EXAMINING THE OFFICE OF FINANCIAL RESEARCH

HEARING

BEFORE THE

SUBCOMMITTEE ON OVERSIGHT AND INVESTIGATIONS

OF THE

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EXAMINING THE OFFICE OF FINANCIAL RESEARCH

Thursday, December 7, 2017

U.S. HOUSE OF REPRESENTATIVES,
SUBCOMMITTEE ON OVERSIGHT
AND INVESTIGATIONS,
COMMITTEE ON FINANCIAL SERVICES,
Washington, D.C.

The subcommittee met, pursuant to notice, at 10 a.m., in room 2128, Rayburn House Office Building, Hon. Ann Wagner [chairwoman of the subcommittee] presiding.

Present: Representatives Wagner, Tipton, Ross, Zeldin, Trott, Kustoff, Tenney, Hollingsworth, Hensarling, Green, Ellison, Cleaver, Beatty, Gottheimer, and Crist.

Also present: Representative Loudermilk.

Chairwoman WAGNER. The Subcommittee on Oversight and Investigations will come to order.

Today's hearing is entitled "Examining the Office of Financial Research." Without objection, the Chair is authorized to declare a recess of the subcommittee at any time. And without objection, all members will have 5 legislative days within which to submit extraneous materials to the Chair for inclusion in the record.

Without objection, the exhibit binder, which is pretty heavy here, including the written testimony of the GAO (Government Accountability Office), which I note was provided to minority staff in electronic format yesterday is entered into the record. The Chair now recognizes herself for 4 minutes for an opening statement.

The Dodd-Frank Act requires the Office of Financial Research, OFR, to report annually to Congress on threats to the stability of the U.S. financial system, the OFR's activities, and the key findings from the OFR's research and analysis.

Today the subcommittee on Oversight and Investigations will receive the annual testimony from the Director of the Office of Financial Research, Director Richard Berner. In addition, this hearing will examine the OFR's work to support the activities of the Financial Stability Oversight Council (FSOC), its management and structure, and finally its cooperation with Congress and oversight bodies such as the Government Accountability Office and the Treasury Department Office of the Inspector General. Congressional oversight of the OFR is limited by its inability to exercise the power of the purse. The OFR has the authority to set up its own budget and to fund itself outside the congressional appropriations process, making them quite unique. In fact, in June of this year, the U.S. Department of Treasury issued a report which recommended and

I quote, "Congress reform structure and mission of the OFR to improve its effectiveness and to ensure greater accountability."

Furthermore, the Financial Choice Act, which this committee passed earlier this year, abolishes the Office of Financial Research. And while I am sure our witness this morning will argue differently, eliminating the OFR would actually improve risk management by creating one less redundant Federal bureaucracy. Recent work by this committee has uncovered as many as 20 other Federal entities that currently exist and will remain in place should the OFR be eliminated.

Collecting and analyzing data should be streamlined, allowing Congress to make informed decisions when crafting policy. For example, the Treasury Department where the OFR is housed already has an Office of Economic Policy which is responsible for analyzing and reporting current and perspective economic developments in the U.S. and world economy. Likewise the division of financial stability, which is maintained by the Federal Reserve performs market surveillance for the purpose of identifying threats to financial stability. Congress must insist better coordination and eliminate unnecessary layers of Federal bureaucracy when they exist.

And finally, and maybe most troubling is the questionable analysis of reports produced by the OFR over the last several years. A 2013 OFR report on the asset management industry concluded that investment managers and institutions they worked for could pose systemic risk to our financial system. That report, which was widely criticized by the SEC, Members of both the House and the Senate, and even former chairman Barney Frank puts into question the OFR's effectiveness and capabilities.

Unfortunately, while the creation of the office might have been well intentioned, reports of the mismanagement, questionable reports and analysis, redundancy, and the inability to fulfill its statutory mandate raise the question, why does the OFR exist?

Director Berner, I look forward to hearing your testimony this morning and I yield back the balance of my time.

I now recognize the gentleman from Texas, Mr. Green, the Ranking Member for 5 minutes.

Mr. GREEN. Thank you so much, Madam Chair, it is an honor to be with you this morning. I thank the witness for appearing as well.

Madam Chair, OFR is a necessary part of the Dodd-Frank defense against systemic failure. Some things bear repeating. OFR is a necessary part of the Dodd-Frank defense against systemic failure. It is the systemic threat sentinel, it looks out for the next AIG, the next Bear Stearns, the next Lehman. It has an absolutely necessary function in this Dodd-Frank legislation, as implemented.

And as it looks across the economic order, it is looking for the 3-7s that we were confronted with in 2008—3 years of a fixed rate, 27 years of rates that would bounce around—given a teaser rate that would coincide with a prepayment penalty such that you could not extricate yourself from a dastardly loan. It is looking for the next line of no-doc loans that would allow people to just get loans for unusual amounts of money without proper documentation.

It looks out for the interconnectedness between these huge mega institutions, institutions that when connected improperly can drag down not only this economy, but the economy of the world. It is a necessary part of the Dodd-Frank defense against systemic failure. FSOC on the other hand is a command center, it is the command center, but the sentinel is OFR. OFR is necessary.

Now like many police departments and areas of the Defense Department, it has some problems. But when we have problems in police departments, not all, some, some areas of the Defense Department we don't decide to eliminate the police department, we don't decide to eliminate the Defense Department or that area that might have a problem, we repair the problem. We don't decide that we are going to cut the budget of Defense by 25 percent because there are problems with some area of the Defense Department. We don't decide we are going to cut the workforce by 45.5 percent because there are problems in some areas of a police department, we fix the problem.

It makes no sense to cut OFR by 25 percent, the budget. It makes no sense to cut the workforce by 45.5 percent. I will stand with anyone who wants to correct problems that may exist in OFR, but I will stand against everyone who wants to eliminate OFR. We worked too hard. It took us many months. And the unfortunate thing about producing good legislation is people don't remember the crisis sometimes that will become the genesis for the legislation.

It is like when you go to the physician and you have a toothache. You are willing to do whatever is necessary to get it resolved. Let's get this pain away. We worked hard to eliminate the pain in 2008. And now that we have eliminated the pain and we have a means by which we can avoid the pain in the future, we have forgotten what the pain was like. It is difficult to remember the pain from your last toothache, but you do remember this, you don't want to get another one. So it is important for us to protect OFR and not allow those who really want to eliminate Dodd-Frank—and by the way, I have colleagues on the other side who have said as much—those who want to eliminate Dodd-Frank start by using this salami process, one slice at a time, OFR, Consumer Financial Protection Bureau, one slice at a time and then you won't have Dodd-Frank, just as we are taking one slice at a time from the Affordable Care Act. I yield back my time.

Chairwoman WAGNER. The Chair now recognizes the Vice Chair of the Oversight and Investigation subcommittee, the gentleman from Colorado, Mr. Tipton, for 1 minute for an opening statement.

Mr. TIPTON. Thank you, Chair Wagner, I appreciate you holding the hearing today to be able to look at the nature and practices of the Office of Financial Research. In September 2014, Chairman Hensarling was quoted as saying, "4 years after Dodd-Frank's passage it is not readily apparent, what, if anything, OFR has contributed to the process of identifying, mitigating systemic risk." 3 years after that statement, it is still not clear to this committee that OFR's fulfilling its statutory purpose, a purpose that Director Berner himself recently called an extraordinarily broad mission.

Since its inception, OFR has been a fixture of Government bureaucracy, riddled with employee dissatisfaction, a lack of transparency and accountability, and, at its worst, obstruction of the work of another Government agency.

I am pleased that this committee is taking another hard look at OFR and its function here today. I would like to be able to thank Director Berner for appearing today and look forward to getting a better understanding of his viewpoints.

Chairwoman WAGNER. The gentleman yields back. We now welcome our witness, Director Berner. Today's witness is the honorable Richard Berner, Director of the Office of Financial Research was confirmed by the U.S. Senate in 2013. Prior to his role as director, Dr. Berner served as counselor to the Secretary of the Treasury with the responsibility of standing up the OFR.

Before joining Treasury in 2011, Director Berner was co-head of global economics at Morgan Stanley and chief economist at Mellon bank. Director Berner received his doctorate from the University of Pennsylvania and his bachelor's degree from Harvard University. Without objection, the witness' written statement will be made part of the record following his oral remarks.

Once the witness has finished presenting his testimony, each Member of the subcommittee will have 5 minutes within which to ask questions.

Director Berner, on the table there are three lights, green means go, yellow means you have 1 minute left, and red means your time is up.

With that, Director Berner is recognized for 5 minutes to give an oral presentation of his testimony. Director Berner.

STATEMENT OF THE HONORABLE RICHARD BERNER

Mr. BERNER. Thank you, Chairwoman Wagner, Ranking Member Green, and Members of the subcommittee. Thank you for the opportunity to testify this morning on behalf of the Office of Financial Research. My written testimony covers the subjects mentioned in your invitation letter. As background I also attached our just released 2017 Annual Report to Congress and a new report on OFR workforce culture. We will provide the results of the 2017 Federal employee viewpoint survey as soon as they are available.

As you may know, I am leaving the OFR at year's end, so I think it is a good time to take stock of where the OFR is now, compared with April 2011 when I was counsel to the Secretary with responsibility to stand up the OFR. Back then we had four staff members and no separate office or infrastructure, just a broad mandate to help support U.S. financial stability after the worst financial crisis since the Great Depression.

Today, we have resources to meet our mandate, an expert and diverse staff of men and women with the tools needed to do their jobs, an office in Washington, a small office in New York, and an analytic environment where OFR members securely maintain large datasets and conduct computing intensive analysis.

More than 2 years ago we begin to take stock of the OFR, resulting in initiatives to strengthen our workplace culture and to streamline our functions. I believe those initiatives will help us effectively and efficiently meet our mandate and maintain the objectivity, integrity, and quality that are the hallmarks of our work.

The OFR mandate is to support its stakeholders, primarily the Financial Stability Oversight Council, by improving the scope, quality, and accessibility of financial data; assessing and monitoring threats to financial stability; and evaluating financial stability policies. I have had the privilege of serving as the OFR's first director since January 2013, and I am proud of the accomplishments that the dedicated OFR workforce has made possible.

For example, the OFR led the international initiative to establish the global legal entity identifier (LEI), which is like a bar code for precisely identifying parties to financial transactions. If the LEI system had been in place during the financial crisis, exposures to the failing Lehman Brothers would have been easier to identify, assess, and manage.

The OFR's also collaborating with the Federal Reserve to collect data describing repurchase agreements or repose, which are critical sources of secured short-term funding across the financial system. This data will be used in publishing an alternative to LIBOR (London Inter-bank Offered Rate). U.S. dollar LIBOR is a benchmark for setting interest rates, and trillions of dollars in mortgages, and other financial products. Our mandate includes developing new tools to better assess and monitor financial system vulnerabilities. We have done that with our new financial system vulnerabilities monitor and financial stress index. We are also doing that by combining network analysis with maps of the financial system to help identify potential systemic vulnerabilities from cybersecurity incidents.

Our mandating also includes making data more accessible. We have done that with our U.S. money market fund monitor which shows developments in these funds by tracking in detail their investment portfolios. And it includes evaluating policies, and we have done that by researching factors, other than size, to assess the systemic importance of banks.

Our staff delivered these consequential contributions to stakeholders despite headwinds from working for a startup amid persistant uncertainties from existential threats to the OFR. When I first testified before this subcommittee in 2011, I said that OFR has mandated to shed light into the dark corners of the financial system. Today, we and our stakeholders can see into those corners more clearly than ever before. Because this work requires ongoing vigilance, that light must continue to shine.

Thank you again for inviting me here today. This oversight helps ensure that the OFR is fully transparent and accountable in carrying out its mission. We look forward to working with you to promote the stability of the Nation's financial system. And I am happy to respond to your questions.

[The prepared statement of Mr. Berner can be found on page 26 of the appendix.]

Chairwoman WAGNER. The Chair thanks the witness for his opening statements. And the Chair now recognizes herself for 5 minutes.

Director Berner, in previous testimony before this committee you have indicated that you and the OFR had every interest in being transparent and accountable, said yet again today. Yet as we have already heard today, including written testimony from the GAO, you have not. As we have already discussed, OFR sets its own budget outside the congressional appropriations process, determines the size of its staff and their salaries, with no direction from

Congress, and has a single director, you. I would argue that the OFR is not accountable at all.

Director Berner, isn't the lesson of the CFPB that Congress indeed made a mistake in creating agencies with single directors who can control every aspect of their agency and are unaccountable to Congress, the President, and the public?

Mr. BERNER. Thank you, Congresswoman, for that question. I believe that we are accountable in many ways to the Congress and to others who oversee us. Hearings such as this one really give us an opportunity to explain to you what we are doing and the ways that we are doing it.

In addition, we file quarterly reports to the Congress on all of our activities and our budget. And as you know from the statute, I am required to consult with the Secretary of the Treasury on budget and other matters and there is oversight from that.

Chairwoman WAGNER. Let me quickly go back to the GAO audit, Director Berner. Quick yes or no, do you feel like your office fully cooperated with the GAO in its investigation?

Mr. BERNER. Yes, we have.

Chairwoman WAGNER. What would you say about GAO's testimony, that was submitted today, which talked about lengthy delays and lack of access? To quote here Director Berner, directly from GAO's testimony today. During—and I quote, "during the course of our review of OFR we have experienced repeated problems with gaining access to both people and documents. Many meetings with OFR officials took months to schedule, some were canceled with short notice and requests for documentation and other information were delayed." And it goes on, and on, and on sir.

What would you say about the GAO's testimony today about all of the delays and lack of access?

Mr. BERNER. I would say, Congresswoman, that we have provided all requested witnesses and documents to the GAO. The delays that did occur were the result of scheduling delays on both sides of the equation, that those were unfortunate. We did have some staff turnover during the period which that audit was being conducted. And we understood from our communications with the GAO that those had been remedied following a conversation between our chief counsel and GAO counsel—

Chairwoman WAGNER. Reclaiming my time, Director, because I did want to cover a couple more topics. Let's discuss for a minute the workplace culture study, by Charles River Associates (CRA), which you, Director Berner actually asked for. Among other things, the study identifies concerns from employees that ranged from a lack of communication, problems with decision making, a lack of direction, a lack of progress and structure, and inexperienced and unskilled management.

A lot of these criticisms from OFR employees, many of whom were hired under your watch. What is OFR doing to address the concerns identified in this report, sir?

Mr. BERNER. Thank you for that. We did ask for that report and we have sought advice from various offices at the Treasury who are experts in these matters in order to make that engagement.

We recognized actually when our Federal Employee Viewpoint Survey scores began to decline a few years ago that indeed there were issues of workplace culture that we needed to address. And we did start to address those in several ways. The CRA report that you refer to is the latest of those, but it is only the latest in a series of efforts that we have been making in order to improve workplace culture, decision making, and other matters.

Chairwoman WAGNER. I appreciate that, Director Berner, but if we are being honest here, when I read the Charles River Associates study on the workplace culture of the OFR, which states strategic planning continues to be a problem, I had concerns.

When I heard your testimony today that the morale in the written testimony, the morale of the OFR was low, it makes one wonder about the leadership structure not to mention Director, the multiple ongoing audits, investigation of the OFR by the Treasury IG, the GAO's testimony today with its harsh criticism of your agency, for any agency that is very young, OFR has created a workplace that appears to outsiders and insiders to be completely dysfunctional. And most concerning, Director Berner, is how this atmosphere effects the work product, the work product that you are obligated to produce.

I look forward—my time has expired—to you putting your answer out in written form or in some way to explain the volume of criticism and reports and information from governmental agencies and studies and others that are most concerning regarding your agency.

Mr. BERNER. Happy to work with you, Congresswoman, to get you what you need.

Chairwoman WAGNER. Thank you. The Chair now recognizes the distinguished lady and friend of mine from Ohio, Mrs. Joyce Beatty for 5 minutes.

Mrs. BEATTY. Thank you so much, Madam Chairwoman, and it is certainly my honor to be here seated next to you.

And also, Mr. Berner, let me say thank you for your testimony. Thank you for your years of service leading the Office of Financial Research. And certainly I wish you the best of luck in your future endeavors.

Mr. BERNER. Thank you.

Mrs. BEATTY. Now, I am going to try to get a couple of questions in within my time. I am going to start, for obvious reasons as you certainly know, we are looking at this tax bill to say during the 2016 election, President Trump promised the American people on several occasions that he was going to close the carry interest loophole that hedge funds take advantage of to pay lower taxes than every day American people.

Now I am not aware of any, so my question is going to be about the Hedge Fund Working Group. In April 2016, the Financial Stability Oversight Council, of which the director of OFR is a nonvoting member, released a pubic statement entitled, Financial Stability Oversight Council Update on Review of Asset Management, Products and Activities. In this report the council stated that quote, "there appears to be a concentration of leverage on the economic and corresponding risk exposure of hedge funds." It went on to state that there is currently no single regulator with all the information necessary to evaluate the complete risk profiles of hedge funds and suggests that there were further analyses that needed to take place.

We heard from this working group in November 2016 at the tail end of the Obama Administration when Deputy Assistant Secretary Crane provided an update on the group's progress on the council. And after reviewing the FSOC minutes of 2017 under the leadership of Treasury Secretary Mnuchin, there doesn't appear to be any reference at all or updates by the Hedge Fund Working Group. In fact, a couple months ago, the American Bankers Association had an article, and Madam Chair, I ask it be entered into the record—

Chairwoman WAGNER. So ordered.

Mrs. BEATTY. Mnuchin shows no interest in continuing FSOC's hedge find inquiry. It was published and it raises the question if Secretary Mnuchin led FSOC, he would disband the working group, can you respond to that?

Mr. BERNER. Thanks for your question Congresswoman, I can't respond to say what Secretary Mnuchin is doing. But I do know that he strongly supports the work of the council to look at risk in the financial system and vulnerabilities where they may occur. I also know that he strongly supports the work of the OFR whose primary purpose is to support the council in a variety of ways.

In particular, in regard to hedge funds—

Mrs. BEATTY. Let me resume my time and ask you, does he support the Hedge Fund Working Group?

Mr. BERNER. I don't know whether he supports the Hedge Fund Working—

Mrs. BEATTY. Have you received any updates or anything about it?

Mr. BERNER. I have not.

Mrs. BEATTY. Would you say morale in an organization can be down if people are afraid that they are going to lose their jobs?

Mr. BERNER. Yes, I would, Congresswoman.

Mrs. BEATTY. Have you heard anything that you should share with us about what people might be thinking—why they would be thinking they might lose their jobs?

Mr. BERNER. I think the President's budget, which came out in May of this year, indicated that there would be significant cuts to the workforce and to the budget of the OFR, and that might be one reason, I think that there are efforts to eliminate the OFR. So there is a great deal of uncertainty that employees are facing.

Mrs. BEATTY. OK. Let me ask you another question. Are you aware of video that was uploaded on YouTube from an alleged employee at the Office of Financial Research? They had raised concerns about disparate treatment of African Americans in the workplace?

Mr. BERNER. Yes, I am aware of those.

Mrs. BEATTY. Do you know what is being done about that?

Mr. BERNER. Yes. When we saw those videos, we referred them immediately to the Treasury Office of the Inspector General for them to look into those videos.

But I want to say, that in addition, if these expressed concerns by employees, and we don't know who produced these, but if they express concerns by employees, I want to strongly say that we really respect concerns. We want to make sure that employees have every opportunity to express their concerns. Expressing them in ways other than that would be really good, but we want to make sure that employees have every opportunity to express their concerns about the workplace and about anything else.

Mrs. BEATTY. Thank you. My time has expired.

Chairwoman WAGNER. The gentlelady yields back. The Chair now recognizes the gentleman from Colorado, the Vice Chair of the Oversight and Investigations Subcommittee, Mr. Tipton for 5 minutes.

Mr. TIPTON. Thank you, Chairwoman. And, Director, again, thank you for being here.

In its report, at the request of the Chairwoman of this committee, the Government Accountability Office identified strategic planning as a serious issue facing OFR. Would you say that the findings of the GAO in this report had merit?

Mr. BERNER. Congressman, I would say the findings of the GAO really overlook a lot of the things that we have been doing in the Office of Financial Research.

