

**Testimony of Richard Berner, Director of the Office of Financial Research,
U.S. Department of the Treasury
United States Senate Banking Subcommittee on Economic Policy
Hearing on “Monitoring Systemic Risk: The Annual Report and Oversight of
the Office of Financial Research”
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The views expressed in this testimony are those of Richard Berner, Director of the Office of Financial Research, and do not necessarily represent the views of the President.

Introduction

Chairman Merkley, Ranking Member Heller, and members of the Subcommittee, thank you for the opportunity to testify today on behalf of the Office of Financial Research about our *2013 Annual Report*. This is our second report to Congress, fulfilling an annual requirement to assess the state of the United States financial system and analyze threats to U.S. financial stability.

This is my first Senate hearing as OFR Director. Let me take this opportunity to state my commitment to make the OFR a valued resource for the Congress, the Financial Stability Oversight Council, and the American people. Our annual report and my testimony are just two ways we make our work known to our stakeholders. We are fully committed to being transparent and accountable, and I look forward to future opportunities to appear before you.

My testimony today will cover the four topics cited in your invitation letter:

1. Our efforts to monitor financial stability and assess potential threats to it;
2. The status of OFR data collection and analysis, and related data security measures in place and under development;
3. Studies conducted and facilitated by the OFR; and
4. Coordination with relevant agencies.

Before I begin that discussion, I would like to step back and review the core mission of the Office and the status of our efforts to meet it.

OFR Mission and Status

The financial crisis revealed serious deficiencies in financial data and in our understanding of vulnerabilities in the financial system. A core part of the OFR’s mission is to fill those critical gaps in data and analysis for the benefit of the Financial Stability Oversight Council (FSOC or Council) and, ultimately, the public. Our mandate is not to duplicate work done at other Council

member agencies, but to complement their work — to provide the connective tissue that will help us look across the financial system.

To assure transparency and accountability, we regularly engage with our stakeholders in several ways. Our staff regularly briefs members of Congress and their staffs. We also publish our studies through the 12 papers in our Working Paper Series and our two annual reports, and make them available on our website. We have also developed our website to be user-friendly and a growing source of content. We routinely make public presentations to industry, academia, government, and public interest groups in order to share our research insights and receive feedback from the broader community. We invite outside experts to seminars to share and debate their findings and sponsor conferences to engage with the public. In the past year, we jointly sponsored three such meetings with the Council and the federal reserve banks of Cleveland and New York.

The structure of the Office assures a balance between this transparency and accountability on one hand, and autonomy on the other. The OFR is an office within the Treasury Department. However, it is unique among Treasury offices. The integrity and independence of the Office's work is protected by statute. The Office serves the Council but is separate from it. In particular, the OFR does not make policy, the Council does. That puts us in an objective position to analyze threats to financial stability and to evaluate policies to mitigate them.

To ensure objectivity, our Congressional testimony and, by extension, our research, must be independent. Under the statute, no officer or agency of the United States can require the OFR Director to submit Congressional testimony for approval, comment, or review prior to delivery to Congress.

In creating the OFR, the Dodd-Frank Act prescribed other key differences from the Treasury. The OFR is funded by assessments on certain financial companies. The OFR's pay and employee benefits are comparable to those of other federal financial regulators. At the same time, the law requires the Director to consult on the OFR budget, hiring, employee compensation, and other matters with the Council Chair, who is the Secretary of the Treasury.

The Office has developed rapidly during the 18 months since we released our first annual report. In addition to our headquarters here in Washington, D.C., we have a satellite office in New York City to engage closely with market participants. Our workforce now stands at more than 190 employees, up from only 30 in fiscal 2011. By fiscal 2015, we plan to reach a full staff of about 280.

As we have grown, we have refined our management structure and our policies and procedures to help us carry out our mission. For example, we established an office of External Affairs, led by a member of our senior management team, to coordinate engagement with external stakeholders and partners in government. Building on the strategic framework that we released in March 2012 to cover FY 2012-14, we are working on a new, five-year strategic plan to take

effect in FY 2015. The strategic goals in both plans are tied to objectives, outcomes, and performance measures that will focus our work and keep us accountable to ourselves and the public.

