quantitative analysis to guide policy. How big or risky does an asset manager have to be to warrant Fed regulation compliments of the FSOC? And does it matter what kind of assets are being managed? Indeed an asteroid could wipe out the planet and thus threaten the financial stability of the United States, but how likely is that? Does that imply that the Fed should regulate NASA to make sure it can find and deflect dangerous asteroids?

The study appears to be rather hasty and incomplete. For example, the study admits that there is double counting in its estimates of the size of the asset management industry, but makes no attempt to correct for the over counting. The study grabs numbers from *Pensions and Investment Age* when more precise numbers are available from other sources such as the SEC's database of investment managers.

It is a standard practice in corporate risk management to identify the severity of potential risks, and the risk appetite of the organization. This study contains no characterizations of the severity of the numerous threats mentioned. Such an assessment of the most important threats would make this a more useful study.

### **The study fails to distinguish between investor characteristics and asset management.**

The study points to a number of investor characteristics that could contribute to the next financial crisis, such as reaching for yield, herding, and the use of leverage. These are characteristics of investors, and would exist even if there were no asset management firms acting on their behalf. The herd-like behavior of investors can certainly lead to problems. For example, the real estate boom of the early 2000s was clearly a herd-like activity in which millions of individual home buyers used high degrees of leverage to purchase houses they could not afford. Many of the great asset bubbles and busts in history, such as Dutch Tulipmania, occurred long before there was a professional asset management industry. I am aware of no evidence that shows that professional asset managers are any more prone to destabilizing herding behavior than individual investors themselves.

Although the study states that asset management firms could transmit or even amplify such shocks, it gives little detail on how and under what conditions this could occur, or what should be done about it. Prudential regulation is designed for protecting the solvency of firms. Such regulation by the Fed would probably do little to keep a herd of solvent firms from stampeding.

### **Contagion will occur even without asset managers.**

One of the hallmarks of a financial crisis is a sudden loss of confidence in certain financial institutions and financial assets. When troubles affect one financial institution, common sense implies that the economic conditions that impacted one institution may also impact similar institutions. There are numerous examples in financial history of individuals acting as a herd for fear of contagion. A classic example is the run on the commercial paper market in the wake of the Penn Central bankruptcy in 1970. Penn Central was one of the largest railroads in the country and its commercial paper had been rated prime just weeks before its bankruptcy. The ensuing loss of faith in the credit rating industry led to a

selloff in commercial paper, and the Fed intervened in in order to prevent further damage to the economy. Note that this occurred several years before money market mutual funds were invented. When the next financial crisis hits short-term funding markets, there will be a similar flight to quality whether or not assets are professionally managed. (And we know that there will eventually be another one, we just don't know when.)

### **The study ignores technology disasters.**

Financial markets have recently been affected by several major technology glitches, and it is quite surprising that this study does not pay more attention to the possible havoc that could be raised by technology failures. A software error (or intentional hacking) in the trading system of a major asset manager could inflict crippling losses not only on the firm itself and its investors but potentially on the entire economy. Supposed a terrorist commandeered the trading software of a major financial firm, and used it to unleash a flood of sale orders in U.S. Treasuries at a volatile time, triggering an overall market crash in Treasury prices. As Treasuries are traded over-the-counter and not on exchanges, the usual exchange-based circuit breakers and market protections would not apply and havoc could result. The disruptions in the Treasury bond market could upset the ability of the U.S. government to fund its operations and lead to further financial instability.

However, it is not clear that prudential Fed supervision under section 113 would do any more than existing regulators such as the SEC to prevent such a disaster.

### **A major scrambling of the books and records of a large asset manager could cripple the economy.**

Most financial assets are now held in electronic form, and for good reason. Electronic records reduce the risk of the loss of physical securities, and also reduce the cost of trading and storing securities. However, the entire economy rests upon accurate records of ownership. If these records become compromised, then the entire economy would come to a halt. Counterparty risk would skyrocket, as no one would know who was solvent and who was not.

Although all asset management firms assert that they have appropriate safeguards and backups, the possibility does exist for a big mess to occur. A slow-acting and stealthy sabotage or embezzlement action could simultaneously compromise a firm's records and its backups simultaneously in a way that would be hard to untangle. Again, it is not clear that additional prudential Fed supervision would decrease the potential damage that could occur. The Fed is primarily a prudential regulator, not a technology regulator.

### **The study totally mischaracterizes the Flash Crash.**

Footnote 17 states:

“The Flash Crash on May 6, 2010 demonstrated the role ETFs can play in transmitting price dislocations in a distressed market. During that event, two-thirds of the 21,000 trades cancelled were trades in exchange-traded products. A joint SEC-CFTC report noted that “many of the securities experiencing the most severe price dislocations on May 6 were equity-based ETFs.” The report also noted the liquidity mismatch between ETFs and the underlying securities: “Sell pressure that overwhelms immediately-available near-inside liquidity is less likely to be ‘caught’ by resting orders farther from the mid-quote in an ETF versus an individual stock.” SEC-CFTC (2010).”