Mr. TIPTON. So you see no merit on the findings?

Mr. BERNER. I think that the efforts we have been making can be improved and we are taking steps to improve them. But I would not say that there are no efforts and that those efforts have gone without producing any results.

Mr. TIPTON. How is the OFR supposed to achieve its statutory mandates under your supervision?

Mr. BERNER. First and foremost, as I mentioned earlier, we are—our purpose is to serve the needs of the Financial Stability Oversight Council and so we want to, and do work with the Council in order to understand what they need from us, whether it is data or analysis, or something else.

Second, once we understand that program—and that is an ongoing conversation, once we understand that—we organize ourselves in the way that the statute recommends and in a way that produces the most effective and efficient way of doing that. We are working hard on changing that right now, because having taken stock of where we are, we are moving forward with some changes that will help us make—get more effective and efficient, including the strategic planning initiatives that you allude to.

Mr. TIPTON. When you are adding—basically with OFR was actually a redundancy added on how many other agencies are doing analysis and research and followed up with the OFR?

Mr. BERNER. I won't argue that OFR is redundant, I would argue that OFR has some unique things that other agencies don't that complement their work.

First, no other agency had the ability to collect data across the financial system. And those data are really needed to understand systemwide where the risks might be. No other agency has access to the data that we have in order to do the work that we do. And that really complements the work of other agencies.

Mr. TIPTON. In light of your previous testimony regarding the critical role that the GAO plays in overseeing OFR I would be interested to know your thoughts on the GAO's forced suspension of its audits. There were serious concerns that the information OFR provided to the GAO, from datasets to staff management practices, was unreliable.

The Government Accountability Office was forced to suspend an audit because it couldn't verify if a Government agency could be held accountable. Do you see this at all problematic?

Mr. BERNER. Congressman, I have just seen the testimony for the first time this morning and it does say there were some concerns about whistleblower activity that forced them to suspend the audit. But as I mentioned earlier, we have, and will, and always do collaborate and cooperate with GAO to give them everything that they need to understand what we are doing and how we are doing it.

And as I understand it, that matter was turned over to the inspector general at Treasury from what they said here, and that they are conducting an investigation. But, I don't comment on investigations, that is what is going on there, it depends on the Treasury OIG.

Mr. TIPTON. I would be interested, Director, to be able to know how you can testify before this committee that when we are talking about the transparency being able to get that information and accountability that you strongly support the GAO's oversight function I assume?

Mr. BERNER. I do.

Mr. TIPTON. And appreciate the constructive work that they do in conducting the reviews. If the information provided to the GAO, if it is not able to be proven reliable, tell me how that works with you?

Mr. BERNER. Congressman, as I said, I cooperate with, and my staff cooperates with, the GAO when they engage with them. My staff and I meet frequently to understand what the GAO is asking for. And my direction to them is to make sure that they cooperate fully, that they give them everything that they need. And if there are concerns expressed by GAO that they are not getting what they need, then we make sure that we get them everything that they need.

As far as this particular audit was concerned, as I mentioned there were some delays that were unfortunate. But we have been working with the GAO ever since we started the organization, want to continue working with the GAO to make sure that the oversight that is appropriate and necessary really goes forward in a way that it should.

Mr. TIPTON. My time has expired Madam Chair. I yield back. Thank you.

Chairwoman WAGNER. The gentleman yields back. The Chair now recognizes the gentleman from Missouri, my friend and delegation colleague, Congressman Cleaver for 5 minutes.

Mr. CLEAVER. Thank you Madam Chair.

Thank you for being here, Mr. Berner.

Mr. BERNER. Thank you.

Mr. CLEAVER. One of my big concerns is if you don't have sufficient resources and staff to fulfill your mandated responsibility as an agency, then you get blamed for not having—not being able to do all the things that we gave for you to do. And when I discovered that in the 2018 budget release, in May, it required a 25 percent cut, so you were at 220 something employees, I think you lost 100. Is that about right?

Mr. BERNER. Congressman, I think our current workforce is at 207.

Mr. CLEAVER. Two hundred seven. So how many staffers have you had to eliminate or positions since the budget release for 2018?

Mr. BERNER. No steps have been taken in that regard yet.

Mr. CLEAVER. Let me ask you another way, are you doing a review now to figure out who—what jobs you can eliminate?

Mr. BERNER. We are doing a thorough ongoing review of the OFR as I mentioned in my testimony. We are taking stock of what we do, how we do it, but with an emphasis on two things. One, is to meet our mission, as you said. And second, that, as I mentioned earlier, derives from the council's needs, to make that as effective and efficient as we possibly can.

And we think that by doing that review, then we will be able to decide in consultation with the Secretary and others at Treasury how we should go about doing that and that review is ongoing as we speak.

Mr. CLEAVER. Suffice it to say the positions wouldn't have been there if you didn't need them. The people—whatever changes you make, whatever reductions you make in staff, I am saying those positions would never have been created in the first place if you didn't need them.

Mr. BERNER. Congressman, when we started the organization, as I mention, it was a startup. And I would be the first to say that as we looked at the organization as it grew we made changes along the way, in organizational structure and skills needed. Furthermore, I would argue that the mission changes in the sense that the financial system is always evolving and so we need to be adaptable and agile in responding to those changes.

So this is not something that is cast in stone, we want to be a vibrant organization that really does meet its mission and adapts to changing needs, and that is the kind of review we are doing right now.

Mr. CLEAVER. All right. Thank you very much. I have been here since the creation, I went through the entire Dodd-Frank, sometimes 6-hour committee hearings. And I know that your agency was—had been beaten, slammed, and thrown under the bus and then backed over for lack of transparency. And I think the Council then took some steps to say we want full transparency and openness, so you opened up to a number of public hearings, each year—I am not sure how many you are having now—but where the public can come in.

Mr. BERNER. I am happy to appear wherever invited.

Mr. CLEAVER. No, no, no. I am just saying I am curious about how many are being held. How many sessions are open now to the public?

Mr. BERNER. All of our work is open to the public. So for example, we just had two conferences recently, which were open to the public, that focused on the issue of fintech and where the opportunities in it and risks might be. Those are completely open to the public. We webcast them on our website. We want to make sure that everything that we do is transparent and open to the public.

Mr. CLEAVER. So are there people from the Administration attending any of those meetings?

Mr. BERNER. Yes, there are. In fact some people from the Administration spoke at those conferences.

Mr. CLEAVER. So where is all of this lack of transparency? How do you come up with that? It's a rhetorical question.

Mr. BERNER. I understand.

Mr. CLEAVER. Thank you very much. I yield back.

Chairwoman WAGNER. The gentleman yields back. The Chair now recognizes the gentleman from Michigan, Mr. Trott, for 5 minutes.

Mr. TROTT. Thank you Chair Wagner. I want to thank the director for being with us this morning.

So you started out in 2013 with four employees in an office—no office of your own and now you have 207 employees, an office in New York, and an office in Washington. Is that correct?

Mr. BERNER. Yes, sir.

Mr. TROTT. That is pretty extraordinary growth in 4 years. Wouldn't you say?

Mr. BERNER. Yes. Actually, Congressman, we began a little bit before that, but yes, it is.

Mr. TROTT. How many people—what is the most number of people you have managed in your prior life perhaps when you were chief economist at Morgan Stanley? How many people did you manage there?

Mr. BERNER. At Morgan Stanley I had a team of about 60 people managed on a global basis in every corner of the world.

Mr. TROTT. I am greatly bothered by—and I haven't been in Congress that long, but I am greatly bother by the GAO's inability to complete its audit. When you first took over the position and started to build the office in May 2013, you were the keynote speaker at the conference, the Fed conference in Cleveland, and you were interviewed. The interview described your position as a linebacker, a roving linebacker that doesn't have any specific job, but you just fill in the gaps where necessary.

And in that interview you said it is your job to develop trust from the other agencies, and to be successful it is going to require that you develop a culture of collaboration, engagements, and accountability. So certainly it is rhetorical for me to ask you this, but you feel like you have accomplished that, even though the GAO couldn't complete its audit so that the taxpayers could know their money is being spent wisely?

Mr. BERNER. Congressman, I feel that we have really worked hard to try to accomplish that and I have acknowledged that we need to do more work to get to our aspirations.

Mr. TROTT. So let's talk about some of your good work. So your analysis of the asset management industry was roundly disparaged by a number of different commentators, specifically the bipartisan group Better Markets, which usually calls for more heavy Government intervention, said that the OFR report adopts an arbitrary analytical framework; it provides literal empirical support; it ignores or minimizes the significance of relevant factors; and it conveys its finding in such vague and amorphous terms that it provides to be of little value and is in fact misleading. So that was

Better Markets, the Dean of Columbia, the Chair of Brookings, the head of Harvard Law School, a bipartisan group of Senators all said the report with respect to the asset management industry was of no value.

What happened there, did the OFR drop the ball or do you dispute all of the commentators and expert analysis of your work?

Mr. BERNER. Congressman, I would say that in that report one of the cornerstones of the analysis, the analytical framework was an approach which looked at the activities of asset managers, rather than at the entities themselves. I think you need to look at both, but the activities framework is something that is really important for us to all focus on when we look at risk in those—in that industry and for that matter in others. In fact, in the Treasury Report on Capital Markets and the Treasury Report on Asset Managers and Insurers, that is the framework that they recommended.

Mr. TROTT. So all these smart people didn't understand the purpose of the report. Is that what you are saying?

Mr. BERNER. No. I am simply saying that that was the purpose of the report to shed some light on what the industry looked like and how to go about looking at risk in it.

Mr. TROTT. So let's go back to Mr. Green's opening statement. Did you believe that without the OFR, FSOC could not possibly identify an institution that posed a systemic risk or that you are critical to that work?

Mr. BERNER. I think the OFR is critical to that work because, as I mentioned, we have some authorities, we have some capabilities that others don't.

Mr. TROTT. Right. But part of the—earlier my friend from Missouri made a comment that you would never of course create a position that wasn't necessary. And part of my concern sitting here representing the people of the 11th District of Michigan and hardworking taxpayers is you have these Government bureaucracies that get created with no specific mission that oftentimes develop a very problematic culture. I am not sure which culture is worse, the culture at OFR or the culture at CFPB, but they are both bad from what I have read. And they grow, and they grow, and they grow. And that is why people coming into D.C. come across the bridge and all they see are cranes, there was never a recession in Washington. The Government just keeps growing.

And if it were just the salaries that were the problem, then we probably could live with that because we have a $4 trillion budget so we can have a few extra salaries baked in there, but it is stifling the banking industry. And it is really death by acronym is what I call it, a bank today has to comply with every possible acronym from OFR, to CFPB, to EEOC, to every possible acronym that is known to man. And it is killing banking, that is why small businesses in my district can't get loans.

But I appreciate your time this morning and I wish you the best as you return. I don't know what your plans are when you leave in December but maybe it's back to the private sector.

Mr. BERNER. Thank you, Congressman.

Chairwoman WAGNER. The gentleman yields back.

The Chair now recognize the gentleman from New Jersey, Mr. Gottheimer, for 5 minutes.

Mr. GOTTHEIMER. Thank you, Madam Chairwoman.

Mr. Berner, I was reading in the report and quoting from page 6 of the OFR Annual Report to Congress, that quote, "the financial system is an attractive target for cyber thieves and other hackers because financial companies manage the Nation's wealth and handle trillions of dollars in transactions every day and that underlie the U.S. economy."

So my question, does OFR downsizing risk our ability in your opinion to protect our country and our financial institutions from cybersecurity attacks? Does it risk our overall financial stability? And so if you don't mind addressing that I would appreciate it, please.

Mr. BERNER. Thank you, Congressman. I don't think that any of us alone has the ability to protect our financial system, our economy from cyber attacks. The attacks are going to happen. But the work that we do in collaboration with Members of the Financial Stability Oversight Council and others and, indeed, in partnership with the industry, I think gives us a better opportunity to add resilience to the system so that when the attacks occur we can understand what their implications might be and so that we can minimize the damage.

Mr. GOTTHEIMER. Thank you. I am good. Thanks. I yield back. Thank you.

Chairwoman WAGNER. The gentleman yields back.

The Chair now recognizes the gentleman from Tennessee, Mr. Kustoff, for 5 minutes.

Mr. KUSTOFF. Thank you, Madam Chairwoman. And Director Berner, thank you for joining us here this morning. In your testimony you mentioned that the OFR supports the FSOC by, quote "Purchasing and securely maintaining more than 65 other datasets used by the FSOC staff." closed quote. That does seem like a large number, 65. Can you tell us how much the OFR spends each year on purchasing commercial datasets?

Mr. BERNER. Yes, sir. I would have to go back and look at the exact number, but we have a budget for purchasing datasets that is roughly $4 million.

Mr. KUSTOFF. It seems like somewhere I read that the number was between $5.5 and $6 million. Would that be incorrect?

Mr. BERNER. I will go back and check, Congressman, and get you the exact number.

But let me just say that as far as the number is concerned, one of the things that we are doing in our review is to make sure that we don't purchase or collect any data that aren't absolutely necessary. So we are taking a review and really looking thoroughly, and working with the council to make sure that we make efficient use of our resources.

Mr. KUSTOFF. Thank you. The GAO's testimony states that the OFR's acting deputy director of research, chief data officer, and chief operating officer were unable to respond to GAO's questions about the OFR's strategic plan and performance measures related to its data collection and data sharing functions. Can you tell me how those commercial datasets were chosen for purchase?

Mr. BERNER. Yes, Congressman. They were chosen in consultation with FSOC. When they had needs for data, we went and made sure that those needs were satisfied. In addition, when we worked with other agencies, we looked to their needs as well and also to the work that the OFR was doing on behalf of the FSOC. Some of those data were required for that purpose as well.

Mr. KUSTOFF. Director, have there been any issues related to OFR's ability to handle sensitive data appropriately? And if so, if you could tell me what steps OFR has taken to ensure that the controls are in place to manage the risk to the confidentiality, the integrity, and the availability of sensitive data?

Mr. BERNER. Thank you, Congressman, for that question. It is a very good one, because there is no priority for us that is higher than maintaining the security of data that are entrusted to us. We make sure that all of our employees go through security training, which is extensive every year and 100 percent compliant with that. We make sure that all of our systems and the way we share data with others is as secure as it can possibly be. No data can be taken outside of the OFR without an agreement.

Data that comes in are done under a strict memorandum of understanding with the supplying agency. Even those which we acquire or get from industry, those are subject to a strict memorandum of understanding as well. And those specify the purpose for which the data will be used, who will have access to the data, how the data will be made secure. When we get data from those entities, they come in and actually look at our systems to make sure that they are in compliance with the security standards that they maintain and we do the same for them. So we go to great lengths to make sure that our data are kept secure.

We also go to great lengths, you mentioned integrity of the data, we go to great lengths to make sure that the data that we have are as high quality as they possibly can be, because you can't make good decisions unless you have high quality data.

So I can talk to you at greater length about that, but we work hard on all those things.

Mr. KUSTOFF. Thank you, Director. And thank you, Madam Chair, I yield back the balance of my time.

Chairwoman WAGNER. The gentleman yields back.

Pursuant to clause D(4), committee rule 3, the Chair recognizes the gentleman from Georgia, Representative Loudermilk for an additional 5 minutes upon the conclusion of the time allocated under the 5 minute rule.

Mr. LOUDERMILK. Thank you, Madam Chair, and thank you for the additional time, because this is extremely important. I have really some information I would like to understand seeing I wasn't here during this time period. I would like to really drill down a little deeper on your statement to Chairwoman Wagner that you believe OFR fully cooperated with GAO's 2014 audit.

In 2014 before this subcommittee you testified and I will quote that, "You wanted to reaffirm that the OFR is fully committed to transparency and accountability." Director Berner, do you still stand by that statement?

Mr. BERNER. Yes, I do.

Mr. LOUDERMILK. You do. Regarding transparency and oversight when you were before this subcommittee in March 2013 you testified that, and again I quote, "As we pursue the OFR's agenda we are committed to the highest level of transparency and accountability to the Congress and the public. We strongly support GAO's important oversight function and appreciate constructive work in conducting this review." Do you stand by that testimony?

Mr. BERNER. I do, Congressman.

Mr. LOUDERMILK. Thank you. Maybe this will go a little quicker than I thought it would. I appreciate that.

So I assume that the sentiments you expressed toward OFR's cooperation with GAO in support of GAO's functions have continued unabated since that time, since March 2013 to the present?

Mr. BERNER. That is correct.

Mr. LOUDERMILK. Thank you. In February 2014 you testified that one of the reasons OFR didn't need additional accountability to Congress was that and again I will quote, "we are subject to oversight by the various inspector general, inspectors general and by the Government Accountability Office, which is an arm of Congress. And in fact, when I was here 10 months ago, I testified on a report about transparency and accountability." Do you still stand by that testimony?

Mr. BERNER. I do.

Mr. LOUDERMILK. Thank you. Director Berner, given these prior testimonies which you agree you still stand by today and I appreciate that. I wanted to know if OFR engaged and repeated, and as it appears, systemic obstruction of the GAO's audit of the OFR.

Mr. BERNER. Congressman, I am not aware of any obstruction of GAO's audit of the OFR. If I may, we provided all the requested witnesses and documents that GAO requested.

When the audit was closed, we were not made aware of that, of the allegations, the reliability of the information provided or of any ongoing concerns that GAO might have had.

Mr. LOUDERMILK. So your statement here today under oath is that you fully cooperated with GAO, you were fully transparent with GAO, there was no obstruction, you fully met their timelines. Is that what I am hearing you say here today?

Mr. BERNER. With regard to the timelines, as I indicated earlier, there were some unfortunate delays in scheduling, but we made every effort to make sure that GAO had the information that it needed.

Mr. LOUDERMILK. Unfortunate would mean unforeseen.

Mr. BERNER. Unforeseen. There were scheduling conflicts. They wanted to talk to all the senior staff.

Mr. LOUDERMILK. There was no effort to avoid responding to GAO's request for meetings?

Mr. BERNER. Absolutely not.

Mr. LOUDERMILK. OK.

Mr. BERNER. No, we make every effort to comply with their request.

Mr. LOUDERMILK. If you will turn to Exhibit 2 in your binder, the testimony of Lawrence Evans, Managing Director of Financial Markets and Community Investment at GAO. I will give you a moment to turn there if you would like. Not too much time, I am on a time limit here.

Mr. BERNER. I am ready.

Mr. LOUDERMILK. Lawrence Evans the Managing Director of Financial Markets and Community Investment at GAO, states, "during the course of our review of OFR we experienced repeated problems with gaining access to both people and documents. Many meetings with OFR officials took months to schedule, some were canceled with short notice and requests for documentation and other information were delayed. We had to make repeated attempts to obtain required documentation and schedule interviews with agency officials.

These attempts included frequent follow-up emails and phone calls, the imposition of deadlines for document delivery that were either not complied with or resulted in production of some, but not all required documents and a discussion between GAO counsel and the chief counsel of OFR recording the agency's continuing delays. Despite these extensive efforts, we experienced significant delays that prevented us from completing our audit work within originally planned timeframes."

Do you not deny those facts?

Mr. BERNER. Congressman, as mentioned earlier, we made every effort to comply with GAO's request and as I also mentioned my chief counsel in consulting with the chief counsel at GAO, I thought we resolved all the difficulties that are described. And I just had a look at this this morning. So as far as I know, we have really worked hard to make sure we overcame those issues.

Mr. LOUDERMILK. So really this boils down to, it is not an opinion question, it is really yes or no. So do you deny the accusations, or the statement that was made by GAO in their report that you weren't cooperative?

Mr. BERNER. We made every effort to cooperate with the GAO.

Mr. LOUDERMILK. So it is not a yes or no. By what you are saying, you are saying no, that the GAO is fabricating their report?

Mr. BERNER. I am not saying they are fabricating their report. I am saying that there were some delays that we acknowledged, but that we made every effort to work with them and get them everything they needed.

Mr. LOUDERMILK. So you believe that transparency is still a vital goal and as you stated strongly support the GAO's important oversight function?

Mr. BERNER. Yes, I do.

Mr. LOUDERMILK. You believe that this removes the need for additional legislative oversight of the OFR, but at the same time cooperating with GAO doesn't seem to be—you are stating it is a top priority, but GAO is saying it was not a top priority.