We no longer talk about standing up the OFR. Today, the OFR is not only standing on its own, but is making important contributions to promote the stability of the U.S. financial system.

OFR Annual Report

The OFR and the Council produce annual reports at six-month intervals. The two reports cover similar ground but take different approaches. The Council report takes a comprehensive view of vulnerabilities and recommends ways to strengthen the financial system. It is a consensus report, signed by all Council members. In contrast, our report dives more deeply into data and research issues related to those vulnerabilities. We provide an independent assessment of the state of the U.S. financial system, although we solicit and incorporate feedback from Council member agencies and other subject matter experts.

The OFR's *2013 Annual Report* contains analyses that focus on analyzing threats to financial stability, evaluating macroprudential policy, presenting findings of OFR research on financial stability (specifically, financial contagion, market liquidity, and interconnections among financial institutions and markets), addressing data gaps and OFR's efforts to fill them, and promoting data standards, such as the Legal Entity Identifier. The report also discusses the status of the Office in achieving its mission, and concludes with our future research and data plans.

Monitoring Financial Stability and Potential Threats

Thanks to an array of policy measures and industry actions, the U.S. financial system has grown stronger and more stable since we issued our inaugural annual report in July 2012. However, the financial crisis taught us never to be complacent about a potential buildup of risks that can damage the financial system and the economy. Threats to U.S. financial stability persist and we must remain vigilant.

Today's environment of persistently low interest rates and low volatility might seem benign, but this environment can breed complacency. It can encourage market participants to take more risks and employ more leverage to achieve desired returns. Those, in turn, increase potential vulnerabilities to shocks, such as sharp increases in interest rates and jumps in volatility.

The weaknesses in the financial system are often hidden — becoming obvious only when shocks expose them. Our job at the OFR is to try to identify and assess the vulnerabilities before shocks hit.

We are developing a new tool — our prototype Financial Stability Monitor — to identify and monitor these threats and to assess the interplay among them. This new monitor, a heat map,

tracks five functional areas of risk: macroeconomic, market, credit, funding and liquidity, and contagion. We consider this breakdown best for looking at risks across the financial system and identifying causes rather than just symptoms. We quantify risks through a mix of economic indicators, market indexes, and measurements that we calculate.

This monitor is the first version of a tool that we will refine and improve over time. One limitation of Version 1.0 is that our current set of metrics largely tells us where we are, not where we are going. To address that, we are working to incorporate new, forward-looking indicators into our framework.

Informed by this monitor, we have identified a range of potential threats to financial stability. The first four are closely related and often occur together.

1. Disruptions in wholesale funding markets, such as repurchase agreements, or repo.
2. Exposure to a sudden, unanticipated rise in interest rates.
3. Exposure to shocks from greater risk-taking in a low-volatility environment.
4. Exposure to a sudden shock to market liquidity.
5. Excessive credit risk-taking and lax underwriting standards.
6. Operational risk from automated trading systems, such as high-frequency trading.

One additional risk is worth discussing in light of the events of the past week. Recently, emerging-market currency and asset markets have come under significant pressure, and such stress has spilled over quickly into global markets for risky assets, such as equities. In our *2013 Annual Report*, we highlighted emerging-market vulnerabilities, including those that have played out in financial markets in the last two weeks. We are monitoring these developments carefully.

In Chapter 4 of our annual report, we summarize OFR research projects on new tools for measuring and monitoring market liquidity (examining the measurement of liquidity shocks across asset classes) and network analysis to improve our understanding of contagion among financial firms exposed to each other.

Macroprudential policies are those aimed at reducing contagion and other vulnerabilities that span the entire financial system. They address threats that cut across financial institutions and markets, and are designed to reduce the likelihood and severity of financial crises.