The ETFs were the victims of the Flash Crash rather than transmitters of it. There were four major waves of the Flash Crash.

1. The Trigger. During a time of high volatility and low liquidity, the S&P500 E-Mini contract plunged in value due to a wave of sell orders. The official SEC-CFTC Report blamed the plunge in the futures on a large sell order from a large mutual fund complex. It is telling sign of the incompleteness of the OFR study that it didn't even mention such a flash-crash initiation in its list of bad things that could happen. However, whether a large trade from a mutual fund complex really did provide the spark that set off the Flash Crash is in dispute and the exact nature of the triggering events is still controversial.<sup>4</sup>
2. The Transmittal. Normal arbitrage activity between the E-mini and other instruments such as cash equities and related ETFs transmitted the price shock to those instruments.
3. The Meltdown. High rates of message traffic led to delayed and corrupted data feeds, leading many liquidity providing participants in the cash equity and ETF markets to withdraw due to “data integrity” concerns. This is documented in the SEC-CFTC Report around page 35.
4. The Mess. The withdrawal of electronic liquidity providers caused massive volatility to affect many cash equities as well as ETFs. Without liquidity providers who normally buy low and sell high, marketable orders executed against any quotes remaining in the market, including “stub” bid of \$.01 or offers of \$100,000. Accenture traded as low as one penny and Sotheby's as high as \$100,000. As ETFs are particularly dependent on electronic liquidity providers, they were hit particularly hard by their withdrawal. ETFs certainly did not spark the Flash Crash, or even transmit it to other asset classes, but were hit by the fallout when the Flash Crash knocked the stabilizing liquidity providers off line.

### **The study neglects ETF rebalancing.**

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<sup>4</sup> See *Findings Regarding the Market Events of May 6, 2010: Report of the Staffs of the CFTC and SEC to the Joint Advisory Committee on Emerging Regulatory Issues* <http://www.sec.gov/news/studies/2010/marketevents-report.pdf>. (“SEC-CFTC Report”). For an opposing view, see Menkveld and Yueshen, *Anatomy of the Flash Crash* [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2243520](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2243520) and [http://www.nanex.net/FlashCrashFinal/FlashCrashAnalysis\\_Theory.html](http://www.nanex.net/FlashCrashFinal/FlashCrashAnalysis_Theory.html).

Speaking of ETFs, it was surprising that the study did not pay more attention to the rebalancing of leveraged ETFs. In particular, it turns out that when the market moves, a leveraged ETF and an inverse leveraged ETF both have to trade in the same direction, amplifying the potential market impact of ETF activity, especially around a large and sudden movement in prices. The neglect of this topic is another example of the incomplete nature of the study.

**The study provides little insight for making Section 113 designation.**

I was hoping that the study would provide some insights or selection criteria for imposing prudential regulation by the Fed on such companies on top of their existing regulation.

Dodd Frank Section 113 provides for Fed regulation of nonbank financial companies if the FSOC “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.”

The text of §113 enumerates a number of specific criteria that FSOC has to consider. These are

- (A) the extent of the leverage of the company;*
- (B) the extent and nature of the off-balance-sheet exposures of the company;*
- (C) the extent and nature of the transactions and relationships of the company with other significant nonbank financial companies and significant bank holding companies;*
- (D) the importance of the company as a source of credit for households, businesses, and State and local governments and as a source of liquidity for the United States financial system;*
- (E) the importance of the company as a source of credit for low-income, minority, or underserved communities, and the impact that the failure of such company would have on the availability of credit in such communities;*
- (F) the extent to which assets are managed rather than owned by the company, and the extent to which ownership of assets under management is diffuse;*
- (G) the nature, scope, size, scale, concentration, interconnectedness, and mix of the activities of the company;*
- (H) the degree to which the company is already regulated by 1 or more primary financial regulatory agencies;*
- (I) the amount and nature of the financial assets of the company;*
- (J) the amount and types of the liabilities of the company, including the degree of reliance on short-term funding; and*

*(K) any other risk-related factors that the Council deems appropriate.*

A more useful study would have examined the industry among these dimensions. Here is a quick snapshot of how the industry stacks up on these criteria:

Clearly, most of the assets in the industry are in long-only mutual and pension funds, so leverage (criteria A) is not an issue for the industry as a whole. Although hedge funds do use leverage, the study explicitly does not address hedge funds.<sup>5</sup> The study does note that investment companies are permitted to use some leverage, but this amount is limited to amounts that are far less than leverage levels permitted to banks. However, there is no indication or analysis of the degree of leverage or its relevance for threats to the financial stability of the United States.