Mr. BERNER. I am saying we made every effort to comply with GAO's request so that we could be transparent and accountable.

Mr. LOUDERMILK. It is a little troubling about every effort, because how do you define every effort? Is that an effort by the standard that you set up or the standards that GAO sets up?

Mr. BERNER. Congressman, I can appreciate the fact that there were some delays. We want to resolve those problems, want to make sure that GAO does have everything that they need to do their work, which I think is very important.

Mr. LOUDERMILK. Let's take it one step further. Let's look at a specific instance from Mr. Evans' testimony, this is in Exhibit 2 of page 4, he stated "OFR delayed and canceled meetings. We first emailed the OFR liaison to request an entrance conference, a meeting between GAO and the Agency under review that marks the beginning of an engagement on February 6th, 2015. OFR's officials agreed to meet with us in person on March 10 in part to accommodate our plans to bring field staff to Washington, DC.

We sent numerous emails to the OFR liaison and attempted to confirm the meeting logistics and attendees, but did not receive a response. On March 4th we provided OFR with a set of questions to guide the entrance discussions. However, on March 9th, 1 day before we were scheduled to meet, the OFR liaison emailed to cancel the meeting.

Although we provided several options for meeting with the agency officials, we were unable to hold the entrance conference with OFR until April 8th, more than 2 months after our first meeting."

Do you dispute those facts?

Mr. BERNER. I don't dispute those facts.

Mr. LOUDERMILK. Is this conduct of continuing to delay meetings something that is acceptable?

Mr. BERNER. Delaying meetings was certainly not the intent, Congressman. Our intent was to try to work with GAO to make sure that we got to them, that they got the things that they needed, and that we made witnesses available to them on the basis that they asked.

Now, I would say, Congressman, that we did have some turnover in the people whom they asked to talk to. People had left. We had a hiatus of leadership in certain areas.

Mr. LOUDERMILK. But if there was a reason to postpone the meeting, you would have let GAO know in advance so they could reschedule; is that what you are telling me?

Mr. BERNER. I am telling you that sometimes we let them know in advance when we knew the information.

Mr. LOUDERMILK. OK.

Mr. BERNER. And so we would—

Mr. LOUDERMILK. Let's pursue that for a moment. Are you aware of the fact that your senior staff knew about the conflicts that led to the cancellation of the entrance conference weeks before the conference date and then misled the GAO about that fact?

Mr. BERNER. I am not aware of that, no.

Mr. LOUDERMILK. We have staff emails. Exhibit 6 is a February 18 email in which Alicia Marshall, senior attorney, and your counsel office confirms the March 10 entrance conference date with GAO.

Exhibit 7 is an email in which an OFR senior staff member declines an invitation to the meeting with GAO because of a, quote, "3-day OFR senior management offsite from March 10 through 12."

Now, that was in March—that was February 20, well in advance of the March 10 date. And then Exhibit 8 is a February 26 email where Alicia Marshall is informed that another two of the senior staff members invited to the GAO entrance conference interview will be at the leadership offsite, and that is February 26, well in advance of the March 10.

But Exhibit 9 is the March 9 email canceling the March 10 meeting on less than 1 day's notice and strongly suggesting that the cancellation occurred because of a last minute change in senior staff's schedules; however, she knew that a month in advance, which the prior emails isn't an accurate representation, or at least a few weeks in advance, I should say.

Do you deny that?

Mr. BERNER. I certainly—I see the emails in front of me. I don't deny their veracity, no.

Mr. LOUDERMILK. I appreciate the Chairwoman giving me additional time.

Chairwoman WAGNER. A few more seconds to close, Mr. Loudermilk.

Mr. LOUDERMILK. Thank you, Madam Chairwoman, and I apologize for the time I exceeded, but this is very critical.

And as I look at this, I understand what you are saying, and I appreciate you standing by your testimony, but it doesn't appear, to me, including whistleblowers telling us that there may have been manipulation of data, that you haven't been fully transparent, and that there is some evidence of obstruction, which seems to be status quo with a lot of our agencies today. And I appreciate you being here. I appreciate your answers.

And Madam Chair, I appreciate the time.

Chairwoman WAGNER. The gentleman's time has expired. The Chair now recognizes the Ranking Member, Mr. Green, for 5 minutes to close.

Mr. GREEN. Thank you, Madam Chair.

Mr. Director, is it your opinion that the financial threats to U.S. stability have abated?

Mr. BERNER. Congressman, I think that we have, over the past many years since the financial crisis, done things to make the financial system more resilient. The financial system is always evolving, and new threats can emerge, and it is our job, in collaboration with the council, to try to identify where those vulnerabilities are, and we need to always be vigilant.

Mr. GREEN. There is a recommendation that requires, or would require a cut in the amount of funding you receive, perhaps as much as 25 percent.

Would you be able to function efficaciously with a 25 percent cut?

Mr. BERNER. Congressman, I think that, as I mentioned earlier in my testimony, it really is time to take stock of where we are in the OFR and to see whether or not we can get more effective and efficient. We have discussed options to do that with the Secretary and with staff with whom he works, and we are looking at those options now to make sure that we use our resources in the most effective and efficient way.

I do believe that the OFR can function effectively and efficiency with fewer resources. Just exactly what that looks like is really going to depend on what the counsel asks of us and what others ask of us.

Mr. GREEN. Should I conclude from your testimony, your recent statements, that you are here today to testify that OFR should be eliminated; that there should be no OFR?

Mr. BERNER. I am here to testify that the work that the OFR does is essential, is critical to help policymakers make good decisions so that we can make our financial system more resilient.

Mr. GREEN. And would you agree that there is some amount of cut in the budget that would cause OFR to lose its potency, its ability to be effective?

Mr. BERNER. I would agree with that, Congressman.

Mr. GREEN. Would you agree also that the budget cuts that relate to employees, some 40.5 percent by one estimate—I have seen another one a little bit higher—would you agree that these employees, the elimination of these employees, at some point that this would have an impact on your efficiency as well as your effectiveness?

Mr. BERNER. I would argue that if the cuts were too deep, that that would have a big impact on our efficiency and our effectiveness. I would also argue that I have enormous concern for the wellbeing and the morale of my employees, and I want to make sure that they are treated fairly and in a way that is respectful.

Mr. GREEN. How do budget cuts and the cuts in staff impact morale?

Mr. BERNER. I think, as I mentioned earlier, Congressman, that the uncertainty over where a budget is going, over whether or not people are going to keep their jobs, I think that uncertainty has weighed on morale. There are other factors, but I think that that certainly is one of them.

Mr. GREEN. And if OFR had been in place in 2008, would it have had an impact on the crisis such that it would have possibly mitigated it in some way?

Mr. BERNER. I think so. I mentioned earlier that the legal entity identifier system, which enabled us to understand who owned risk, who owned whom, those things would have really helped inform policymakers where the risks were. The work that we have done since that time, also would have helped us understand better, risk in various parts of the financial system, in short-term wholesale funding and derivatives markets, and I can give you a complete list of those things. In fact, we have written about that subject.

Mr. GREEN. Had you, or OFR, the opportunity to look into AIG, would you have been able to spot the connectedness that AIG seems to have had to so many institutions that were flying under the radar, as it were?

Mr. BERNER. I think that we would have done a better job of that, for sure.

Mr. GREEN. And finally this: You would say to me, without question, reservation, hesitation, or equivocation that AFR is absolutely, totally, and completely needed?

Mr. BERNER. Absolutely.

Mr. GREEN. I yield back.

Chairwoman WAGNER. The gentleman yields back. The Chair now recognizes the gentleman from Minnesota, Mr. Ellison, for 5 minutes.

Mr. ELLISON. I thank the Chair and the Ranking Member.

Director Berner, first of all, I just want to say thanks for your work and your hard work—

Mr. BERNER. Thank you.

Mr. ELLISON. —In your research analysis. It is helpful to have thoughtful analysis about what makes our financial markets work better, because ultimately, we are trying to serve people and make sure people's lives are better.

Mr. BERNER. I agree with that, Congressman.

Mr. ELLISON. And so if you would, sir, please congratulate your staff for the good work they are doing. I know you don't get a lot of appreciation. When you go back to your office, just let them know that we do—that your work is appreciated.

Mr. BERNER. Thank you, Congressman. I will be sure to do that.

Mr. ELLISON. Thank you. Specifically, the slide on the "Financial System Vulnerabilities" is really interesting to me. OFR finds some improvements since the financial crisis a decade ago. Contagion risk is lower. That is a good thing. And it is much less likely that financial stress in one financial institution or market is going to spill over into others. I think that is a good thing for mom and pop grocery stores, homeowners, whoever, it is a good thing. Financial institutions are less risky, and they are more solvent and are less highly leveraged.

Do you agree with all that, as my reading of material you supplied?

Mr. BERNER. I do, Congressman. And, you indicated, that is what we said in our report.

Mr. ELLISON. Yes. Yes. But market risk and credit risk remain high, and I would like to just ask you about risks facing the nonfinancial institutions.

I am very concerned about the growing monopolization of businesses in our economy. Has OFR looked at market concentration and the threat it poses to workers, small business, and competition? And let me just add for the record, you can hardly look at any industry in our country without about three or four big entities controlling 50, 60, 70 percent of the market. That is my analysis, not yours.

But would you please answer whether or not OFR has looked at market concentration and the threat it—and what risk it might represent to workers, small businesses, and competition?

Mr. BERNER. Congressman, we haven't looked directly at concentration in nonfinancial businesses. Others have. I would simply say we look at concentration risk in the financial services industry and how it might affect financial stability. That is certainly one of the things that we do look at.

For example, if there is an institution that first has a virtual monopoly or a large concentration of risk, that is something that we want to take into account. But as far as nonfinancial businesses are concerned in our economy, there is more concentration, and that is something that we need to pay attention to as we think about what that means for the economy as a whole.

Mr. ELLISON. Thank you. Because as I talked to my colleagues, we are all concerned about the falloff in the number of startups. What role does the concentration of markets have in starting a business? As you monopolize and concentrate, maybe it is the barriers that are just tougher than they used to be.

I am not saying that is certainly the case. I am saying it is worth some study. And we all say we believe in small business, let's think about this.

So let me jump to another question. We have seen deep cuts for regulatory agencies, like the Office of Financial Research, are being proposed. Do you have concerns that rewriting the rules to benefit banks, Wall Street, hedge funds, could result in lower wages, fewer businesses, more monopolies, more concentrated markets?

Mr. BERNER. Congressman, I have not written about concerns like that, and I would say that before I answer in the affirmative, we have to really take a look at those things, but I think that it is a reasonable question to ask.

I think that it is time to take stock of the things that we have done, to make the financial system more resilient, and it is pretty clear that some tailoring, some adjustments can be done.

One that is very important and that I support, in particular, is not having a one-size-fits-all approach to financial regulation, so that our community banks are not burdened by excessive regulation. That is very important. That is something that we talk about with our colleagues at Treasury and other financial regulatory agencies.

Mr. ELLISON. All right. I only have 24 seconds left. Could you give us an update on LEIs? I was a little late to the hearing. If you have a few seconds just to say what you can share as to how that is going?

Mr. BERNER. Sure. We have made great progress on that on a global basis, but it is not sufficient, and I think it would benefit by having U.S. regulators mandate the use of the LEI in regulatory reporting. That would actually help reduce the cost of regulatory reporting and make the reports more useable by regulators and by the public.

Mr. ELLISON. Thank you. I yield back.

Chairwoman WAGNER. The gentleman's time has expired.

The Chair now recognizes the gentleman from Indiana, Mr. Hollingsworth, for 5 minutes.

Mr. HOLLINGSWORTH. Mr. Berner, I genuinely appreciate you being here today. I know that one of the things both sides of the aisle are very concerned about is the prevention of a future crisis like we saw back in 2008. But I know something I am gravely concerned about is employing the same strategy that failed to see the 2008 crisis and only doubling down on that strategy and expanding that strategy instead of refocusing on strategies that have a higher likelihood of reducing the amount of systemic risk.

And to that point, I know one of the primary purposes of OFR, at least as put forth in the Dodd-Frank Act, was to perform some of the economic research for FSOC. Now, there are a variety of other players that do the same thing. Notably, the Fed has over 300 PhD economists in its employ, especially in the division of financial stability, where the primary mission is to, I quote, "develop and coordinate staff efforts to identify and analyze potential risk to the financial system and the broader economy, including through the monitoring of the asset prices, leverage, financial flows, and other market risk indicators."

Within this division, the financial macroeconomic stability studies section also, specifically researchers, and I quote, "linkages between financial stability and macroeconomic performances, including the effects of distress of financial institutions," end quote.

In addition to that, the Treasury Department has a number of other economists in its employ. I guess what I am asking or trying to get to is, why does the Federal Government need another redundant agency with more redundant employees to do the same type of research?

Mr. BERNER. Congressman, as I mentioned earlier, we have at least two unique features that make us good partners for the Federal Reserve, for the Treasury Department, and indeed for the FSOC.

Our purpose, as I mentioned earlier, is to serve the FSOC's needs. Those are, first, that we have access to data that others don't. If we can share them with others in the course of their work, we do that. But certainly we share the work and results that we do.

And second, we look uniquely across the financial system where others cannot. Even the Fed, even others in the financial regulatory community don't have that same broad authority that we do, and so we work to fill the gaps that they might have both in collecting data and in doing the analysis.

Mr. HOLLINGSWORTH. Yes. So taking both of those points, which I know you had made before, and I appreciate you reiterating. The second one first is this really a nebulous concept of looking at systemic risk, and I have heard witness after witness after witness come in here and talk about how difficult it is to both measure and understand systemic risk.

And, look, I am just an old business guy, and I feel like we have, in this institution, redundancy, and now asking them to try to look at and measure something that is really hard to understand, nebulous, and maybe, in the end, isn't delivering any further protection with regard to all of this research.

So I guess how do you measure the systemic risk, as you look broadly across the economy, and what is it exactly that you would measure the effectiveness by which you are looking for that?

Are we just waiting for another crisis?

Mr. BERNER. I am really glad you asked that question, Congressman because I am an old business guy myself. Having been in business for 30 years. But I actually don't like the term "systemic risk." I prefer to look at "threats to financial stability" because that enables us to look at them individually and collectively—both.

And that is our approach in the Office of Financial Research. We look at vulnerabilities in the financial system. We have identified them in our reports, including the latest one, and we put them together to come up with an assessment of overall risks. That is the purpose of the monitoring that we do. That is the purpose of collecting the data that we do.

Mr. HOLLINGSWORTH. Yes. So one of the old adages, "fight the last war," sometimes we fight the last war instead of the next one.

We had these 300 economists at the Federal Reserve, all of whom, presumably, were concerned about macroeconomic stability and threats to financial stability, and now, I guess with an extra 10 PhDs and an extra 12 PhDs, we should rest at night knowing that 312 will do the job where 300 didn't do the job.

What is unique about your organization that enables them to see something that no one has seen before, no economist quite under-stands fully, and that we haven't at least seen the results thereof to assure that what we think we are getting we are getting, with those taxpayer dollars?

Mr. BERNER. I wouldn't say that we have greater peripheral vision than others, but I think we have the ability and the authority to look in places that other people aren't looking.

When you look outside the banking system, you look in nonbank financial institutions and how the financial system is evolving. Think about innovation, which has enormous benefits for the financial system and for the economy. But innovation may also carry risks. So we need to understand what those risks might be and consider them.

One of the things that we do in order to do that is to work with not just our stakeholders in the Federal Government and in the regulatory community, but we also engage with industry to understand how they manage their risks and to see what they see going on in the financial system.

Mr. HOLLINGSWORTH. I guess taxpayers back home are gravely concerned about the level of redundancy that we have in the Government, and even more concerned with the significant risk and detriment of another financial crisis, that we are doubling down on a strategy of we just need a few more people looking in a few more places and certainly we will find the problem before it becomes an enormous burden on taxpayers, and I worry about reiterating that strategy.

And with that, I will yield back, Ms. Chairman.

Chairwoman WAGNER. The gentleman's time has expired.

I would like to thank Mr. Berner for his testimony today.

The Chair notes that some Members may have additional questions for this panel, which they may wish to submit in writing. Without objection, the hearing record will remain open for 5 legislative days for Members to submit written questions to these witnesses and to place their responses in the record. Also, without objection, Members will have 5 legislative days to submit extraneous materials to the Chair for inclusion in the record.

[Whereupon, at 11:23 a.m., the subcommittee was adjourned.]

A P P E N D I X

December 7, 2017

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 "Examining the Office of Financial Research"

December 7, 2017

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 Wagner, Ranking Member Green, and members of the subcommittee, thank you for the opportunity to testify this morning on behalf of the Office of Financial Research.

This hearing will be my final opportunity to testify before Congress as OFR Director because, as you probably know, I am preparing to leave the OFR at year's end. I have had the privilege of serving as the OFR's first Director since January 2013 and before that, beginning April 2011, as Counselor to the Treasury Secretary with the assignment of standing up the OFR.

Back then, we had only four staff members and no separate office or infrastructure — just a broad mandate to support U.S. financial stability after the worst financial crisis since the Great Depression.

Today, the OFR has the resources to meet that mandate: an expert staff of men and women with the tools needed to do their jobs, an office in Washington, a small office in New York, and an analytic environment where OFR staff members in data and research securely maintain large datasets and conduct computing-intensive analysis.

I am proud of the accomplishments that the dedication of the OFR workforce has made possible toward fulfilling our mandate and delivering value to our stakeholders, primarily the Financial Stability Oversight Council (FSOC, Council). Our staff attained these consequential achievements despite headwinds from working for a start-up amid persistent uncertainties about existential threats to the OFR.

In the remainder of my testimony, I will discuss each of the topics requested in the subcommittee's invitation letter.

OFR Progress in Fulfilling Its Statutory Mandate

The Dodd-Frank Wall Street Reform and Consumer Protection Act (Dodd-Frank Act) gave the OFR a dual data-and-research mandate. In support of the Council and member agencies in fulfilling their purposes and duties, the Office is tasked with improving the scope, quality, and accessibility of financial data; assessing and monitoring threats to financial stability; and evaluating financial stability policies.

All of the Office's activities are undertaken to fulfill that mandate. Usefulness in helping to fulfill the mandate is our yardstick for measuring the importance and priority of every proposed OFR project and activity.

FSOC Support

In support of the Council, its committees, and its members, I and members of the OFR staff work routinely with them on a wide variety of FSOC activities and initiatives.

As Director, I am a nonvoting member of the Council. I and other members of the OFR staff maintain many points of contact with members of the FSOC staff and the staffs of FSOC members to determine their needs from the OFR for support, and collaborate on how to provide that support.

The OFR supports the FSOC and its members by:

- collecting, maintaining, and securely sharing supervisory and commercial datasets;
- purchasing and securely maintaining more than 65 other datasets used by the FSOC staff and used for the FSOC Annual Report and other analytical needs, including:
    - credit default swap data,
    - data on trends in the primary syndicated loan market and on principal market participants,
    - granular information on credit trends in lender portfolios and in newly originated loans,
    - a global insurance database,
    - information about residential mortgage and mortgage-backed securities activity,
    - a fixed-income securities database,
    - anonymized, loan-level mortgage information,
    - data on measures of credit risk in publicly and privately held firms, banks, and insurance companies, and in broad classes of equity and debt-related assets, and
    - data and accompanying tools to combine comprehensive banking financial statements with a wide range of other bank information.

- leading the FSOC Data Committee — a Council forum for sharing information and coordinating action on data-related topics that affect member agencies;

- producing the Interagency Data Inventory — a catalog of data collected by member agencies — and co-leading the Data Committee's working group that updates it. Maintenance of the inventory, now on the OFR website, is increasingly important as we strive to identify opportunities to reduce the financial regulatory reporting burden;

- engaging with the FSOC staff in weekly calls and in other ways to coordinate on current projects and issues;
- supplying data and analysis related to financial system vulnerabilities;
- helping the Council identify and prioritize threats to financial stability, in part by regularly producing and presenting threat assessments to the FSOC Systemic Risk Committee. These assessments include results of our analysis of confidential data available to the OFR on credit default swaps, repo and securities lending markets, and private funds;
- conducting, coordinating, and sponsoring objective research to evaluate and improve regulatory and financial stability policies;
- developing new monitoring and risk-assessment tools and presenting them to the FSOC Systemic Risk Committee;
- presenting the results of our work to the Council members and to FSOC deputies committee to inform their discussions of financial-system vulnerabilities and potential policy steps;
- presenting at, and contributing to discussions in, other FSOC working committees and groups, including the Regulation and Resolution Committee and Financial Market Utilities Committee;
- assisting the FSOC in developing its annual report by providing data, analysis, and writing;
- providing data and analysis to support the FSOC's nonbank designation process; and
- developing procedures and protocols for securely sharing data among the FSOC, its members, and the OFR.