The Dodd-Frank Act requires us to evaluate macroprudential policies. In Chapter 3 of the report, we outline a framework for evaluating such policies. Since the financial crisis, U.S. regulators have expanded the macroprudential toolkit, for example, through supervisory stress tests. Further improvement to stress tests would incorporate funding risks, potential spillovers, and feedback effects to increase value for financial stability assessments.

Data Collection, Standards, Analysis and Security

Filling data gaps. A key mandate for the OFR is to improve the scope and quality of financial data. To better measure financial activity and thus better understand how the financial system works — its interconnections, its vulnerabilities, and its risks — we are engaged in several projects to fill data gaps.

A critical step in filling data gaps involves taking stock of existing data. To that end, we have produced and recently published the public portion of an Interagency Data Inventory on the OFR website. The OFR produced the inventory in collaboration with the FSOC Data Committee.

The inventory is a catalog of the data that FSOC-member agencies collect from industry that we will update regularly. It contains a listing of datasets, or “metadata,” not the data themselves. The public portion posted on our website excludes information about nonpublic data, including those derived from other data.

The inventory is essential for identifying gaps in data, avoiding duplication in future requests for data from industry, and improving research and analysis to understand threats and vulnerabilities in the financial system. It is thus a key building block in the OFR data analysis and reporting architecture.

Chapter 5 of our annual report discusses data gaps in detail. It assesses gaps related to short-term funding markets and related financial activities, explains why filling gaps in data related to these markets is a top priority, and describes ways we will fill them. In 2014, we are working with the Federal Reserve Bank of New York to improve and expand data that measure activity in such markets, like repo and securities-lending activities.

Data standards. High-quality data are critical for good decisionmaking. Data standards are essential to assure data quality, and thus for comparing, aggregating, linking, and analyzing data. Their adoption will improve data quality and reduce collection costs and duplication.

What are data standards? They are rules that help precisely identify parties to financial transactions, precisely define financial instruments and how they relate to one another, and precisely specify how data should be collected. Standards for collection specify the data fields for collected data and the formats in which they are collected. In the same way that templates are used to collect address information with separate fields for street, city, state, and zip code, the use of standards improves data management and the quality of analysis.

We are making needed investments in the development and implementation of data standards. Chapter 6 of our annual report describes the framework we have developed for creating and promoting data standards. Not surprisingly, a key conclusion is that to be effective, standards should be adopted universally. We all need to use the same standards, or alternatively to be able

to translate one set of standards smoothly into another. More work is needed, and I ask for your support to promote their use.

The report also describes progress on implementing the Legal Entity Identifier (LEI), a global standard like a bar code for uniquely identifying parties to financial transactions. OFR leadership in the initiative to establish and promote the use of the LEI includes serving as Chair of the LEI's Regulatory Oversight Committee.

The LEI's benefits are huge. Precise identification of counterparties would give firms a clearer picture of their exposures in the marketplace. Estimates from financial industry sources suggest that use of the LEI will save billions of dollars that the industry now spends on cleaning and aggregating disparate data and on reporting data to regulators.

For financial regulators, the LEI would assist in data aggregation and comparisons, thus help in identifying vulnerabilities in the financial system and providing insight into ways shocks can spread across financial markets.

Given those benefits, the case for universal adoption of the LEI system is strong. We are collaborating with primary regulators to achieve broader implementation of the LEI in U.S. financial reporting, to sync with efforts abroad. I call on regulators in the U.S. and around the world to require use of the LEI through regulatory rulemaking.

The need for data standards also extends to financial products. For example, a universal mortgage identifier (UMI) is clearly needed. Mortgage debt represents 70 percent of U.S. household liabilities. The mortgage finance system is complex and the data produced by this system are fragmented. A single UMI would bring coherence to these data and would significantly benefit households, industry, regulators, and researchers.

We call for the establishment of a single, cradle-to-grave, universal mortgage identifier that protects the privacy of the borrowers. With substantial input from industry and several agencies, we have just published an OFR working paper that discusses the characteristics that a UMI should have and criteria for implementation.

Industry participants strongly favor the LEI and the UMI to help make their internal data and their reporting activities coherent and efficient.

