# Testimony of Richard Berner, Director of the Office of Financial Research, U.S. Department of the Treasury House Financial Services Subcommittee on Oversight and Investigations Hearing on "The Annual Report of the Office of Financial Research" February 5, 2014

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 McHenry, Ranking Member Green, 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 my second appearance before the Subcommittee as Director of the OFR and I am pleased to return. Let me take this opportunity to reaffirm my commitment to make the OFR a valued resource for Congress, the Financial Stability Oversight Council, and the American people. Equally important, I want to reaffirm that we are fully committed to transparency and accountability.

Our annual report and my testimony here are two of the ways we honor that commitment and make our work known to our stakeholders. 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.

In my testimony, I will summarize four key topics addressed in the report:

- 1) monitoring and analyzing potential threats to financial stability,
- 2) data collection and analysis,
- 3) data standards, and
- 4) data security.

We pursue all four to fulfill our mandate to support the Financial Stability Oversight Council (FSOC or the Council). I will also describe other ways we support the Council.

Before I discuss those topics, I want to review the mission of the Office and update you on the status of our efforts to meet it.

## **OFR** Mission and Status

The financial crisis revealed serious deficiencies in our understanding of vulnerabilities in the financial system and in the financial data needed to measure them. A core part of the OFR's mission is to fill those critical gaps in analysis and data for the benefit of the Council and, ultimately, the public. Our mandate is to complement, not duplicate, the work of other Council

member agencies — to provide the connective tissue that will help us look across the financial system to discover vulnerabilities and risks.

The OFR is an office within the Treasury Department, but is unique among Treasury offices. The objectivity and independence of the Office's work is protected by statute. To ensure OFR 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 that the OFR is funded by assessments on certain financial companies. OFR employees' pay and benefits are comparable to those of other federal financial regulators. At the same time, the law requires the Director to consult with the Council Chair, who is the Secretary of the Treasury, on the OFR budget, hiring, employee compensation, and other matters.

This autonomy is critical to doing our job right and goes hand-in-hand with a fundamental responsibility to be transparent and accountable to Congress and the American people.

To assure this transparency and accountability, we regularly engage in many ways with our stakeholders and those with responsibility for oversight of the Office. Our staff regularly briefs members of Congress and their staffs. We publish our studies through our Working Paper Series and our 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. When we post significant content to the website, we send out an alert to website subscribers. Since I testified here last March, the number of subscribers who signed up to receive these e-mail alerts to flag new website content has more than doubled from about 2,000 to more than 4,500.

We routinely make public presentations to industry, academia, government, and public interest groups to share our research insights and receive feedback from the broader community. We also 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 OFR 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 those plans are tied to objectives, outcomes, and performance measures that keep us accountable.

When I was here in March, I discussed our progress in 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. Although the reports cover similar ground, they take different approaches. The Council report is signed by all Council members. It takes a comprehensive view of vulnerabilities and recommends ways to strengthen the financial system. The OFR report, in contrast, provides 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. In addition, the OFR report dives more deeply into specific vulnerabilities in the financial system.

The OFR's *2013 Annual Report* analyzes threats to financial stability, evaluates macroprudential policies, presents findings of OFR research on financial stability (specifically, financial contagion, market liquidity, and interconnections among financial institutions and markets), addresses data gaps and OFR's efforts to fill them, and discusses our work to promote 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 and Analyzing Potential Threats to Financial Stability

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 might damage the financial system and the economy. Threats to U.S. financial stability remain and we must stay 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 future 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. We cannot predict or prevent financial crises. Instead, our job at the OFR is to try to identify and assess the vulnerabilities before those shocks hit, and to inform policymakers about tools needed to strengthen the weaknesses. I am confident that such monitoring and analysis can help reduce the severity, and hopefully, the frequency of future financial crises.

A new tool for monitoring threats. 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.

*Principal threats to financial stability; monitoring tools and policy analysis.* 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 month. Emerging-market currency and asset markets have recently come under significant pressure, and such stress has spilled over quickly into global markets for other assets. In our *2013 Annual Report*, we highlighted emerging-market vulnerabilities, including those that have played out in financial markets in the last three 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.