The OFR has also partnered with FSOC member agencies on a number of research and data projects, some at the specific direction of the FSOC or its member agencies, and others in a less formal response to concerns discussed. Examples related to data scope and data quality are provided in the next section.

Progress on Improving Financial Data

More broadly, good data are essential for good policymaking. Data needed to inform financial stability analysis and policymaking must often be granular. Such data must also be standardized to assure their quality; to make them easier to compare, aggregate, and analyze; and to make them shed light on who owns what risks.

Our data-and-research agenda requires advanced and secure information technology tools. We bring large quantities of data into our analytical environment, which we designed and built specifically to securely support computing-intensive work with large datasets. The need to keep these data secure and safeguard against breaches drives much of our security work.

The OFR has made strides in building and strengthening all three legs of what I call the three-legged stool of improving the scope, quality and accessibility of financial data.

Data Scope

Regulators and the industry both need financial data that are comprehensive in scope. Those data must also be detailed enough for assessing and monitoring risks and vulnerabilities in the financial system, and for policymakers to make informed decisions. Fulfillment of the OFR mandate to fill gaps in the data needed involves collecting key data from the financial industry, often collaborating with fellow regulators.

How we collect data determines how heavy or light the regulatory reporting burden will be. The OFR and many fellow regulators are committed to identifying, using, and promoting best practices in collecting data to reduce or eliminate duplication and minimize any collection burdens. The OFR has been able to accomplish much of its work relying on data already collected by other regulators, or voluntarily provided by industry, rather than undertaking compulsory measures.

For example, we have collaborated with two FSOC member agencies — the Federal Reserve and the Securities and Exchange Commission (SEC) — on an initiative to collect data describing activity in bilateral repurchase agreements, or repos, which are a critical source of secured short-term funding across the financial system.

A repo is essentially a collateralized loan, when one party sells a security to another party with an agreement to repurchase it later at an agreed price. Securities lending is the same thing but involves a loan rather than a sale, and is a much smaller market. The U.S. repo market provides more than $3 trillion in funding every day. However, the repo market can also contribute to risks to financial stability, so obtaining more information about these transactions will fill an important data gap. Bilateral repo transactions involve specific securities as collateral and may be transacted bilaterally between two parties.

To ensure we employed best practices in data collection, we launched a voluntary pilot project in 2015 in partnership with the Federal Reserve and the SEC to collect data on bilateral repo transactions from a representative handful of firms engaged in repo markets. The pilot provided valuable insights into the overall repo market and the data that market participants used to describe repo transactions.

Having learned from the pilot, and shared the results of that initiative with the Council and the public, we recently reported to the Council and the public our plan with the Federal Reserve to undertake a rulemaking later in the current fiscal year for an ongoing data collection covering cleared bilateral repo transactions.

These data are critical for and will be used immediately in publishing the Secured Overnight Financing Rate, which has been selected as an alternative to the LIBOR interest rate benchmark. U.S. dollar LIBOR has been used to set interest rates on trillions of dollars of retail mortgages, corporate loans, derivatives, and other financial products, but LIBOR's past reliance on survey submissions rather than transactions undermined the integrity of the benchmark and permitted manipulation.

Data Quality

Providing more and better data is important. Standardizing them and sharing them now, in financial calm times, across borders is equally so. There is no point for regulators to ask firms for data that are not useful or in formats that cannot be used. In addition, firms bear costs for providing data in a different format if the data is already being provided to regulators in a format that we could use.

Data quality is the second leg of the three-legged stool of better financial data. High-quality data that conform to common standards facilitate aggregation, sharing, risk management, and good decision making. High-quality data prevent overlap and duplication among data collections, and facilitate the collection of data once for a variety of purposes by many regulators.

The global Legal Entity Identifier, or LEI, is a foundational data standard that the OFR played a lead role in developing and promoting.

Like a bar code for precisely identifying parties to financial transactions, the LEI helps make the flood of data flowing in the financial system easier to compare and share. The LEI can also generate efficiencies for financial companies in internal reporting and in collecting, cleaning, and aggregating data.

If the LEI system had been in place during the financial crisis, the breadth and depth of exposures to the failing Lehman Brothers would have been easier to identify, assess, and manage.

By reducing overlap and duplication, the LEI can also ease regulatory reporting burdens. Estimates of industry savings in managing their data by using common standards run into the billions of dollars. Because of these savings, industry groups have called on regulators to broadly adopt the LEI.

Globally, more than 800,000 companies now have LEIs. Ironically, however, given that the LEI was an American brainchild, U.S. regulators have been slow to abandon their individual data identification systems or to map the LEI to those systems. U.S. regulators are unfortunately lagging behind their counterparts overseas, most notably in the European Union.

For years, I have been calling for regulators at home and abroad to step up and require the LEI in regulatory reporting. The time has come to move from suggesting change to requiring it. U.S. federal financial regulators should mandate the LEI in regulatory reporting. I am also calling for industry to amplify its support.

The OFR has the authority to require the use of data standards when we collect data, so we will propose requiring the LEI in our upcoming data collection on repo transactions.

To promote data quality, we have also collaborated with U.S. regulators and FSOC members, including the Commodity Futures Trading Commission (CFTC) and the SEC, and with those abroad, specifically the Bank of England and the European Central Bank, to create frameworks for setting global standards for granular data, such as in swaps and other over-the-counter derivatives.

To help implement those standards, the OFR and the CFTC conducted a joint project to promote the use of data standards in swap data reporting to assure swap data quality and usefulness. An initial memorandum of understanding initiated the project to enhance the quality, types, and formats of data collected from registered swap data repositories. Under a second agreement, members of the OFR staff worked at the CFTC on the project.

In addition, we advised the SEC on swap data, and on ways to improve Form PF for measuring the risk exposures of hedge funds and other private funds. We have also advised the Consumer Financial Protection Bureau and the Federal Housing Finance Agency on mortgage data standards.

Data Accessibility

Data accessibility is the third leg of the three-legged stool of better financial data. Lack of data sharing among regulators is a major cause of duplicative and overlapping reporting requirements, so the OFR is fostering data sharing through efforts to overcome obstacles to it.

A key — perhaps the key — challenge lies in balancing the need to share data more broadly with the imperative to protect data security. Tools for keeping data secure include security protocols, encryption, and authentication. Using these tools and aligning data security requirements among regulators helps to persuade data owners that their shared data will be secure.

The Federal Financial Institutions Examination Council — the interagency group of banking regulators — has identified some best practices for secure data sharing, including technology solutions and the use of standards to assure that shared data are consistent and accurate.

A related challenge is to reach agreement on the details and protocols of data sharing. Specific memorandums of understanding, or MOUs, are needed to spell out those details. The OFR has signed more than 50 such MOUs with federal, state, and overseas regulators and others to facilitate data sharing.

Negotiating MOU details can take months. To streamline and accelerate the process, we are working with other FSOC members to develop a set of common MOU provisions.

So-called "metadata repositories" can also facilitate sharing and avoid duplicative data collections. The repositories, which contain metadata — data about data — rather than the datasets themselves, give regulators insight into the data collections of other regulators. A regulator contemplating a new data collection can consult the repository to see if another regulator is already collecting the needed data.

We plan to build on the Interagency Data Inventory, a metadata repository described above. We will also help other organizations to link their existing metadata catalogs or create new ones. We envision the OFR maintaining a central library of financial metadata for multiple stakeholders, giving authorized users a single, secure place to find sources of data.

Reducing Regulatory Reporting Burden

As the previous discussion implies, our data-related work facilitates reducing the regulatory reporting burden, and the OFR has launched a pilot project to explore how we can collaborate with the Council to do that.

Regulation and oversight of financial institutions and markets is divided among federal and state agencies. Banks, brokers, and other U.S. financial institutions and markets are overseen on the federal level by nine independent regulators and three self-regulatory organizations. (Insurance companies and some banks are also regulated at the state level). Firms engaged in multiple financial activities are governed by more than one regulator. Sometimes a single activity is overseen by multiple regulators.

This fragmented approach enables tailored regulation and enforcement, but can also result in inconsistent and inefficient oversight and reporting. The current regulatory structure has led to inconsistencies in agencies' data collection activities. U.S. financial institutions report that they are often required to submit the same data to more than one U.S. regulator using different calculations, classifications, and formats.

Duplicative, conflicting, or inconsistent reporting requirements have the potential to increase costs, undermine the efficiency and quality of data collections, and impede data comparison and integration. Duplicative, conflicting, or inconsistent reporting requirements can also misalign regulatory reports from the data that firms use for their risk management. Likewise, these requirements could impair the ability of government officials to assess and monitor threats to financial stability and assure the functionality and integrity of financial markets. Finally, duplicative and inconsistent requirements can erode public confidence in government.

To better understand this issue, we asked a handful of financial institutions and industry groups for examples of such burdens. During initial discussions, firms focused on reports to FSOC member agencies. Information came from asset managers, banks, and financial services trade associations.

We analyzed a selection of the examples identified by industry to determine the general validity of industry concerns and identify ways the OFR might help address the issues. For each example, we compared multiple data fields to identify duplicative, conflicting, or inconsistent data requirements and found that the industry's concerns warrant further analysis. That follow-up work is underway at the OFR.

Progress on Financial Stability Research

A large part of the OFR's dual mandate involves financial data, while another major part involves conducting research and developing new tools to better assess and monitor financial-system vulnerabilities.

Much of this work is done in support of or in collaboration with Council member agencies. Based on OFR research, for example, we advised and collaborate with the Federal Reserve on ways to improve the stress testing of banks, including analysis of the data used in stress tests. We also conducted and maintain analysis to determine the best methods for identifying the systemic footprint of banking firms. In this effort, we built on our earlier research to show how a multifactor approach for assessing systemic importance and risk is superior to making determinations based solely on bank size.

Topics related to financial stability are explored in the more than 100 OFR research papers and reports posted on our website. These publications cover areas central to the OFR mission, such as potential improvements in stress testing banks and nonbanks, assessing the systemic importance of banks, and the risks and benefits of central counterparties.

We have submitted the required Annual Report to Congress every year since 2012 and have published a separate Financial Stability Report every year since 2015. All of this work is posted on the OFR website the benefit of the Council and the public.

Monitoring Tools

The website contains several OFR interactive monitoring tools; developing such tools was noted above as a statutory mandate. Two new tools are:

- Financial System Vulnerabilities Monitor – This monitor is a heat map of 58 indicators of potential vulnerabilities in the U.S. financial system, designed to provide early warning signals of potential U.S. financial system vulnerabilities that merit investigation. The monitor is organized in six categories: (1) macroeconomic, (2) market, (3) credit, (4) solvency and leverage, (5) funding and liquidity, and (6) contagion.

  We base our overall assessment of U.S. financial stability on an evaluation of the categories of risk in this monitor and on our research, analysis, and surveillance of the financial system. When the monitor shows high or rising vulnerabilities, it indicates a high or rising risk of disruptions in the future. Vulnerabilities typically lead to additional stress when shocks hit, such as when widespread losses or loan defaults strike the financial system. The additional stress can feed a downward cycle.

  The monitor currently shows that market risks from a potential sharp change in the prices of assets in financial markets are high and rising. Rising prices and falling risk premiums may leave some markets vulnerable to such changes. (Risk premiums are returns in excess of returns on risk-free investments.) Such market corrections can trigger financial instability when the assets are held by entities that have excessive leverage and rely on short-term debt and other liabilities.

- Financial Stress Index – The index is a daily market-based snapshot of stress in global financial markets, constructed from 33 financial market variables. The index is positive when stress levels are above average, and negative when stress levels are below average.

  Financial stress refers to a breakdown in the normal functioning of financial markets, sometimes with adverse consequences for the economy. Just as body temperature is used to monitor physical health, stress is one of several metrics that we use to monitor financial health. Episodes of stress can be severe, as in the financial crisis.

  The index currently shows that overall stress is near its lowest level since the financial crisis, primarily because of low volatility. However, this low volatility may be leading investors to take big risks, making the financial system more fragile and vulnerable to shocks.

  Policymakers need accurate, clear, and timely signals of market stress to effectively monitor potential effects on the financial system and the economy.

  The index incorporates five categories of indicators: (1) credit, (2) equity valuation, (3) funding, (4) safe assets, and (5) volatility. The index shows stress contributions by the United States, other advanced economies, and emerging markets.

- U.S. Money Market Fund Monitor – This monitor, displayed on the most visited page on the OFR website, is designed to track the investment portfolios of money market funds by funds' asset types, investments in different countries, counterparties, and other characteristics. Users can view trends and developments across the money market fund industry.

  Money market funds have been popular for decades among investors who want better returns than bank accounts offer, but still with little risk. Since the 1990s, institutional investors have used money market funds as a professional cash management option.

  The funds strive to maintain the value of the money invested in them. At the height of the financial crisis in 2008, investors in an established fund lost money when the price of each share fell slightly below $1 — called "breaking the buck." In the ensuing weeks, investors pulled hundreds of billions of dollars out of prime money market funds in favor of safer investments, such as government money market funds. The government stepped in to insure funds temporarily. That support ended in 2009. Reforms recommended by the Council and adopted by the SEC required prime funds as of October 2016 for institutional investors to use floating share values rather than a fixed share price.

  A lack of detailed data about fund holdings blocked regulators from seeing risks quickly in 2008. Since then, regulators have begun to require funds to report detailed data about their holdings more frequently. Funds are also required to hold more liquid assets.

To develop this monitor, the OFR analyzed more than 4 million records of monthly data on the holdings of about 500 funds over five years. Before the OFR released the monitor, the data were on the SEC website as separate individual filings and industry-level monthly reports. The OFR monitor displays the data in a graphical format that is easy to adjust to the needs of any user. Users can also download the data into spreadsheets.

- G-SIB Scores Interactive Chart – This online chart shows the set of 12 financial indicators that the Basel Committee on Banking Supervision, a group of bank supervisors from 28 jurisdictions, created in 2011 to identify global systemically important banks, or G-SIBs. A G-SIB is a bank whose failure is believed to pose a threat to the international financial system. The interactive chart displays the data for G-SIBs based in the United States, the eurozone, China, and several other countries. The chart graphically displays the data employed in our work to identify the systemic footprint of banking firms.

Annual Report

Our just-released *2017 Annual Report to Congress*, which I attached to this testimony, assesses the state of the U.S. financial system, including an analysis of threats to financial stability, key findings from our research and analysis, and status of the OFR's efforts in meeting its mission.

The report says overall risks to financial stability remain moderate. We reached this assessment by weighing the financial system's resilience against its vulnerabilities.

Although the system is far more resilient than it was when the financial crisis loomed a decade ago, new vulnerabilities have emerged, including in the last fiscal year. For example, vulnerabilities from excessive leverage (when resources are low relative to investment exposures) could be exposed by high and rising risks from a potential sudden drop in prices of assets in financial markets, particularly stock markets and bond markets.

The report highlights three specific, key threats to the U.S. financial system:

1. Vulnerabilities to Cybersecurity Incidents – The financial system is vulnerable to cybersecurity incidents because of its interconnectedness and heavy reliance on information technology.

   A large-scale cyberattack or other cybersecurity incident could disrupt the operations of one or more financial companies and markets, and spread through financial networks and operational connections to the entire system, threatening financial stability and the broader economy.

   The financial system is an attractive target for cyber thieves and other hackers because financial companies manage the nation's wealth and handle trillions of dollars in transactions every day that underlie the U.S. economy.

To assist in mitigating this threat, we are combining network analysis with maps of the financial system populated by real-world data to help identify potential systemic vulnerabilities to cybersecurity threats.

2. Obstacles to Resolving Failing Systemically Important Financial Institutions – Resolution is the process of restructuring or liquidating a failing financial company through bankruptcy or regulatory mechanism.

   The failure of a large, complex financial company could transmit distress to other firms and possibly trigger another financial crisis.

   After the last crisis, regulators developed important tools for resolving failing U.S. bank holding companies that are systemically important, but orderly resolution may be difficult in some scenarios. In addition, tools to enable an orderly resolution process for nonbanks are still works in progress.

3. Structural Changes in Markets and Industry – Three aspects of market structure pose threats: (1) lack of substitutability, which is the ability to replace essential services if a provider fails or drops that line of business; (2) fragmentation of trading activities across multiple channels and products; and (3) the chance of a difficult transition to a new reference rate to replace the London Interbank Offered Rate, or LIBOR.

We selected the key threats based on their potential impact, probability of occurring, probability of happening soon, and the preparedness of industry and government to manage them.

The annual report also discusses how we are serving our key stakeholders: the FSOC, FSOC members, the Treasury Department, Congress, the financial services industry, and the public. It describes our efforts to continue adjusting our focus to meet the needs of those stakeholders.

In addition, the report discusses our national and international collaboration over the past fiscal year, current staffing levels, our budget, and information technology projects. OFR employees participate in a wide variety of events related to financial stability research, data, and analysis. Collaboration with outside researchers, regulators, and industry experts domestically and abroad is crucial to our success.

OFR Financial Research Advisory Committee

We receive valuable suggestions and recommendations from our Financial Research Advisory Committee, a group of 29 professionals with experience in business, economics, finance, data science, risk management, and information technology. Committee members are drawn from industry, academia, and the policy community.

The committee, established in 2012, gives the OFR the benefit of industry experts who bring diverse perspectives to inform our work and help the OFR to fulfill its mission. Under the governance of the Federal Advisory Committee Act, the full committee meets semiannually. The OFR makes the minutes and webcasts of the meetings available to the public.

The three subcommittees — Research, Data and Technology, and Financial Services and Risk Management — meet at different times during the year to develop committee work.

The full committee met twice in FY 2017:

- February 23 – This meeting included discussions of financial stability risks identified by the OFR, the OFR initiative to develop a financial instrument reference database, adoption of the Legal Entity Identifier, and the research agendas of OFR programs on central counterparties and risks in financial institutions. The OFR also received updates from the committee's Financial Instrument Reference Database Viewpoint Working Group, Data Standards Working Group, and Financial Innovation Working Group.

- July 20 – This meeting included a presentation on improvements to the Financial Stability Monitor (redeveloped as the Financial System Vulnerabilities Monitor); a demonstration of the OFR's new monitoring tool, the Financial Stress Index; an update on the OFR's efforts to identify obstacles to broader adoption of the Legal Entity Identifier; and a discussion of the OFR's work to monitor and analyze operational risks and cybersecurity risks. The OFR also received updates from the committee's Financial Innovation Working Group.

Information Security

The OFR has no priority higher than information security. The OFR recognizes its responsibility to safeguard data collected and used in support of its mission. Appropriate management of all data ensures that the OFR remains an essential source of data and analysis for monitoring threats to financial stability.

We have built a strong security and privacy awareness program over the past several years dedicated to ensuring that our systems and our data are secure and will remain secure.

The OFR continues to cultivate a strong culture of security awareness and the Office follows applicable federal regulations, directives, and best practices for information security. For example, the OFR follows the National Institute of Standards and Technology guidance for the implementation and operation of a government information security program.

All OFR employees take annual security and privacy training, and employees who have access to nonpublic data are subject to heightened post-employment restrictions.

The OFR brings large quantities of data into its analytical environment, which was designed and built specifically for the OFR to securely support computing-intensive work with large datasets. The OFR's information security program works to ensure that the analytic environment has effective security controls and procedures that match the level of risk posed by the information systems, tools, and data the OFR holds.

In FY 2017, we renewed our commitment to maintaining the confidentiality, integrity, and availability of our systems and the information they hold. We conducted our annual internal and external "penetration tests," which were completed by an independent third party, with no major findings identified. We also deployed several additional controls and tools that strengthened our security posture.