In another initiative, we are engaging with the Commodity Futures Trading Commission (CFTC) to design and use standards to improve the quality of data collected from trade and swap data repositories.

Data analysis. Our annual report contains preliminary results of OFR research using newly available, highly granular data. For example, our analysis of money market fund investments enables us to assess the factors triggering the large decline in U.S. money fund holdings of European bank liabilities during the European sovereign debt crisis. An analysis of the sovereign

credit default swap market enables us to identify the sellers, market makers, and buyers of credit protection, and thus to locate sources of risk. We also analyzed hedge fund leverage using aggregated data from Form PF. These aggregated data suggest that hedge fund use of leverage is inversely related to the liquidity of, and the risks in, assets in the funds' portfolios.

Data security. No OFR goal is more important than safely and securely collecting data and safeguarding the data we hold.

OFR information security standards are governed by those of the Treasury, and our Chief Information Security Officer works closely with his Treasury counterpart to assure that our policies and procedures meet or exceed the standards of the Treasury Department, as well as the standards of Council member organizations.

To support OFR staff research and to clean, manage, and store large-scale datasets, we have made substantial progress in building our technological infrastructure and the analytical environment that will house our data and give our researchers the advanced tools they need to conduct innovative research.

Our information security standards are fundamental to this new technology infrastructure, verifying access permissions at the most granular level. Technology is necessary but insufficient alone to assure security, so the systems we are building for data acquisition, management, and dissemination are accompanied by strict and clear rules for data security and data sharing.

As required by the Federal Information Security Management Act, the Office has established an information security program policy and data handling procedures for proper safekeeping of information at the highest level of the Federal Information Processing Standards. Our program also includes post-employment restrictions for employees who handle sensitive information.

In addition, we are expanding security controls for sharing information among Council member agencies, collaborating to forge bilateral data-sharing agreements to assure all participants that shared data will be protected, secured, and treated consistently. The agreements are consistent with the analysis of Council data sharing by the Council of Inspectors General for Financial Oversight.

For data-sharing agreements to work, agencies must agree on information security classifications and how to apply them. For example, different agencies may have had different policies for handling data defined as "restricted" or "high security." The Office led an initiative by the Council Data Committee to "crosswalk" security classification categories. An interagency working group established a common framework for information security practices, processes, and compliance requirements.

The National Institute of Standards and Technology assisted the working group in aligning the framework with the Federal Information Security Management Act of 2002 and the Federal

Information Protection Standards. These federal standards represent the common base to which all federal agency classifications are mapped.

OFR Studies Conducted and Facilitated

The OFR has conducted and facilitated a wide range of studies in support of its mission. For example, our Working Paper Series is designed to inform the process of assessing, measuring, monitoring, and mitigating threats to financial stability. In addition to the paper about the Universal Mortgage Identifier, discussed above, we have released a paper assessing contagion in financial networks and several papers on the theory and practice of stress testing.

The OFR has also conducted analysis for the last two FSOC annual reports. We have also facilitated analysis for the Council, such as evaluating the risks of money market funds and data related to the process of designating nonbanks for supervision by the Federal Reserve.

In the international arena, the OFR contributes to work streams of the Financial Stability Board on ways to improve data quality in swap data repositories and data gaps in shadow banking.

In September 2013, we released *Asset Management and Financial Stability*, a report on asset management summarizing the results of a study requested by the Council. We designed the report to inform the Council's consideration of what threats in asset management activities exist and what remedies, if any, might be appropriate to mitigate any such threats.

The report had three key findings:

- Asset management activities and firms differ from banking activities and banks. To quote the first page of the report, asset management activities “differ in important ways from commercial banking and insurance activities. Asset managers act primarily as agents: managing assets on behalf of clients as opposed to investing on the managers’ behalf. Losses are borne by — and gains accrue to — clients rather than asset management firms. In contrast, commercial banks and insurance companies typically act as principals: accepting deposits with a liability of redemption at par and on demand, or assuming specified liabilities with respect to policy holders.”
- Vulnerabilities in some activities could give rise to threats to financial stability, in particular, risk-taking in separately managed accounts and the reinvestment of cash collateral in securities lending transactions.
- Significant data gaps hamper analysis. Filling them would be essential to verifying our findings.