*Conducting and sponsoring research.* We do not conduct our research and analysis in a vacuum. On the contrary, we engage with the broader research community to conduct, promote, and sponsor world-class research by exchanging and testing ideas.

The OFR has conducted and sponsored 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.

We now have a dozen Working Papers published on our website, and several more in the works. Subjects of recent working papers include contagion in financial networks and several papers on the theory and practice of stress testing. Our most recent paper calls for the establishment of a single, cradle-to-grave, universal mortgage identifier that protects the privacy of the borrowers. These papers, usually written in collaboration with outside experts, advance the state of knowledge on financial stability topics by engaging the broader financial economics research community in developing and testing economic thinking and theory.

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.

In addition, 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.

Our Financial Research Advisory Committee also helps us evaluate our analysis. The committee consists of 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 will soon be webcasting another meeting of the Committee when we will have the opportunity to provide updates on our progress against those recommendations.

## Data Collection and Analysis

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. We will update it regularly. The inventory 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. We are currently 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. We are also engaged in Financial Stability Board initiatives supported by the G20 to fill data gaps in these areas, and in other aspects of shadow banking activity. In addition, we are collaborating with the Securities and Exchange Commission on cleaning and analyzing detailed data from Form PF, which is submitted by hedge funds and other private funds.

Regarding 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 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. Just as standards were necessary 150 years ago to make sure all of our trains could fit on all of our rails, standards are critical today to the

functioning of the global financial system's infrastructure. 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, made up of almost 60 central bankers, treasurers, and markets regulators from around the globe.

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. Almost 150,000 entities are already identified using the LEI. Regulators already require using the LEI for certain swaps, insurance, and banking reporting in the U.S., Canada, Europe, and parts of Asia. I call on regulators in the U.S. and around the world to require use of the LEI in regulatory reporting.

The need for data standards also extends to financial products. As I mentioned earlier, 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 that protects personal privacy would bring coherence to these data and would significantly benefit households, industry, regulators, and researchers.

Substantial input from several agencies was essential in developing the OFR working paper we recently published on the characteristics that a UMI should have and criteria for implementation.

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

Some initiatives require identifiers for both entities and products. As a case in point, the OFR and the Commodity Futures Trading Commission (CFTC) contribute to a Financial Stability

Board initiative to design data standards and criteria for aggregating data across trade and swap data repositories. We are also collaborating with the CFTC to design and implement standards to improve the quality of data collected from trade and swap data repositories.

#### 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 in 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. All Council member agencies but one have signed off on that framework; when they do, data sharing will be far simpler and more secure than it is today. 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.

# **FSOC Support**

A key element of the OFR mission is to support the work of the Council. However, the OFR and the Council are separate. The OFR provides data and analysis to the Council, and our missions to assess and monitor threats to financial stability are complementary. But it is incorrect to say that the Office is the research arm of the Council.

As OFR Director, I serve on the Council, but as a non-voting member.

Under the Dodd-Frank Act, the OFR evaluates policies related to financial stability, but the OFR does not make policy. The Council does. That role puts us in an objective position to analyze threats to financial stability and to evaluate policies to mitigate them.

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

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, and we lead the U.S. delegation on the global LEI initiative.

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.

At the request of the Council, we conducted a study to inform the Council's consideration of what threats in asset management activities exist and what remedies, if any, might be appropriate for the Council to consider to mitigate any such threats.

In September 2013, we released the results of that study in a report, *Asset Management and Financial Stability*.

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. This is why firm-specific, non-public information was not needed for the report.
- 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; 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. Many important contributions from those experts appear verbatim in the report.

# Conclusion

Let me conclude where I began — with our commitment to transparency and accountability. Fulfilling our mission requires that we collaborate with our stakeholders and be accountable to them, including the Council, other regulators, industry, and the American people.

In that regard, we want to be sure that you in Congress are fully informed about our work to help promote U.S. financial stability. Hearings like this are critical venues for that information exchange, and I look forward to such opportunities in the future to keep you informed. More broadly, we invite engagement with you and your staffs to assure that the dialogue is frequent, open, and informative.

Thank you again for inviting me here today. I would be happy to respond to your questions.