Workforce and Culture

To achieve its mission, the OFR has made a priority of building and maintaining a diverse and highly skilled workforce. The Office began in 2011 with only four employees, increased to 30 by the end of that year, and currently stands at 207.

Our workforce has great expertise and experience in fields central to our mission and related support functions. As noted, I am proud of the accomplishments that the dedicated OFR workforce has made possible.

However, morale among OFR employees is low. Federal Employee Viewpoint Survey results for the OFR began to decline in 2014. In response, we took steps that included launching an employee engagement project that produced recommendations resulting in changes, such as an employee suggestion box, an employee Lunch and Learn program, a newsletter and electronic message boards to keep employees informed, a redesigned and upgraded employee intranet site, an online employee directory, and an employee recognition program.

These changes did not produce the desired results to improve morale, echoed in survey scores. After the 2015 and 2016 results confirmed that we had more work to do to achieve the goal of the OFR becoming a world-class workplace, we brought in outside experts from main Treasury to collaborate with us on additional steps to improve workplace quality. They recommended that OFR managers and employees engage in training to improve management, communication, and workplace engagement, for example:

- The OFR leadership team (Director, senior managers, and associate directors) enrolled in a "Leadership Deep Dive Program," a multiple-session course conducted by the Weatherhead School of Management at Case Western Reserve University.

- This program was complemented by a series of new and existing training courses in which managers enrolled, and offered by Treasury's Office of Human Resources and the Office of Civil Rights and Diversity, on a range of topics, including diversity and inclusion, combatting unconscious bias, performance management, merit system principles, and employee development.

- The OFR leadership team took additional diversity and conflict resolution training.

- The team took hands-on training on "The Speed of Trust," and later made the training available to the entire staff. The Speed of Trust program is aimed at changing the culture and performance of individuals teams by practicing behavior that build trust and communication and avoiding counterfeit behavior that undermines it.

In addition, Treasury's Office of Human Resources, Treasury's Office of Civil Rights and Diversity, Treasury's Office of Minority and Women Inclusion, and Treasury's Office of the General Counsel recommended that we hire an independent consultant to conduct a cultural assessment of the OFR workforce and provide recommendations to a panel of officials including me, and the heads the offices named above.

The contractor, Charles River Associates, issued its report just a couple of weeks ago (Nov. 21) and we shared the full report with Congress, the Secretary of the Treasury and his staff, Treasury's Inspector General, and the OFR staff. We posted the report on the OFR website and issued a statement on it to the public. The full report is attached to this testimony.

One of the reasons we launched the cultural assessment initiative was the appearance of several anonymous videos on the Internet making allegations including employee discrimination at the OFR. We took these allegations seriously and responded.

Charles River independently assessed whether statistical evidence indicates patterns of discriminatory practices at the OFR. The employment outcomes studied included applicant selections for hire, starting base salary, performance ratings, merit pay increases, current base salary, award selections, promotions, and separations.

The report concluded, "There is no evidence of a pattern and practice of adverse decisions with respect to gender or race/ethnicity in any employment practices analyzed. Instead, the analyses of the different employment outcomes are overwhelmingly neutral with respect to gender and race/ethnicity and are among the most neutral or favorable that CRA [Charles River Associates] has observed for an employer."

Charles River also elicited employee feedback about workplace culture, with a focus on diversity, inclusion, fairness, employee engagement, empowerment, and trust.

The report included recommendations for improving OFR culture, while noting that, "the study focused only on identified concerns raised by employees and did not ask what is working well at OFR, so the results do not represent a balanced view of both positives and negatives."

The full report is attached to this testimony.

Morale among OFR employees has also been affected in recent years and employee stress levels rose as proposals repeatedly surfaced in Congress to eliminate the Office, and as the President's Budget proposed steep cuts in the OFR budget and workforce. Late last month, employees were told that that the staff would be cut consistent with the budget.

Employees during OFR "all hands" staff meetings express concern about what the future holds; when decisions will be made about job cuts and budget cuts; and how OFR functions, work groups, and individuals will be targeted for elimination.

We are committed to making the OFR a world-class workplace, and believe that our efforts, especially recently, are having an impact. We have received only preliminary results from the 2017 Federal Employee Viewpoint Survey, but those suggest that we may see progress when the full results are available. We will provide them to the subcommittee when they are available.

OFR Cooperation with Oversight Bodies

The OFR always cooperates fully with oversight bodies, including Congress, the Government Accountability Office (GAO), and the Treasury Department's Office of Inspector General. We have provided documents as requested and made OFR employees available for interviews as requested.

Congressional Oversight

As noted, we have submitted an Annual Report to Congress as required by the Dodd-Frank Act every year since 2012 and made those reports broadly available on the OFR website. We submitted reports on Human Capital Planning as required from 2012 through 2015.

As required by the law (the Consolidated Appropriations Act of 2016, PL 114-113), we file quarterly reports to Congress on the OFR's use of funds, staffing levels, and actions to achieve Office goals and objectives.

We interact routinely with key members of Congress, their staffs, and committee staffs to respond to questions, address concerns, and share insights on issues related to financial stability.

In addition, we are working with other agencies to respond to Congressional inquiries about assessing the benefits of cross-market surveillance for market oversight and financial stability monitoring, and the potential impact for financial firms of a new Chapter 14 of the Bankruptcy Code.

I testify before Congress whenever invited. This is my fourth time testifying as OFR Director.

Auditors' Oversight

Since its establishment, the OFR has been the subject of four GAO audits (and interviewed for another five); six audits by the Treasury Inspector General; and participated in one audit by the Council of Inspectors General on Financial Oversight.

After a GAO report in 2012 called for the OFR to strengthen its transparency and accountability, we made significant strides to improve our communication with our stakeholders, including the public:

- We made major upgrades to our website, which began as only a few pages on the website of the Treasury Department, became a stand-alone OFR website in early 2015, and was recently redesigned to showcase our interactive online monitors and data standards work.

- More than 31,000 subscribers have signed up to receive alerts about our website updates.

- We created a senior management position of Chief of External Affairs to foster enhanced communication and outreach by leading the team responsible for communications, Congressional affairs, and outreach with FSOC, its members, and industry.

- We further developed our strategic planning and performance management. We published the OFR Strategic Framework in early 2012 for fiscal years 2012-14, which described the OFR's long-term strategic goals, objectives, and implementation priorities.

- In early 2015, we released our Strategic Plan for fiscal years 2015-19. The plan provides OFR leaders with a roadmap for achieving the Office's mission, vision, goals, and objectives. It also demonstrates the OFR's commitment to being transparent and accountable, and to linking activities to strategic goals and performance metrics.

The 2012 GAO report acknowledged that no material overlap is apparent in the work of the OFR and the FSOC, which have complementary mandates, or among the work of FSOC member organizations. However, the report recommended that, to ensure comprehensive identification and analysis of threats to the financial system and to minimize duplication, the FSOC and the OFR clarify their respective responsibilities for monitoring threats to financial stability, as well as the roles of FSOC member organizations. In response, the OFR and the FSOC have strengthened steps to assure a coordinated approach to achieving their shared mission and minimize duplication.

During a GAO audit that began in February 2015, eight OFR senior managers and several other OFR employees were interviewed and the Office provided more than 700 pages of requested documentation. The OFR complied fully with all GAO requests related to the audit. The GAO reportedly terminated the audit in 2016 but never informed the OFR of the termination. The GAO has declined to inform the OFR about the reasons for termination and has not requested additional information from the OFR that might be needed to resume the audit.

In a separate audit by the Treasury Inspector General related to procurement, we have provided all requested documents and made available witnesses for 34 interviews. That audit was started in August 2014 before stopping, starting, and stopping again until October 2016, when the IG returned to the audit. In all the OFR has responded to at least 1,400 inquiries related to this audit; as I understand it, as of today, only one document request (containing 10 discreet inquiries) is outstanding.

Conclusion

When I first testified before this subcommittee in 2011, I said the OFR is mandated to shed light into the dark corners of the financial system.

The OFR has made enormous progress since its inception on fulfilling its mission. Today, we and the Council can see into those corners more clearly than ever before.

But our work is far from complete. The evolving nature of the financial system and the vulnerabilities that could threaten it make financial stability a moving target and the dark corners move with it. Because this work requires ongoing vigilance, that light must continue to shine.

Thank you again for inviting me here. I am happy to respond to your questions.

OFR
OFFICE OF FINANCIAL RESEARCH

ANNUAL REPORT TO CONGRESS | 2017

FROM THE DIRECTOR

I am pleased to present this *2017 Annual Report to Congress*. It fulfills our statutory requirement to assess the state of the United States financial system, including analyzing potential threats to financial stability, documenting our progress in meeting our mission, and describing our key findings.

We assess threats to financial stability by weighing vulnerabilities in the financial system against its resilience. Our overall risk assessment is unchanged from last year: Threats to financial stability are moderate. But underneath that assessment are changes in the balance between financial-system vulnerabilities and resilience.

We judge that three vulnerabilities are newly important: (1) those arising from cybersecurity incidents; (2) obstacles to resolving large, complex financial institutions; and (3) those arising from changes in financial market structure.

However, we also judge that the system's resilience has improved over the past year, as government officials and market participants continue to implement efforts to enhance resilience globally.

Our 2017 Financial Stability Report complements this annual report with a more deeply analytical assessment of threats to financial stability.

These reports and the ones we published previously reflect the views of the OFR, but we continue to benefit from input from and collaboration with the member organizations of the Financial Stability Oversight Council and their staffs.

Collaboration is a critical ingredient in fostering what we call a virtual research-and-data community — one that extends the reach and impact of what our staff can accomplish alone. Our collaboration includes interaction with our Financial Research Advisory Committee and our domestic and global counterparts.

Such input and collaboration have facilitated the progress we've made during the year toward meeting our mission. For example:

- In collaboration with the Federal Reserve, we advanced plans to begin collecting data on bilateral repurchase agreements and to publish new reference rates that are alternatives to LIBOR.
- We developed new tools to assess and monitor vulnerabilities and resilience in the financial system. Our Financial System Vulnerabilities Monitor and Financial Stress Index expand the risk-assessment toolkit for the benefit of officials and the public.

- We evaluated alternative methodologies to set regulatory thresholds for U.S. banks based on risk rather than size alone.

- We assessed resilience in central clearing counterparties.

Over the past six years, policymakers globally have increased financial-system resilience by improving capital and liquidity, and performing regular stress tests at banking firms; instituting new resolution regimes to restore market discipline; and strengthening derivatives markets.

Now is an appropriate time to take stock of whether such reforms effectively balance the vibrancy of the financial system with its resilience. The first three reports from the Treasury Department on the Executive Order on Core Principles for Regulating the United States Financial System are important steps in that stocktaking, and the OFR stands ready to deploy our data and analytical tools to evaluate that balance in support of the effort.

Likewise, over the past six years, the OFR has filled gaps in our understanding of the functioning of the financial system both in normal and stressful times. And we have filled gaps in financial data and taken steps to improve their quality and accessibility.

Now is an appropriate time to take stock of the OFR as an organization — one that started with a handful of people when I arrived in 2011, and must effectively balance achieving an extraordinarily broad mission with efficiency and agility. Over the past two years, we have embarked on that path through initiatives to reconfigure and streamline our functions. I am convinced we can do that while maintaining the objectivity, integrity, and quality that are hallmarks of our work.

During nearly five years as Director of the OFR, I have had the honor of leading an extraordinary group of public servants, united in their passion for our mission and their shared commitment to succeed. I am extraordinarily proud of the OFR team and grateful for the privilege of working with this diverse group of dedicated and talented professionals.

Although I will be leaving the OFR at year end, I am confident that the OFR staff will keep that passion burning and strive as "One OFR" to build on the progress we have achieved together toward a strong and vibrant organization. This year's accomplishments demonstrate that teamwork brings success, and OFR team members will continue to work together and collaborate with our stakeholders to produce outstanding results.

Richard Berner

Richard Berner
Director, Office of Financial Research

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2017 Annual Report to Congress

We prepared this *2017 Annual Report to Congress* to meet the statutory requirement for the Office of Financial Research (OFR) to prepare and submit a report to Congress within 120 days after the end of each fiscal year.

As in previous years, the report's three main chapters assess the state of the United States financial system as required by the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010, including:

1 Analysis of Threats to the Financial Stability of the United States

2 Key Findings from the OFR's Research and Analysis of the Financial System

3 Status of the Efforts of the OFR in Meeting Its Mission

1 Analysis of Threats to the Financial Stability of the United States

Overall risks to financial stability remain in the medium range. We reached this assessment by weighing the financial system's resilience against its vulnerabilities.

The system is far more resilient than it was when the financial crisis loomed a decade ago, but new vulnerabilities have emerged, including in the last fiscal year.

For example, vulnerabilities from excessive leverage (when resources are low relative to investment exposures) could be exploited by risks that are high and rising from the potential for a sudden drop in prices of assets in financial markets, particularly stock markets and bond markets.

The chapter highlights three key threats to the U.S. financial system:

1. **Vulnerabilities to Cybersecurity Incidents**
2. **Obstacles to Resolving Failing Systemically Important Financial Institutions**
3. **Structural Changes in Markets and Industry**

We chose these key threats based on their potential impact, probability of occurring, proximity (could they happen soon?), and the preparedness of industry and government to manage them.

We also introduce new risk-assessment tools developed by the OFR — our Financial System Vulnerabilities Monitor and our Financial Stress Index — and discuss the insights from them that contribute to our assessment of financial stability.

We base our overall assessment of U.S. financial stability on many inputs, including an evaluation of the six categories of risk in the vulnerabilities monitor and our research, analysis, and surveillance of the financial system.

2 Key Findings from the OFR's Research and Analysis of the Financial System

This chapter discusses key findings in six areas, plus findings contained in selected research papers during the fiscal year:

1. **Network Analysis to Identify Cybersecurity Vulnerabilities and Operational Risk** – Network analysis combined with maps of the financial system populated by real-world data may help identify potential systemic vulnerabilities to cybersecurity threats.
2. **Reducing Regulatory Reporting Burdens** – Preliminary OFR analysis indicates that examples cited by industry about duplicative, conflicting, and inconsistent regulatory reporting requirements merit further exploration.

3. **LIBOR Alternative** – Alternatives to LIBOR are needed. One milestone for achieving a smooth transition to any alternative is that officials and market participants must help develop active derivatives markets that use the new rate. LIBOR, formerly known as the London Interbank Offered Rate, but now called ICE LIBOR (Intercontinental Exchange LIBOR), is an interest rate benchmark.
4. **Legal Entity Identifier** – To realize the full potential of the Legal Entity Identifier (LEI), a financial data standard, strategic regulatory mandating of the LEI is required, according to industry advocates. The LEI is like a bar code for precisely identifying parties to financial transactions.
5. **Assessing the Systemic Importance of Banks** – A multifactor approach that captures risk is superior to using asset size alone to determine the systemic footprint of U.S. banks. The asset-size threshold could subject some large U.S. banks with traditional business models to costs for complying with regulations that are not aligned with their risks.
6. **Financial Data Services Initiatives** – The Financial Stability Oversight Council (FSOC) and its member agencies could increase efficiency by adopting initiatives to facilitate appropriate data sharing and reduce the indirect and potentially direct costs of financial data acquisition.

3 Status of the Efforts of the OFR in Meeting Its Mission

This chapter discusses how we are serving our stakeholders: the FSOC, FSOC members, the Treasury Department, Congress, the financial services industry, and the public. It also describes our efforts to continue adjusting our focus on meeting the needs of those key stakeholders.

In addition, the chapter discusses our national and international collaboration over the past fiscal year, current staffing levels, our budget, and information technology projects.

OFR staff experts and leaders participate in a wide variety of events related to financial stability research, data, and analysis. Collaboration with researchers, regulators, and industry experts domestically and abroad is crucial to our success. We also receive valuable suggestions and recommendations from our Financial Research Advisory Committee, a group of 29 experienced professionals with experience in business, economics, finance, data science, risk management, and information technology. Committee members are drawn from industry, academia, and the policy community.

Our research and data agenda requires advanced and secure information technology tools. We bring large quantities of data into our analytical environment, which was designed and built specifically for the OFR to securely support computing-intensive work with large datasets. The need to keep these data secure and safeguard against breaches drives much of our security work.

Analysis of Threats to the Financial Stability of the United States

Overall risks to financial stability remain in the medium range. We reached this assessment by weighing the financial system's resilience against its vulnerabilities. Thanks to actions taken after the financial crisis, the system is far more resilient than it was when the crisis loomed a decade ago, but vulnerabilities have emerged, including in the last fiscal year.

Although our overall assessment is moderate, market risks are high and rising from the potential for a sudden drop in the prices of assets in financial markets, particularly the stock markets and bond markets. Such a decline could exploit vulnerabilities from excessive leverage, when resources are too low in relation to investment exposures.

The chapter highlights three key threats to the U.S. financial system:

1. **Vulnerabilities to Cybersecurity Incidents**
2. **Obstacles to Resolving Failing Systemically Important Financial Institutions**
3. **Structural Changes in Markets and Industry**

We also introduce new risk-assessment tools developed by the OFR — our Financial System Vulnerabilities Monitor and our Financial Stress Index — and discuss the insights we glean from them about financial stability.

The new monitor and index can be found on the OFR website

The new monitor and index, which are both on the OFR website, financialresearch.gov, are part of the OFR's quantitative monitoring toolkit. They signal where potential vulnerabilities might require further investigation. We conduct those investigations using a wider set of data, qualitative information, and expert analysis. The OFR's *2017 Financial Stability Report* contains a more in-depth analysis of the threats and our overall assessment of financial stability.

Financial Stability Threats

Shocks that cause widespread losses or loan defaults can expose underlying vulnerabilities and turn them into threats that can potentially disrupt the financial system with adverse consequences for the economy.

We selected the key threats to U.S. financial stability based on their potential impact, probability of occurring, probability of happening soon, and the preparedness of industry and government to manage them. The key threats are:

1. Vulnerabilities to Cybersecurity Incidents

The financial system is vulnerable to cybersecurity incidents because of its interconnectedness and heavy reliance on information technology.

A large-scale cyberattack, accident, or other cybersecurity incident could disrupt the operations of one or more financial companies and markets and spread through financial networks and operational connections to the entire system, threatening financial stability and the broader economy.

The financial system is an attractive target for cyber thieves and other hackers because financial companies manage the nation's wealth and handle trillions of dollars in transactions every day that underlie the U.S. economy.

The hack of consumer information at the consumer credit reporting firm Equifax, disclosed in September 2017, highlighted the vulnerability of some financial companies and the absence of regulatory guidance on how consumer credit reporting companies should manage cybersecurity risks. The attackers reportedly accessed personal information for 145 million Americans, including Social Security numbers and driver's license information.

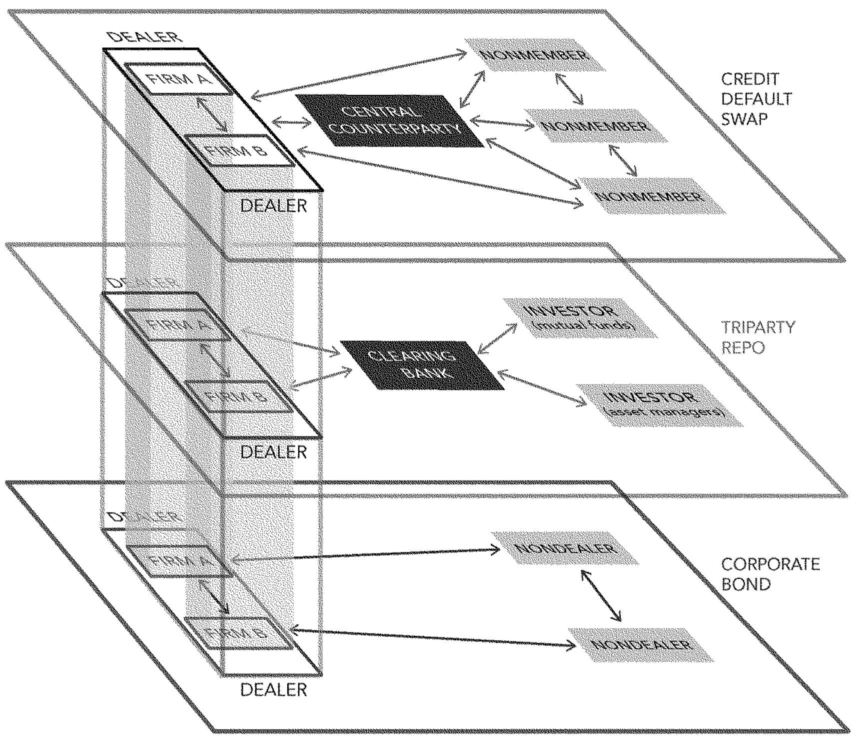
A cybersecurity incident could pose a financial stability risk if it caused a loss of confidence in financial institutions, if it damaged the integrity of consumer financial data, or if the victimized company provided unique services that could not easily be replaced.