Similarly, the bulk of the assets are not engaged in off-balance-sheet shenanigans (criteria B). The study does note that some fixed-income funds sell CDS protection, but this is usually a legitimate investment activity by bond managers to gain exposure to some bonds: Owning cash or a Treasury bond and selling a CDS on a corporate bond creates a payoff equivalent to owning a corporate bond. Owning such a “synthetic” bond can sometimes be a better deal than owning the bond itself if the premium for selling the CDS protection is high enough. A good bond manager monitors both the yields on the actual bonds and compares them with the yields on the synthetic bonds and acts accordingly. The fact that these unleveraged funds are net sellers of protection provides a source of protection for other important participants in the financial system, such as highly leveraged banks. This activity actually increases the stability of the financial system and should not be used as a pretext for imposing regulation under §113.

As far as activity with other important financial institutions (criteria C), clearly asset managers interact with large investment banks and commercial banks on a daily basis. Yet it is difficult to see how the failure of a particular asset manager would threaten the financial stability of the US. If Blackrock fails, it is unlikely that the investors in the ETFs that it manages will stop trading those ETFs. The only thing likely to happen is that the ETF franchises get sold to other asset managers in the liquidation.

Professionally managed assets are important sources of funding for corporations and governments (criteria D and E). However, the failure of a particular fund management company, even the largest one, Blackrock, will not systemically jeopardize such funding.

As asset management companies manage, but not own assets, criteria (F) illustrates that this indirect management creates a fire-break that reduces the transmission of risk. Once again, if the fund management company dies, the customer’s assets don’t die and are easily transferred to other management firms. This is very different from the case of a highly leveraged bank, in which the failure of the bank often leads to a fire sale of the bad assets.

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<sup>5</sup> The study states on page 2: “In addition, the activities and risks posed by hedge funds, private equity, and other private funds are not addressed in detail.”

The study does point out that customers may move their assets out of a troubled firm to avoid complications in the event of a failure. However, just moving the assets will not likely create a massive wave of selling, just a transfer.

Criteria (G), the nature, scope, size, scale, concentration, interconnectedness, and mix of the activities of the company, is quite broad. Note that it refers to the company itself and not the entire industry. With respect to asset management, the issue is whether a particular asset manager is so big, so interconnected, or doing so many complicated things that it poses a threat to the financial stability of the United States. This clearly applies to large complex interconnected firms such as AIG that just happen to manage assets along with all of their other activities. It would also apply to the large Wall Street investment banks, but they are already regulated by the Fed. Most asset managers are not firms whose failure would create a domino effect bringing down the financial system, and the study should have stated this.

Investment companies and investment advisers are already regulated (criteria H) by the SEC. It is not clear at all that additional regulation by the Fed would reduce any threat that they pose, if any, to the financial stability of the United States.

Asset management firms clearly (criteria I) hold large amounts of financial assets. But is there a cutoff point that makes an asset management firm so risky that the country is better off imposing another level of regulation on it? Mere size alone does not create risk. The largest mutual funds in the United States are mostly index funds that merely buy and hold assets. Their low turnover is a stabilizing force in markets. The fact that investors may redeem assets in a time of stress does not mean that any impact of such customer behavior will be reduced through an additional layer of regulation.

Reliance on short-term funding (criteria J) is not important for most of the asset management firms in the study as they are long only, and the study does not address hedge funds.

Thus, in looking at the statutory criteria, it is pretty clear that most asset managers do not present any threat to the financial stability of the United States, and the study does little to help identify any such firms that might.

### **Obvious ex-post SIFIs can provide some insight.**

So what should the criteria look like for §113 designation? Let's proceed by induction. With 20-20 hindsight, it is fairly easy to identify large non-Fed regulated financial institutions whose financial distress threatened the financial stability of the United States and led Congress to enact §113.

*Fannie Mae and Freddie Mac.* These highly leveraged government sponsored entities engaged in four lines of business:

1. Savings and Loan. Fannie and Freddie acted like Savings and Loans by buying and holding mortgages.

2. Mortgage guarantees. The mortgage guaranty business is mostly systemic risk insurance. In good times, losses are predictable and manageable, but in a financial downturn losses become extremely large.
3. Paper shuffling. Fannie and Freddie repackaged mortgages into mortgage backed securities that were sold to investors.
4. Hedge fund. Fannie and Freddie used their cheap borrowing costs to purchase securities. Their implicit government guarantee allowed them to borrow money cheaply, which allowed them to pour gasoline on the housing bubble by buying tens of billions of dollars of subprime-backed paper.

Fannie's and Freddie's regulator, OFHEO, permitted them to operate with far less capital than commercial banks. The resulting high levels of leverage magnified returns in good times, but led to perilous losses when the housing bubble burst.