It is also important to note what the report did not do:

- It did not evaluate individual firms. Any designation process by the FSOC would involve evaluation of individual firms. The OFR report did not focus on individual firms, but instead on asset management activities. As a result, the OFR report alone could not be used as the basis for designating any particular firm.
- It did not substitute for the Council's work. The goal of the report was to provide information. The Dodd-Frank Act established the OFR as a research and data organization with the mandate to support the Council and its member agencies in their efforts to identify and mitigate threats to financial stability. Responding to the Council's request for this analysis is part of fulfilling that mandate. However, the OFR's responsibilities do not extend to deciding on policy actions. The OFR Director is a non-voting member of the Council and only the voting members of the Council decide on the specific threats posed by any activity and whether any remedies are necessary to mitigate such threats.

Finally, it is important to note that the OFR followed an open and transparent process in gathering information for the report:

- The OFR research team met with representatives from the asset management industry on numerous occasions. Not only did we grant every request from the industry to meet, but we actively sought meetings with industry representatives to learn as much as possible about industry business models and practices.
- The OFR research team engaged with experts from FSOC member agencies throughout the entire course of the process, including extensive interaction with experts from the Securities and Exchange Commission (SEC). Many important contributions from those experts appear verbatim in the report.

Sponsoring research. We do not conduct our research and analysis in a vacuum. On the contrary, we seek to create a virtual research community to promote and sponsor world-class research by exchanging and testing ideas. The conferences, workshops, seminars, and public appearances that I mentioned earlier serve as incubators for generating new ideas about promoting financial stability and making our financial system safer.

Another such incubator is our Financial Research Advisory Committee, 30 distinguished professionals in economics, data management, risk management, information technology, and other fields who provide expert advice to the OFR and bring diverse perspectives to help the OFR fulfill its mission. In August 2013, the committee submitted its first set of recommendations to the OFR; these recommendations and the proceedings of the Committee are posted on our website.

We have also established a program for sponsoring research through grants. In May 2013, we announced our partnership with the National Science Foundation to sponsor novel research related to financial stability. The first grant was awarded in September 2013 for a project to

examine the impact of high-speed trading on the financial system. This research promises to yield additional insights into working with extremely large financial datasets in a supercomputing environment. Researchers at the University of Illinois at Urbana-Champaign and the San Diego Supercomputing Center are conducting the research.

Coordination with Relevant Agencies

Interagency coordination is part of the OFR's every day routine in engaging with FSOC member agencies and others. Examples include our extensive coordination with relevant agencies on our asset management report, on data sharing, in seeking input from agencies on other research-related publications, and in providing subject-matter expertise to them.

The OFR leads the FSOC's Data Committee, which handles issues related to data collection, gaps, and standards. We are also supplying data and analysis to the FSOC Systemic Risk Committee and the Nonbank Designation Committee.

Before publishing a research working paper or annual report, we solicit feedback from subject matter experts in academia and at FSOC member agencies and other financial regulators, such as the Federal Reserve Bank of New York.

We are also collaborating with the SEC on cleaning and analyzing data from Form PF, which is submitted by hedge funds and other private funds and, as I mentioned, we are engaging with the CFTC to improve the quality of data reported to swaps data repositories.

As I already mentioned, we are also collaborating with Council member agencies through the Council's Data Committee to promote data sharing, consistent with the strictest security measures.

Conclusion

As the financial system changes, evolves, and innovates, new threats and vulnerabilities continuously emerge. At the OFR, we face the challenge every day of filling gaps in data, and conducting and sponsoring essential research that will help us not only understand the financial system of today, but also identify the vulnerabilities that could ensnare our financial system and economy tomorrow.

It is critical for Congress and the American people to receive timely and accurate information about our essential work. That is what makes venues such as this hearing so important.

Thank you again for the opportunity to appear today. I would be happy to respond to your questions.