In such a scenario, customers and other financial companies might sever their connections to a victimized company to avoid exposure and protect themselves from losses. They might also sever ties to similar companies for fear they are also vulnerable. Finally, they might limit their risks by pulling back from certain types of financial activities.

Three factors increase vulnerabilities to cybersecurity incidents for any type of company and industry:

1. The open structure of the Internet allows malicious actors to target companies across the globe.

Figure 1. Example of Financial System Network Mapping



Source: OFR analysis

2. The availability of encrypted digital currencies or "cryptocurrencies" makes evading detection easier for criminals because they can move and hold funds under assumed names.
3. Product liability laws do not generally apply to computer software, creating potential incentives to rush products to market and fix or "patch" problems later, including cybersecurity vulnerabilities.

Financial companies can help protect themselves and the overall system by investing in strong defenses and increasing their ability to recover from cybersecurity incidents. Regulators must work with the industry to ensure the resilience of the financial system, even if individual companies do not recognize that the benefits of protecting the overall system are worth their cost of increased resilience.

In the insurance industry, the National Association of Insurance Commissioners adopted a model law in October for protecting insurance data from hackers. But for the model law to take effect, U.S. states would need to adopt it.

In October 2016, federal banking regulators proposed rules to enhance risk management standards to combat cybersecurity threats.

Tabletop exercises are simulated cybersecurity incidents industry and regulators hold

As the OFR researches cybersecurity risks, we analyze past breaches, evaluate the effectiveness of regulations and policies, and draw lessons from "tabletop exercises" — simulated cybersecurity incidents — industry and regulators hold.

We are also applying network analysis and using detailed datasets to develop maps to learn how cybersecurity incidents can spread through the financial system (see **Network Analysis to Identify Cybersecurity Vulnerabilities and Operational Risk**). For example, such network analysis could focus on interconnections within markets and how shocks are transmitted — analysis that can be applied to shocks from cybersecurity incidents (see **Figure 1** for a representative multilayer view of work that could be done on three markets: credit default swaps, triparty repurchase agreements, and corporate bonds).

2. Obstacles to Resolving Failing Systemically Important Financial Institutions

Resolution is the process of restructuring or liquidating a failing financial company through bankruptcy or regulatory mechanism. The failure of a large, complex financial company could transmit distress to other firms and possibly trigger another financial crisis.

After the financial crisis of 2007-09, regulators developed important tools for resolving failing U.S. bank holding companies that are systemically important, but orderly resolution still may be difficult in some scenarios. Tools to enable an orderly resolution process for nonbanks are still works in progress.

There are two paths for the resolution of a failing systemically important financial institution (SIFI) that is not an insured depository institution. The first path is bankruptcy.

The second path, created by the Dodd-Frank Act, is the "orderly liquidation authority" when bankruptcy may not be the best alternative. On the recommendation of regulators and in consultation with the President, the Secretary of the Treasury could place the failing SIFI into receivership for the Federal Deposit Insurance Corporation (FDIC) to liquidate. The Act created this second path as a backstop to the bankruptcy process for the FDIC to address financial stability concerns and for better cross-border coordination among regulators.

In some scenarios, the first and second paths have shortcomings for handling the failure of the largest and most complex bank holding companies, known as global systemically important banks (G-SIBs). For example, if more than one G-SIB was failing, the FDIC might not be able to use the orderly liquidation authority to restructure the banks and release them from oversight quickly enough to stabilize the U.S. financial system.

Some proposals would strengthen bankruptcy provisions for financial companies but also would eliminate orderly liquidation authority. However, obstacles to handling a G-SIB failure through the bankruptcy process may remain. For example, the bankruptcy trustee might not have near-immediate access to short-term liquidity needed to stabilize the failing company or the cooperation of international regulators.

Finally, tools for successfully resolving systemically important nonbank financial firms are still being developed, despite problems among such firms during the crisis, such as the collapse of Lehman Brothers and near-failure of insurer American International Group, and the increasing importance of nonbanks such as central counterparties (CCPs).

Unlike G-SIBs, CCPs are not required to submit "living wills" to their primary federal regulators with plans for their rapid and orderly resolution in the event of their material financial distress or failure. CCPs are required to develop recovery and orderly wind-down plans for extreme events that could threaten their viability and financial strength before insolvency is reached. But CCPs are not subject to sanctions if regulators deem their plans unsatisfactory.

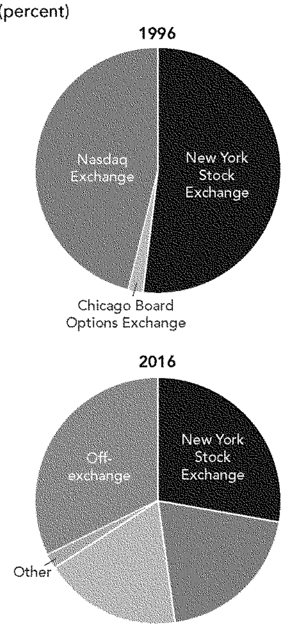
In 2016, the Commodity Futures Trading Commission (CFTC) issued guidance requiring more detailed wind-down planning. The Securities and Exchange Commission (SEC) is requiring CCPs under its supervision to submit initial plans by the end of 2017.

3. Structural Changes in Markets and Industry

Three aspects of market structure pose threats: (1) lack of substitutability, which is the ability to replace essential services if a provider fails or drops that line of business; (2) fragmentation of trading activities through multiple channels and products; and (3) the danger of a difficult transition to a new reference rate to replace the London Interbank Offered Rate (LIBOR).

A lack of substitutability is an aspect of market structure that can pose a threat. Some markets depend on one or a few financial institutions whose services may be difficult to replace under stress. For example, the increasing reliance on a single institution for settlement of Treasury securities and related repurchase agreements (repos) is a key vulnerability. An interruption in Treasury settlement services would disrupt the Treasury market and potentially a range of other markets.

Figure 2. Market Share by Exchanges and Their Affiliates, 1996 and 2016 (percent)



Source: Muzan Trade and Quote

Fragmentation in markets can also pose threats. As electronic trading has escalated, the number of trading channels has grown (see **Figure 2**). This growth can increase flexibility for risk managers who want to hedge by diversifying their risks and for corporate treasurers and portfolio managers to reallocate assets quickly under stress. But fragmentation also introduces risks by reducing liquidity because resources of market makers are stretched thinner across more exchanges and products.

Some markets are also becoming more fragmented among products, raising concerns about the availability of liquidity also becoming more fragmented.

Another potential threat comes from the transition from LIBOR to an alternative. The risks and costs of using LIBOR make the move essential, but failure to make a timely and smooth transition could impair the functioning of markets that now rely on LIBOR. LIBOR reflects transactions in a shrinking market. Most of the responses by traders to the LIBOR survey are based on judgment rather than actual trades. LIBOR tracks unsecured transactions, which represent a small share of banks' wholesale funding.

The new U.S. benchmark rate, the Secured Overnight Financing Rate, will be produced by the Federal Reserve Bank of New York in cooperation with the OFR. It will be based on trading activity in repos backed by Treasury securities, not bank surveys (see **LIBOR Alternative** in next chapter).

The Alternative Reference Rates Committee, made up of banks active in the derivatives market, informed the process and selected the Secured Overnight Financing Rate as its preferred LIBOR alternative. The new rate promises to be more reliable.

Despite these improvements, the transition from LIBOR carries additional risks. Obtaining widespread market acceptance and reliance could take years. Officials and market participants must develop active derivatives markets that use the new rate.

Financial Stability Assessment

We base our overall assessment of U.S. financial stability in part on an evaluation of the six categories of risk in our new Financial System Vulnerabilities Monitor and on our research, analysis, and surveillance of the financial system.

This new monitor improves on and replaces the OFR's Financial Stability Monitor. When we introduced the prototype of the Financial Stability Monitor in 2013, we noted that we planned to update and fine tune it. We made improvements in 2014 and 2015, then began a project in fiscal year (FY) 2017 to make fundamental changes.

The previous version of the monitor combined signals of vulnerability and stress, which prevented an accurate assessment of risk.

A vulnerability is a factor that can originate, amplify, or transmit disruptions in the financial system

As its name indicates, the new Financial System Vulnerabilities Monitor gives early warning signals of potential vulnerabilities. A vulnerability is a factor that can originate, amplify, or transmit disruptions in the financial system.

When the Financial System Vulnerabilities Monitor shows high or rising vulnerabilities, it indicates a high or rising risk of disruptions in the future. Vulnerabilities typically lead to additional stress when shocks hit, such as when widespread losses or loan defaults strike the financial system. The additional stress can feed a downward cycle.

A second new tool, the OFR Financial Stress Index, is a daily snapshot of current stress in global financial markets. Stress can be minor; for example, it can surface in a brief period of uncertainty and price volatility in the equity market. Or it can be major, like the stress precipitated by the runs on Lehman Brothers and other broker-dealers in 2008.

The distinction between stress and vulnerabilities means that the two should be measured separately. Both of these complementary tools factor into our overall assessment that risks to U.S. financial stability remain in the medium range.

Financial System Vulnerabilities Monitor

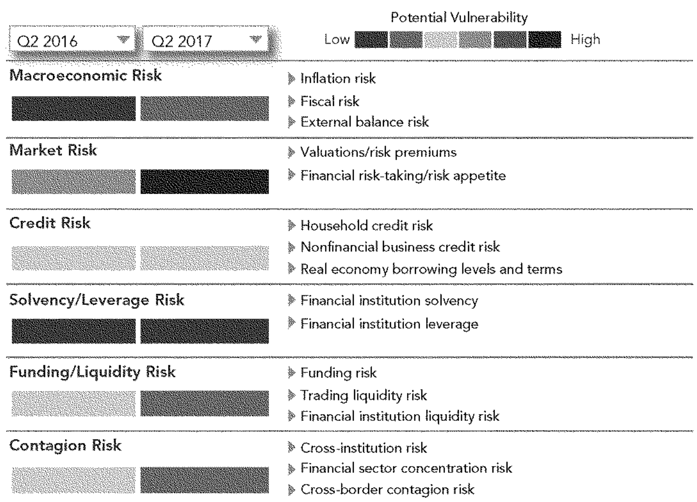
The Financial System Vulnerabilities Monitor is a heat map of 58 indicators of potential vulnerabilities organized into six risk categories: (1) macroeconomic, (2) market, (3) credit, (4) solvency and leverage, (5) funding and liquidity, and (6) contagion. These categories reflect key types of risks that have contributed to financial instability in the past.

The stress index and vulnerabilities monitor each have a category for credit, but the two tools are measuring different aspects of the financial system, so the same or similar categories or indicators are not contradictory. For example, high stock valuations generally indicate low stress now, but such high valuations can be a potential vulnerability for the future.

The new monitor, which we will update quarterly, includes a category for solvency and leverage that was not in the earlier monitor. New underlying indicators provide additional information (see Figure 3).

The colors of the heat map mark the position of each indicator in its long-term range. For example, red signals that a potential vulnerability is high relative to its past. Orange signals that it is elevated. Movement toward red indicates that a potential vulnerability is building.

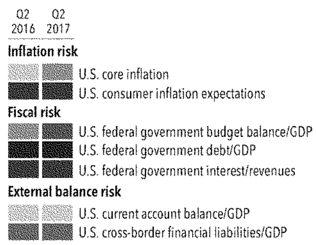
Figure 3. Financial System Vulnerabilities Annual Comparison, Second Quarters of 2016 and 2017



Note: Data available as of Oct. 4, 2017. The colors reported here and in past editions are subject to change because of newly reported data, data revisions, or changes in the historical range due to new observations.
Sources: Bloomberg Finance L.P., Compustat, Federal Financial Institutions Examination Council call reports, Federal Reserve Form Y-9C, Haver Analytics, Morningstar, SNL Financial LC, the Volatility Laboratory of the NYU Stern Volatility Institute (https://vlab.stern.nyu.edu), OFR analysis

Macroeconomic risk

Risk from inflation, government borrowing, and cross-border financing



Macroeconomic risks to U.S. financial stability are moderate. The U.S. economy continues to expand at a modest pace. The current U.S. economic expansion is the third longest since 1850. Inflation is low, and investors are not expecting major changes.

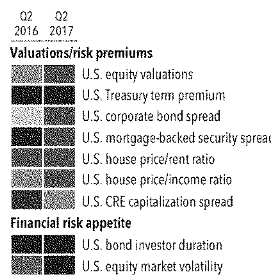
U.S. government debt as a percent of gross domestic product (GDP) is at its highest level in decades. Very low interest rates are currently mitigating this vulnerability because they make debt more affordable.

China's elevated level of debt hampers additional borrowing and is high by world standards, although credit growth has slowed over the past year. Direct U.S. financial claims on China are small relative to the size of the U.S. financial system, but the Chinese government is a major holder of U.S. government debt. Indirect exposures through other Asian markets and through the global economy are more significant.

Potential negative spillovers still exist from Brexit, the United Kingdom's planned exit from the European Union. If the exit does not go smoothly, the disruptions would most affect U.S. financial institutions with large direct financial exposures to the United Kingdom and potentially spread to other U.S. financial firms and markets.

Market risk

Risk to financial stability from movements in asset prices



Market risks from a sharp change in the prices of assets in financial markets are high and rising.

Rising prices and falling risk premiums may leave some markets vulnerable to big changes. Risk premiums are returns in excess of returns on risk-free investments.

Such market corrections can trigger financial instability when the assets are held by entities that have excessive leverage and rely on short-term debt and other liabilities.

Each of our annual reports has highlighted the risk that low volatility in market prices and persistently low interest rates may promote excessive risk-taking by investors and create future vulnerabilities. In 2017, strong earnings growth, steady economic growth, and increased expectations for a U.S. fiscal policy that stimulates economic growth have fueled the rise in asset prices.

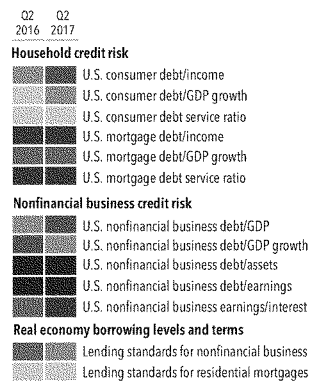
Stock market valuations are at historic highs, according to several metrics.

Prices are also elevated in bond markets, suppressing yields. Risk premiums for corporate bonds have nearly fallen to the lowest point since the financial crisis. At the same time, long-term interest rates in the United States remain low, despite a long span of steady economic growth, low unemployment, and gradual increases in benchmark interest rates by the Federal Reserve.

The low rates have increased the risk of loss by bond investors if interest rates rise, but two factors mitigate the potential systemic risk from rising rates. First, investors such as pension funds and insurance companies have long-term liabilities, including pension obligations and life insurance coverage that allow them to tolerate any short-term market losses on bonds. Second, the Federal Reserve has clearly stated its intention to raise interest rates gradually.

Credit risk

Risk of borrowers or counterparties not meeting financial obligations such as business loans and mortgages



Some measures of credit risk have moderated since last year, reflecting crosscurrents of positive and negative developments. Credit risk from debt by nonfinancial corporations remains elevated. Nonfinancial corporate debt continues to grow, although at a slower pace than in 2016. Measures of firms' debt-to-assets and debt-to-earnings ratios are red on the monitor heat map.

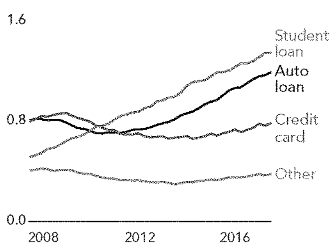
In addition, the quality of covenants may be weakening. Covenants are terms in financial contracts meant to protect investors. For example, covenants may limit a borrower's total debt or restrict business activities. Weaker covenants historically accompany buildups of debt and may signal lower credit quality.

However, the growing economy and rising profits are reducing the risk of defaults. Many companies have rolled over their existing debt at lower interest rates and with longer repayment timetables.

Household credit risks are rising, but appear to be concentrated in the nonmortgage segment of the market. Total household debt, including mortgages, hit a record $12.8 trillion in the second quarter of 2017, surpassing its 2008 peak. Mortgage risks remain moderate after the drop in such debt after the financial crisis.

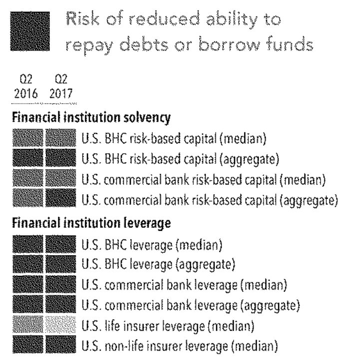
Auto loans and student loans bear watching. They account for much of the recent growth in household debt (see **Figure 4**). Delinquencies of student loans have been high since 2012. Auto loan delinquencies have declined from their post-recession peak in 2011 but have been rising since 2015.

Figure 4. U.S. Nonmortgage Household Debt ($ trillions)



Note: Data as of June 30, 2017. "Other" includes consumer finance and retail loans
Sources: Federal Reserve Bank of New York, OFR analysis

Solvency and leverage risk



The failure or near-failure of large financial institutions has been a common source of stress during financial crises in the past, including the crisis of 2007-09. For this reason, the OFR's new monitor includes measures of solvency and leverage risk. These measures signal low risk in banks.

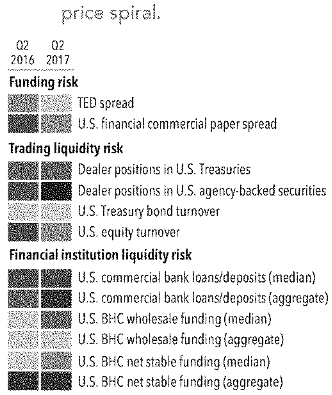
Large banks have more capital to serve as a cushion against losses than before the crisis. The eight U.S. G-SIBs have significant buffers of capital and liquidity above the minimum required, which bolsters their solvency. Bank profits are gradually starting to improve as interest rates rise but remain relatively low. Return on equity for U.S. G-SIBs has been stagnant at about 10 percent, compared with 12 percent to 17 percent before the crisis.

Insurance company leverage is moderate. Since the crisis, insurers have used less leverage. Leverage is high when the company resources needed as a buffer against losses are low relative to investment exposure. Some life insurers make substantial use of derivtives; this indicator captures only the current market value of these exposures and may understate future risks.

Leverage among nonbank broker-dealers, which are not reflected in the monitor, deserves monitoring. Most of the largest U.S. broker-dealers are affiliated with banks. However, changes in bank regulation may fuel an increase in broker-dealers not affiliated with banks. The largest nonbank broker-dealers — each with more than $10 billion in assets — have substantially more leverage than their bank-affiliated peers.

Funding and liquidity risk

Risk that investors will lose confidence and pull their funding from a firm or market and market participants won't be able to sell securities without creating a downward price spiral.



Market liquidity, the ability of a market participant to buy or sell an asset in a timely manner at relatively low cost, remains a concern. Market liquidity is vulnerable to the risk of asset fire sales — the risk that market participants will not be able to sell securities without creating a downward spiral in prices.

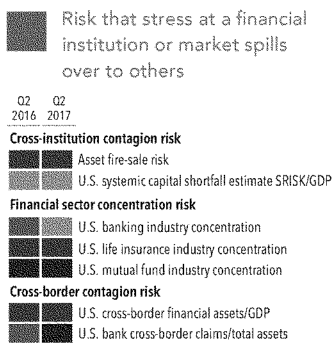
Funding liquidity (the availability of credit to buy assets) is also subject to run risk — the risk that investors will lose confidence and pull their funding from a firm.

In the past several years, U.S. G-SIBs have steadily increased their reliance on "runnable liabilities," liabilities that are vulnerable to runs.