Fannie and Freddie are clearly systemically important financial institutions which should be closely supervised. They have extreme leverage, are very large in size, and have a very large market share in an important sector of the economy. If Fannie and Freddie had stopped buying and guaranteeing mortgages, the Great Recession would have been Great Depression 2.0 as there was little private supply of mortgage financing at the time.

Congress has not yet decided their fate. There is no particular reason why a government-backed entity needs to be in the S&L, paper shuffling, or hedge fund businesses. Those businesses should be wound down and turned over to the private sector. However, the private sector cannot credibly offer systemic risk insurance. A government-backed mortgage guarantee program will help to moderate business cycles by promoting a steady supply of mortgage finance throughout the business cycle. Experience has shown that without such guarantees mortgage financing is extremely pro-cyclical.

*AIG.* AIG experienced large losses in its issuance of credit default swaps (CDS), along with investment losses it incurred by investing the cash collateral from its securities lending program in illiquid and toxic mortgage-backed securities. AIG is extremely large, and has high leverage as indicated by its assets to total equity ratio. A default by AIG on its CDS would have threatened the financial solvency of many other important financial firms.

*Lehman Brothers and Bear Stearns.* These investment banks failed due to serious losses on their holdings of mortgage-backed securities along with excessive leverage and reliance on short-term funding. Although the holding companies of these investment banks owned SEC-regulated broker-dealers, a gap in regulation left the parent companies unregulated. The SEC had a voluntary "consolidated supervised entity" program that provided a veneer of regulation, but nothing as comprehensive as the Fed applies to large bank holding companies.<sup>6</sup> Subsequent to the failures of Bear and Lehman, the remaining investment banks became bank holding companies under Fed supervision.

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<sup>6</sup> See <http://www.sec.gov/news/press/2008/2008-230.htm>.

*Long-Term Capital Management (LTCM)*. LTCM was a very large hedge fund that used leverage to engage in a number of investment strategies. When the fund ran into trouble, there was a concern that a sudden unwinding of its positions would wreak havoc in the market for U.S. Treasury securities. Furthermore, the large number of partially offsetting derivative transactions made it difficult, as in the case of Lehman Brothers, to determine the net positions of the firm and its counterparties. Dodd-Frank now adds more supervision of hedge funds along with more central clearing for swaps, addressing some of the issues raised by LTCM.

We thus see two common characteristics: Leverage so high as to cause extreme risk levels, and the fact that their failures threatened the solvency and operations of other firms. Short-term funding in some cases exacerbated the leverage problem and provided the spark for the final collapse. The implication is that the FSOC should focus on large leveraged entities whose failure would impact other firms. These conditions do not exist for the bulk of the firms in the asset management industry that are the focus of this study. The study should say so, and provide objective criteria for identifying those firms, if any, that present a threat to the financial stability of the United States.

**The study makes mistakes showing a lack of understanding of key institutional details.**

The study contains mistakes that show a lack of understanding of some key institutional details, as illustrated by the previous mischaracterization of the Flash Crash. Another example occurs on page 15, with respect to the management of cash collateral by securities lenders. “Most agent lenders also provide indemnity for any borrower default by paying the lender for any collateral deficiency.” This statement is false. The exact opposite is true. I have reviewed many securities lending agreements. In general, the agreements specifically provide that the security owners bear the risk of default and the risk of a collateral deficiency. Providing an indemnity against any and all defaults would create severe accounting and capital considerations for the agent lender. In the securities lending agreements, the agent lenders generally indemnify only for losses due to the agent lenders’ negligence. When there is a loss, the security owners may allege negligence in the management of the portfolio, such as purchasing securities not permitted by the investment guidelines. While agent lenders may sometimes compensate security owners when there is a loss in the investment of the cash collateral, they generally do so only for reasons of customer goodwill or to avoid protracted litigation over whether they were negligent.

This mistake, if left uncorrected, could lead to the false assumption that agent lenders have issued guarantees upon large pools of collateral and thus are exposed to large amounts of risk with potential consequences for their financial stability and that of their counterparties. The reality is that the agent lenders have not issued such guarantees.

**Cost-benefit analysis should be applied to data collection activities.**

The study asserts that there are data gaps in the activities of privately managed accounts and in the repurchase (repo) market. As a researcher, I certainly appreciate the desire for ever more granular data to

satisfy my curiosity. However, it would likely be quite costly to gather the desired data, and it is certainly not clear that there would be much benefit. Sound cost-benefit should be applied to mandated data collection activities. With respect to the repo world, the systemic risk comes from highly leveraged entities relying upon repo for funding. As these highly leveraged entities are already regulated by the Fed and others, those regulators should already have whatever data they need to judge the riskiness of the situation.

If you have any questions, feel free to email or call me.

Respectfully submitted,

James J. Angel, Ph.D., CFA