Indicators of market liquidity are mixed. Some indicators suggest that conditions are moderate, while others suggest lower risk. Two measures of market liquidity signaled extraordinary stress during the crisis but have since eased:

1. **Bid-ask spreads** – the difference between the average price at which customers buy from dealers and the average price at which customers sell to dealers; and
2. **Price-impact measures** – the price change after a large trade is completed.

Contagion risk



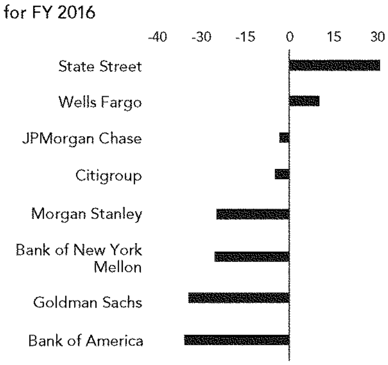
Contagion risk is the danger that stress at a financial institution or market spills over to others. OFR research suggests that the financial system remains highly interconnected. Of the many factors contributing to the financial crisis, contagion is one of the most difficult to measure (see **The Contagion Index and Agent-based Models**).

The monitor includes measures of concentration in the financial system. Concentration makes the financial industry more vulnerable to the spread of disruptions from distress at individual

The Contagion Index and Agent-based Models

In the search for new ways to measure contagion risk, OFR researchers have developed a contagion index to assess the potential spillovers to the broader financial system when a bank defaults. The contagion index has been declining in recent years for most G-SIBs (see **Figure 5**).

Figure 5. Percent Change in Contagion Scores for FY 2016



Sources: Federal Reserve Form Y-15, OFR analysis

The contagion index is not included in the monitor because it can only be calculated since 2013. The index combines measures of a bank's leverage, size, and connectivity.

$$\text{Contagion Index} = \text{Financial Connectivity} \times \text{Net Worth} \times (\text{Outside Leverage} - 1)$$

Connectivity is measured as the portion of a bank's liabilities held by other financial institutions.

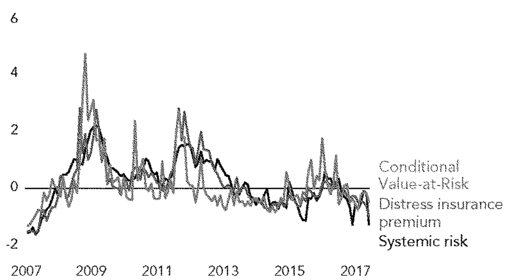
OFR researchers also continue to use agent-based models to analyze how risks can spread among firms during a crisis. Agent-based models simulate behaviors of different types of financial firms and the complexity of behavior among firms as they react to the actions of other firms. These models help us understand the way risks propagate across the financial system and the impacts of shocks and changes in regulatory policies. The OFR cosponsored a conference on the topic with the Bank of England and Brandeis University in September 2017.

firms. The monitor shows that these signals are mixed. Concentration in the U.S. mutual fund industry is high. Concentration in the U.S. banking industry is moderately elevated; the heights reached after the crisis have subsided. Concentration in the life insurance industry is low.

The monitor also includes the SRISK measure. SRISK — short for systemic risk — reflects the capital a firm is expected to need to remain solvent during a crisis. SRISK and two other metrics offer insights on the contribution that individual firms make to systemic risk (see **Figure 6**).

In addition, the monitor now contains an index of fire-sale risk, the chance that a self-reinforcing cycle will develop when liquidations of bank assets push down prices in a falling market. This risk has also been low in recent years.

Figure 6. Systemic Risk Measures of Joint Distress for the Six Largest U.S. Bank Holding Companies (z-scores)



Note: Equal-weighted average. The six largest bank holding companies are Bank of America, Citigroup, Goldman Sachs, JPMorgan Chase, Morgan Stanley, and Wells Fargo. Z-score represents the distance from the average, expressed in standard deviations.

Sources: Bloomberg Finance L.P., the Volatility Laboratory of the NYU Stern Volatility Institute, OFR analysis

Financial Stress Index

The Financial Stress Index is a daily market-based snapshot of stress in global financial markets. It is constructed from 33 financial market indicators. The indicators are organized into five categories: (1) credit, (2) equity valuation, (3) funding, (4) safe assets, and (5) volatility.

The index is positive when stress levels are above average and negative when stress levels are below average.

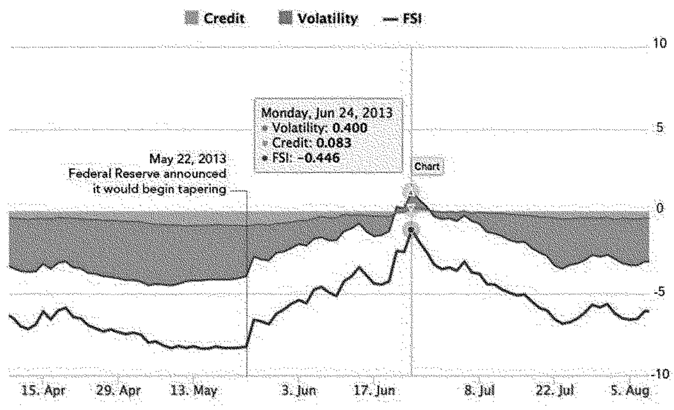
The index shows that overall stress is near its lowest level since the financial crisis, primarily because of low volatility. However, this low volatility may be leading investors to take big risks, making the financial system more fragile and vulnerable to shocks.

The OFR index can be broken down so users can view each of the five categories separately or in combination. It also can be broken down by the region generating the stress.

Analysis of the categories can reveal the drivers of financial stress, guiding the interpretation of market events by cutting through the clutter of market chatter. For example, if we examine the index during the 2013 "Taper Tantrum" event, we find that the index shows increased levels of stress in the credit and volatility categories (see **Figure 7**).

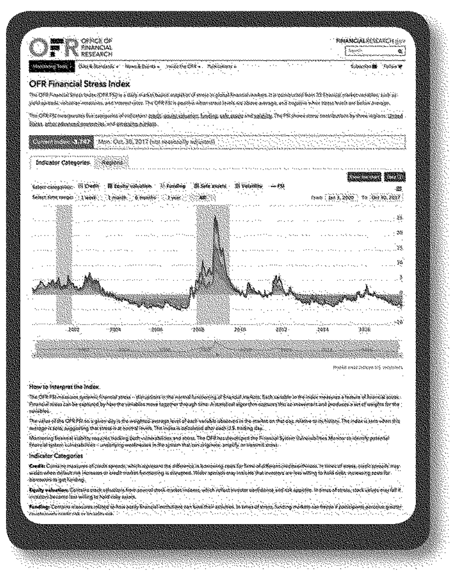
The methodology for the index uses a dynamic process to account for changing relationships among the variables in the index. No two stress events are exactly the same, and the relative importance of drivers of financial stress varies over time.

Figure 7. OFR Financial Stress Index - 2013 Taper Tantrum Period



Sources: Bloomberg Financial L.P., Haver Analytics, OFR analysis

Financial stress refers to a breakdown in the normal functioning of financial markets



OFR Financial Stress Index can be found at www.financialresearch.gov/financial-stress-index/

The OFR's innovative methodology is dynamic but remains accessible to policymakers.

The daily frequency of the OFR's index improves upon the weekly or monthly frequency of other indexes.

Financial stress refers to a breakdown in the normal functioning of financial markets. High levels of financial stress can precede declines in economic activity. These episodes can be severe. For example, the OFR index shows stress peaking during the financial crisis. Policymakers need accurate, clear, and timely signals of market stress to effectively manage the effects.

Key Findings from the OFR's Research and Analysis of the Financial System

The OFR has continued to work throughout the year on data and research projects to fulfill its mission. This chapter describes key findings from our research and analysis. The chapter focuses on cybersecurity and operational risk, reducing regulatory reporting burdens, an alternative reference rate, the Legal Entity Identifier (LEI) data standard, a multifactor approach to assessing the systemic importance of banks, and financial data services initiatives. The chapter also discusses selected findings in our research papers during the fiscal year.

Network Analysis to Identify Cybersecurity and Operational Risk

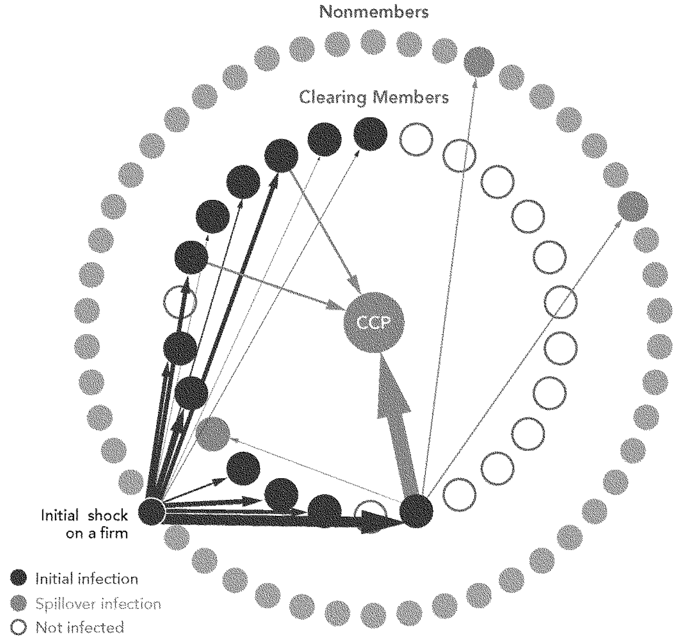
Cybersecurity incidents and other operational risks are growing threats to financial stability. Financial firms are connected through complex, interconnected networks. Disruptions to the operations of a key institution in the financial system could be transmitted through these networks and lead to a systemic crisis (see **Financial Stability Threats**).

Indicates an OFR Key Finding

To understand this threat, officials can combine network analysis with maps of the financial system to identify cybersecurity vulnerabilities and other operational risks. Networks can be mapped out in a visualization of financial entities such as firms, markets, trading desks, financial market utilities (nodes), and the connections between these entities (links). Network analysis of these connections increases the understanding of potential vulnerabilities to shocks and helps in evaluating and developing policies to enhance the stability and resilience of the financial system (see **Figure 8**).

Financial stability threats from cybersecurity vulnerabilities and operational risks should be studied across the entire financial system.

Figure 8. Interconnections in the Credit Default Swaps Market Illustrate How Shocks Can Spread



Note: Arrows signify direction of payment and the thickness of the line indicates the size of payment disruption. CCP stands for central counterparty.
Source: OFR analysis

The OFR's broad financial stability mandate gives us a unique perspective for studying threats to the financial system from cybersecurity risks and other operational risks. The OFR has the authority to collect data from federal financial regulators and market participants. This authority allows the OFR to analyze a wide range of detailed transaction-level datasets. Using these data, researchers can develop detailed maps that show the financial transactions among market participants and identify the participants most important to a particular part of the U.S. financial system.

The OFR's current research on cybersecurity and other operational risks is in two main areas. The first analyzes past operational and cybersecurity incidents involving financial entities. We review event studies, recent experiences, and other information to understand events and how they might threaten the financial system. Researchers evaluate the efficacy and scope of regulations and gaps in policy that could affect the financial system's resilience. We draw lessons from tabletop exercises, which bring together industry participants and regulators to examine potential scenarios.

The second major area of OFR research focuses on applying network analysis to potential cybersecurity risks and other operational risks. The OFR is developing maps that highlight connections throughout the financial sector. We use these maps to identify key vulnerabilities and critical institutions across different markets.

Network analysis combined with maps of the financial system populated by real-world data may help identify potential vulnerabilities to cybersecurity threats.

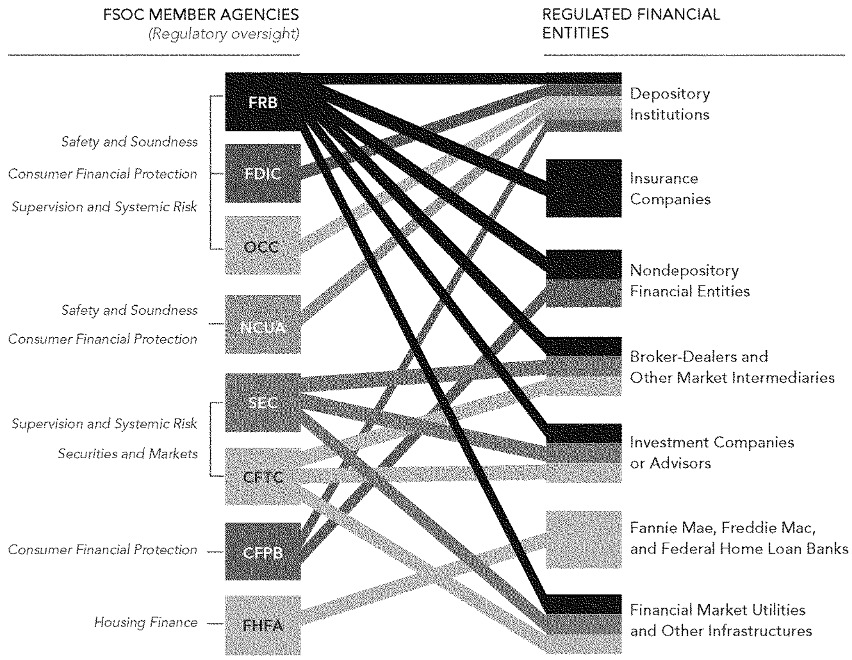
Network analysis of these maps identifies the most centrally connected companies in a financial market. This analysis offers several key lessons for improving defenses. One lesson is that a network's resilience can vary greatly against different types of threats. Targeted attacks by sophisticated adversaries can cause much more damage than random failures, and these attacks necessitate a much higher level of network resilience. Another lesson is that coordinating defense strategies among network participants is vital in preventing weaknesses in defense systems. A lack of coordination between market participants and regulators can compromise network stability and leave key institutions under-defended.

As real-world data is added to these maps, network analysis yields more valuable insights. The maps hold the potential to allow policymakers, market participants, and the public to see specific ways cybersecurity and operational risks could threaten the stability of the financial system. Those insights help bolster network defenses.

Reducing Regulatory Reporting Burdens

Regulation and oversight of financial institutions and markets is divided among federal and state agencies. Banks, brokers, and other U.S. financial institutions and markets are governed on the federal level by nine independent regulators and three self-regulatory organizations. (Insurance companies and some banks are also regulated at the state level). Firms engaged in multiple financial activities are governed by more than one regulator. Sometimes a single activity is governed by multiple regulators (see **Figure 9**).

Figure 9. Current Oversight by Federal Financial Regulators



Note: Financial Stability Oversight Council member agencies (from top to bottom) are: Federal Reserve Board of Governors (FRB), Federal Deposit Insurance Corporation (FDIC), Office of the Comptroller of the Currency (OCC), National Credit Union Administration (NCUA), Securities and Exchange Commission (SEC), Commodity Futures Trading Commission (CFTC), Consumer Financial Protection Bureau (CFPB), Federal Housing Finance Agency (FHFA).

Sources: Government Accountability Office (GAO), Financial Regulation, GAO-16-175, February 2016, Figure 2, OFR analysis

This fragmented approach enables tailored regulation and enforcement, but can also result in inefficient oversight and reporting. The current regulatory structure has led to inconsistencies in agencies' data collection activities. U.S. financial institutions report that they are often required to submit the same data to more than one U.S. regulator using different calculations, classifications, and formats.

Duplicative, conflicting, or inconsistent reporting requirements have the potential to increase costs, undermine the efficiency and quality of data collections, and impede data comparison and integration. Duplicative, conflicting, or inconsistent reporting requirements can also misalign regulatory reports from the data that firms use for their risk management. Likewise, these requirements could impair the ability of government officials to assess and monitor threats to financial stability and assure the functionality and integrity of financial markets. Finally, duplicative and inconsistent requirements can erode public confidence in government.

Preliminary OFR analysis indicates that examples cited by industry about duplicative, conflicting, and inconsistent regulatory reporting requirements merit further exploration.

To better understand this issue, we asked a handful of financial institutions and industry groups for examples. During these initial discussions, firms focused on reports to member agencies of the Financial Stability Oversight Council. Information came from asset managers, banks, and financial services trade associations.

We analyzed a selection of these examples identified by industry to determine the general validity of industry concerns about regulatory burden and identify ways the OFR might help address these issues. For each example, we compared multiple data fields to identify duplicative, conflicting, or inconsistent data requirements and found that the industry's concerns warrant further analysis, as discussed in the next section.

Private Fund Reporting

Preliminary OFR analysis found validity in the assertions from industry about duplicative, conflicting, or inconsistent reporting requirements. Discrepancies generally fell into three categories:

1. identical information sought in different data formats or classifications,
2. similar information sought using different methodologies or metrics, and
3. different information sought for similarly situated filers or scenarios.

The OFR found evidence of duplicative, conflicting, and inconsistent requirements between the two forms that investment advisors use to report information about private funds to federal agencies.

For example, the reporting requirements of Forms PF and CPO-PQR demonstrate at least some of these characteristics. The Dodd-Frank Act directed the SEC to establish reporting requirements for investment advisers to private funds. The law requires that the reports include data such as counterparty credit risk exposure, trading and investment exposures, and types of assets held.

To collect the data, the SEC and the CFTC jointly implemented a rule requiring certain private fund advisors and commodity pool operators (CPOs) to submit information through Form PF. Separately, the CFTC implemented Form CPO-PQR. Large CPOs, as members of the National Futures Association, must also submit the association's Form PQR, an abbreviated version of the CFTC form. These forms require CPOs to file confidential reports on holdings, transactions, and certain trading strategies and characteristics. Based on size, certain pools file more frequently and file more information than others.

These reporting forms contain examples of identical information being sought. By filing Form PF or CPO-PQR, a respondent might not be required to file all or part of the other forms or schedules of forms. CPOs whose pools qualify as hedge funds might report quarterly on Form PF, exempting themselves from filing all but one year-end CPO-PQR schedule. However, large CPOs are still required to report quarterly on Schedule A of the association's Form PQR. The association's Form PQR contains a subset of the information in the CFTC's Form CPO-PQR. As a result, the large CPOs might be required to file Form PF, an abbreviated but duplicative Form CPO-PQR, and a duplicative association Form PQR at the end of the year.

Although the agencies and association attempt to limit reporting duplication, the attempts fall short of preventing all overlap.

In another example, both forms request information on assets under management but have different definitions. Form CPO-PQR defines assets under management as the amount of all assets under the control of the CPO. The SEC defines regulatory assets under management to include securities portfolios that receive supervisory or management services from the report filer. The difference in the definitions could require CPOs to calculate separate types of assets under management for reporting on each of the forms.

Findings and Next Steps

The OFR's initial analysis found that concerns raised by the industry may be justified. Further analysis is necessary to better understand the reasons for the discrepancies. Future analysis should consider whether individual discrepancies cause burden, or burden exists only in the aggregate.

If further analysis confirms that these concerns are justified, we will work to ease these burdens through the FSOC and its member agencies and by pursuing our data-related mandates.

Approaches to improve data quality and reduce reporting burden include:

- helping agencies agree on common standards for definitions, identifiers, and formats;
- using statutory authority to impose common standards by brokering agreements between industry and regulators on essential data elements;
- promoting and adhering to best practices in data collection; and
- facilitating effective data sharing among regulators.

LIBOR Alternative

For years, the LIBOR interest rate benchmark has played a central role in global financial markets and the economy. U.S. dollar LIBOR has been used to set interest rates on trillions of dollars of retail mortgages, private student loans, corporate loans, derivatives, and other financial products. LIBOR, formerly the London Interbank Offered Rate, is now known as ICE LIBOR (Intercontinental Exchange LIBOR).

A new interest rate benchmark would be more reliable and viable than LIBOR.

The LIBOR benchmark's past reliance on survey submissions rather than transactions led to widespread manipulation. Traders submitted responses to the LIBOR survey intending to increase returns on derivatives positions, and during the 2007-09 financial crisis, intending to minimize appearances of riskiness of their banks.

Although reforms to LIBOR have made manipulation less likely, a shift in sentiment among banks about the advantages of LIBOR and increasing reluctance by banks to participate in LIBOR surveys, along with the longer-term trend from unsecured to secured funding markets, have raised serious questions about the viability of LIBOR as a benchmark.

Doubts about LIBOR's future prompted the Federal Reserve to begin an effort to identify an alternative benchmark for funding costs in U.S. financial markets.

Key Benchmarks for Alternative Rates

Triparty General Collateral Rate

This rate would be calculated based on overnight repurchase agreement (repo) transactions against Treasury securities in the triparty repo market. The market is called triparty because each transaction between a security seller and buyer also involves a clearing bank. The Federal Reserve Bank of New York collects data about repo transactions from the two clearing banks in this market.

Broad General Collateral Rate

This rate would be a broader benchmark based on trades in triparty repo and the general collateral financing (GCF) overnight repo market. Trades in the GCF repo market are made against a pool of general collateral rather than a specific security. The market is run by the Fixed Income Clearing Corporation (FICC), which acts as a central counterparty. To calculate daily rates, data will be obtained about interest rates and the value of funds borrowed in GCF repo.

Secured Overnight Financing Rate

This rate would be the broadest measure of the repo-based rates. It covers the two markets included in the broad general collateral rate, plus centrally cleared bilateral repo transactions. Bilateral transactions are arranged and settled between borrower and lender. Bilateral repo transactions generally fall into two categories: (1) trades cleared through FICC's service, and (2) uncleared trades completed without a third party. Because not much data about uncleared bilateral trades is available, this benchmark would be calculated with data about interest rates and the value of funds borrowed in trades cleared through the FICC service.

The OFR joined the effort, and we have worked closely with the Federal Reserve to create a set of benchmarks based on data on overnight repurchase agreements, or repos.

The Federal Reserve Board and the Federal Reserve Bank of New York convened the Alternative Reference Rates Committee, made up of banks active in the derivatives market, to inform the process.

The repo market is a key source of secured short-term funding for the financial system. In a repo transaction, a security owner sells a security to raise cash. The agreement requires the seller of the security to repurchase it on a specific date for a prearranged price. If the seller is unable to repurchase the security, the cash provider is entitled to liquidate the security for repayment.

In late August 2017, the Federal Reserve sought public comment on three daily rates based on repo transactions with U.S. Treasury securities that would be published by the Federal Reserve Bank of New York in cooperation with the OFR (see **Key Benchmarks for Alternative Rates**).

The Alternative Reference Rates Committee selected the Secured Overnight Financing Rate in June 2017 as its preferred alternative to U.S. dollar LIBOR.

The new benchmarks would be more reliable and viable than LIBOR because they are based on actual secured transactions, rather than quotes, and would bring necessary transparency to the repo market.

The OFR plans to establish an ongoing data collection covering some repo transactions. Some of these data might be useful in calculating these rates. This work builds on the OFR's 2015 pilot project conducted with the Federal Reserve and the SEC to collect data on bilateral repo transactions.

The OFR is uniquely situated to collect data across multiple markets that may lie beyond the reach of other regulators.

We expect to begin with cleared trades so the data can support calculation of the Secured Overnight Financing Rate. Currently, data to support that rate are provided on a voluntary basis — not suitable for establishing a rate on which potentially trillions of dollars in contracts are based.

Selection of the preferred LIBOR alternative is only a first step. The transition period brings risks. New benchmarks will require broad market acceptance. For example, to achieve a smooth transition, officials and market participants must help develop active derivatives markets that use the new rate. Market participants say substantial time might pass before all types of financial contracts now using LIBOR make the transition to a new benchmark rate. Even then, some existing contracts do not specifically allow an alternative reference rate to be selected, so amending their terms could be difficult. In some cases, amending a financial contract may require the agreement of all bondholders.

Legal Entity Identifier

The global LEI system is a cornerstone for financial data standards that benefits industry and government. Like a bar code for precisely identifying parties to financial transactions, the LEI helps make the vast amounts of data in the financial system more comparable. The LEI can generate efficiencies for financial companies in internal reporting and in collecting, cleaning, and aggregating data.

The LEI can ease companies' regulatory reporting burdens by reducing overlap and duplication. Many financial firms report data to more than one government regulator, and different regulators have different reporting requirements and data identifiers. This lack of uniformity can lead to inefficient, costly, and overlapping requirements for reporting and data management that create costs for industry. Estimated costs for industry of managing data without common standards run into the billions of dollars.

The OFR's goal is adoption of the LEI broad enough to serve the needs of the OFR, the FSOC, and FSOC member agencies to conduct financial stability monitoring and analysis. To achieve such a network effect, private firms must voluntarily adopt the LEI.

When broadly adopted, the LEI will drive efficiency and gains in data quality for industry and government.

Because of these problems, industry groups have called on regulators to broadly adopt the LEI. The same case can be made for adopting other uniform standards for regulatory reporting, especially about common metrics for instruments and accounting.

Organizations reap substantial direct benefits from adopting the LEI, including reductions in manual processes to check identifiers, efficiency gains when integrating data sources, and improvements in data quality. These benefits can save man-hours and reduce costs. Broad adoption of LEIs for client onboarding and client documentation could produce operational efficiencies for individual banks and clients as well as entire markets.

The LEI can also help industry, regulators, and policymakers trace exposures and connections across the financial system. If the LEI system had been in place during the financial crisis, the breadth and depth of exposures to the failing Lehman Brothers would have been easier to assess and potentially manage.

The OFR led the design and deployment of the global LEI system. The system is now complete, with a three-tier governance structure, more than 700,000 LEIs assigned, and reliance on the LEI in scores of regulations in the United States and abroad.

But full adoption of the LEI — necessary for the LEI to produce the most efficiencies for government and the private sector and to keep the system self-sustaining — has not yet happened. The OFR's goal is adoption of the LEI broad enough to serve the needs of the OFR, the FSOC, and FSOC member agencies to conduct financial stability monitoring and analysis.

To achieve such a network effect, private firms must voluntarily adopt the LEI. Recent discussions and surveys show that mandating the LEI in appropriate cases also remains necessary.

At its February 2017 meeting, the OFR's Financial Research Advisory Committee recommended that the OFR hold discussions with industry executives and government officials about the current and future benefits of the LEI, associated costs, and barriers to broader adoption. The committee also recommended that the OFR share the results of its inquiry with selected industry executives who could help identify practical ways to overcome the barriers. Finally, the committee suggested meetings between regulators, industry, and the OFR to further explore potential solutions.

Strategic regulatory mandating of the LEI is required, according to industry advocates.

The OFR has determined that regulations requiring use of the LEI (as opposed to making LEI use optional) are effective and necessary to drive adoption. For example, the Markets in Financial

> The OFR has determined that regulations that require use of the LEI are effective and necessary to drive adoption.

Instruments Regulation in Europe, set to take effect in January 2018, requires LEIs for all counterparties to all trades under a rule known as "no LEI, no trade." This rule helped drive LEI adoption in Europe, and notable increases in LEI issuance have occurred in the run-up to the compliance deadline.

In Europe, regulators concluded that the benefits justified requiring the LEI in this way. In the United States, many market participants will not obtain an LEI unless it is mandated.

Our fact-gathering found that regulators are reluctant to mandate use of the LEI if they already have an identifier that serves the needs of their own reporting, even if they would benefit from increased interoperability of their data with data from other regulators.

Regulators also view the $75 cost of obtaining an LEI as a burden on smaller businesses without more compelling and direct benefits. Smaller organizations are often reluctant to obtain LEIs, claiming that LEI acquisition would be an additive regulatory burden without a clear, direct benefit. These organizations may not have data operations, do not appreciate the potential for productivity gains, do not appreciate the indirect benefits, or do not believe their organizations affect financial stability.

Although the cost of obtaining an LEI is low, the administrative costs of maintaining LEIs in internal systems can be a factor, especially systems with more complex data.

Larger firms have more hurdles to clear in changing their processes to obtain, maintain, and renew their LEIs. Firms with internal databases that rely on proprietary identifiers also incur costs to map their databases to the LEI. However, some firms have already made infrastructure investments and implemented database improvements to use LEIs.

The next step in the evolution of the LEI standard, the introduction of corporate hierarchy data (also known as level 2 data), can create challenges because of the complexity of many organizational structures. These data answer the question of "who owns whom" in the financial system and offer insights about the full risk exposures of large, complex financial entities.

Consistent with statements several years ago by the FSOC and G-20 (the Group of 20, a forum of finance ministers and heads of central banks from 19 countries and the European Union), the OFR has found that the LEI offers indirect benefits relating to market stability. Repeated confirmation of these benefits by government regulators remains critical to reach the number of adopters needed to make the system self-sustaining and achieve the network effects necessary to conduct dynamic and effective financial stability monitoring and analysis. So does the identification of quantifiable cost savings and efficiency gains, as cited by recent industry reports.

Assessing Systemic Importance of Banks

What is the best way to determine the systemic importance of a U.S. bank? Many U.S. regulations categorize banks based on asset size. However, size alone does not fully capture the risks a bank may pose to financial stability.

A multifactor approach that captures risk is superior to using asset size alone to determine the systemic footprint of U.S. banks.

OFR research supports an alternative approach that relies on multiple factors, not just asset size.

The Dodd-Frank Act created an asset-size threshold of $50 billion to identify banks to be subject to enhanced regulation. That threshold could subject some large U.S. banks with traditional business models to enhanced regulation that creates compliance costs unaligned with their risks. It could also exclude some U.S. operations of foreign banks.

Substitutability means providing important services that customers would have difficulty replacing if the bank failed.

As of the end of 2015, a total of 34 U.S. banks each had more than $50 billion in assets. Eight of those are banks identified as global systemically important banks (G-SIBs), banks whose distress or disorderly failure would cause significant disruption to the global financial system (see Figure 10).

A multifactor approach could replace the $50 billion asset-size threshold used in some U.S. bank regulations. A multifactor approach would be similar to the approach used internationally to identify G-SIBs.

G-SIB identification is currently based on an evaluation of five factors: (1) size, (2) complexity, (3) interconnectedness to other financial companies, (4) foreign activities, and (5) lack of substitutability (providing important services that customers would have difficulty replacing if the bank failed).

For identifying systemically important U.S. banks, the G-SIB methodology could be extended and applied to identify large U.S. banks that are not G-SIBs, but merit extra regulatory scrutiny.

For U.S. banks with traditional business models, an asset-size threshold for determining whether to apply heightened regulatory standards could create misaligned regulatory compliance costs.

The first improvement would be to better incorporate risks arising from a lack of substitutes, particularly for banks that provide payments, settlement, custody, and other unique services central to the functioning of financial markets.

The second improvement would better account for the complexity of some foreign banking organizations operating in the United States. The U.S. operations of foreign banks tend to be more active in U.S. capital markets and rely more on wholesale funding than comparably sized domestic banks.

Figure 10. Systemic Importance Scores Under the Basel Methodology (basis points)

Bank Holding Company	Size	Interconnectedness			Substitutability			Complexity			Cross-Jurisdictional Activity		2015 Systemic Importance Score
Global Systemically Important Bank (G-SIB) / Non-G-SIB / Intermediate Holding Company	Total exposures score	Intrafinancial system assets	Intrafinancial system liabilities	Securities outstanding	Payments activity	Assets under custody	Underwriting activity	Amount of over the counter derivatives	Adjusted trading and available for sale securities	Level 3 assets	Foreign claims	Total cross-jurisdictional liabilities	
JPMorgan Chase	394	363	415	425	1160	1413	699	798	839	489	278	353	464
Citigroup	300	338	414	336	1107	831	536	735	465	512	409	426	430
Bank of America	354	291	185	359	444	8	730	659	647	284	185	158	345
Goldman Sachs	170	329	130	249	50	74	498	702	314	410	182	162	252
Wells Fargo	271	215	160	419	143	147	669	95	442	434	62	79	250
Morgan Stanley	140	247	62	172	47	106	512	427	453	253	136	182	212
Bank of NY Mellon	51	91	278	50	801	1686	11	17	77	0	47	112	160
State Street	32	34	174	63	320	1521	0	21	123	39	42	75	148
Northern Trust	17	53	19	13	169	435	0	6	21	0	15	31	56
HSBC North America	57	50	65	46	11	2	84	110	25	62	20	0	44
U.S. Bancorp	65	17	14	105	33	86	36	3	36	58	2	19	41
PNC Financial Services	53	24	14	58	11	6	27	5	60	140	4	2	34
Charles Schwab	24	18	0	35	1	178	0	0	68	0	4	2	25
Deutsche Bank Trust	7	13	38	0	268	0	0	0	0	0	1	0	23
Capital One Financial	47	25	2	83	3	0	4	2	24	15	5	1	20
TD Group U.S. Holdings	37	16	5	5	2	1	0	3	82	19	15	1	18
American Express	24	9	8	97	1	0	0	1	9	0	13	7	15
BB&T	30	2	5	50	3	3	17	1	15	28	1	0	14
SunTrust Banks	29	3	3	31	3	4	25	3	8	35	1	1	14
BMO Financial	18	28	16	18	22	10	13	0	18	1	3	4	13
Ally Financial	20	8	11	83	1	0	0	1	23	1	1	0	13
MUFG Americas Holdings	17	15	10	15	4	9	0	2	22	29	2	1	11
Fifth Third Bancorp	21	3	4	28	5	17	11	1	19	7	2	0	11
Santander Holdings USA	18	3	25	19	0	0	0	1	19	29	1	0	10
M&T Bank	17	3	5	29	7	6	1	0	4	1	0	0	7
KeyCorp	16	2	2	20	4	6	13	1	5	5	1	0	7
Discover Financial	13	11	0	54	1	0	0	0	1	0	0	0	7
Huntington Bancshares	10	2	2	14	2	6	2	1	11	35	1	0	7
Regions Financial	18	1	3	18	3	1	3	1	13	5	0	0	7
Citizens Financial	20	5	5	14	8	0	0	1	2	0	1	1	7
BBVA Compass	13	1	4	12	1	0	9	1	9	1	1	1	5
Comerica	11	7	6	10	1	4	2	0	3	1	1	1	5
BancWest	13	2	3	9	2	0	0	0	3	1	0	1	4
Zions Bancorp	8	2	3	7	2	0	0	0	2	2	0	0	3

Note: Data as of December 31, 2015. Entries are sorted from highest to lowest systemic importance score.
Sources: Basel Committee on Banking Supervision, Federal Reserve Form Y-15, OFR analysis

During the financial crisis in 2007-09, stress on foreign banks spilled into the U.S. financial system and the U.S. operations of some of these banks were large beneficiaries of Federal Reserve credit programs.

Financial Data Services Initiatives

The OFR has a statutory mandate to standardize the types and formats of financial data, expand the scope of data suitable for financial stability analysis, foster appropriate data sharing, and make data accessible while protecting data security.

> Financial data services initiatives could reduce regulatory reporting burdens.

One of the OFR's challenges is to achieve this mandate while serving the needs of the FSOC, FSOC members, and other stakeholders. To meet this challenge, the OFR is considering financial data services initiatives the FSOC could adopt to streamline financial data purchasing, collection, integration, and access.

One potential financial data services initiative could offer one-stop shopping for detailed information — like an index or card catalog — about the data held by FSOC member agencies.

Another initiative would foster data sharing among FSOC member agencies by helping stakeholders apply standard formats to financial data and access analytic tools and related code, while protecting data security.

> Financial data services initiatives could serve the FSOC and its member agencies by increasing efficiency, facilitating appropriate data sharing, and reducing the indirect and direct costs of financial data acquisition.

A repository of metadata, the detailed descriptions of the data regulators collect, will enable linking of financial datasets. In collaboration with FSOC member agencies, the OFR maintains a limited version of this repository today, the Interagency Data Inventory.

A third financial data services initiative would expand on the current inventory by including richer detail on the descriptions of regulatory data collections, down to the granular data-element level.

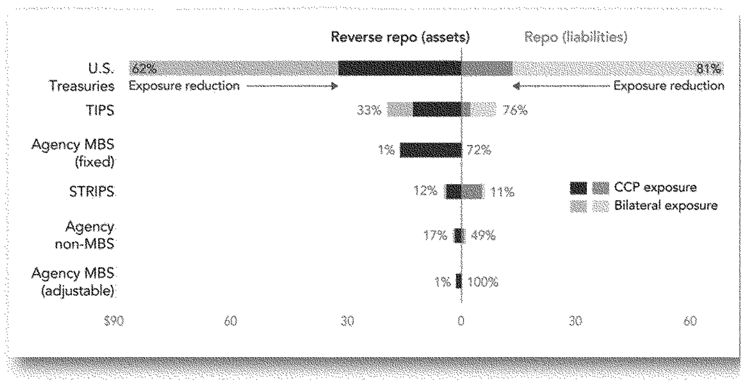
This detail is analogous to the column headings and formats in a spreadsheet. The heading displays the column name and each cell in the column is in a certain format, such as text, number, currency, or percentage.

A metadata repository captures these types of descriptive details. By comparing the details in a catalog of metadata, we can address questions of duplication, overlap, and inconsistencies among FSOC members' datasets — an essential step toward reducing regulatory reporting burdens.

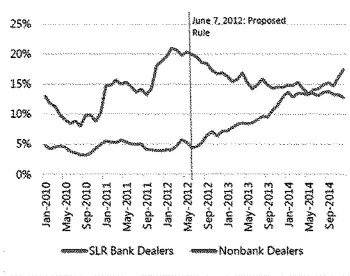
Key Findings from 2017 Research Papers

The OFR's published research focuses on financial stability issues central to our mission. Here are key findings from selected OFR briefs and working papers during fiscal year (FY) 2017.

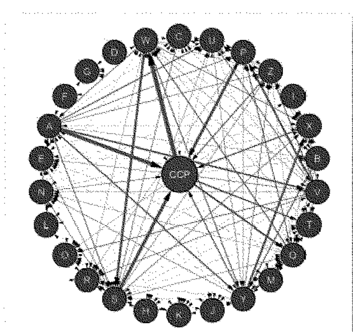
- **Expanding central clearing in the repurchase agreement (repo) market could reduce risk exposures for dealers by 81 percent.** The repo market provides short-term financing for financial companies. After the financial crisis, rules made banks more resilient to stress, but also increased the cost of repo trading for bank-owned dealers. These costs are mostly related to the 2012 introduction of the supplementary leverage ratio, which the OFR has explored in other papers. Today, dealer-to-dealer bilateral repo transactions backed by government securities can be centrally cleared, but transactions between dealers and clients are not centrally cleared. Expanding repo central clearing to transactions between dealers and clients could reduce costs related to the supplementary leverage ratio, improve market access, and support financial stability. ("Benefits and Risks of Central Clearing in the Repo Market," by Viktoria Baklanova, Ocean Dalton, and Stathis Tompaidis)



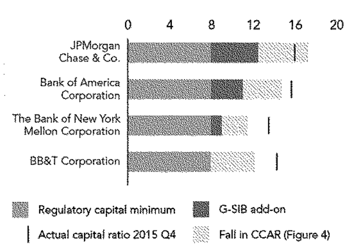
- **New leverage rules have affected the repo market. Bank-owned dealers subject to the rules now borrow less through repo but use lower-quality collateral.** Higher bank capital requirements help protect banks against losses, but may have unintended consequences. Regulators use leverage ratios such as the supplementary leverage



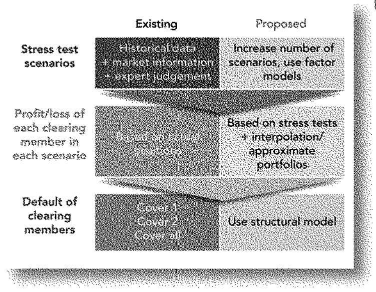
ratio to backstop risk-based capital standards. Risk-based standards require banks to hold more capital against more risky assets. Leverage ratios do not draw distinctions based on risk. After the supplementary leverage ratio was introduced in the United States in 2012, dealers owned by U.S. bank holding companies and covered by the new regulation borrowed less in the repo market, but used riskier collateral. Dealers not owned by banks increased their repo borrowing as bank-affiliated dealers pulled back. This change suggests risks may be shifting outside the banking sector. ("Do Higher Capital Standards Always Reduce Bank Risk? The Impact of the Basel Leverage Ratio on the U.S. Triparty Repo Market," by Meraj Allahrakha, Jill Cetina, and Benjamin Munyan)



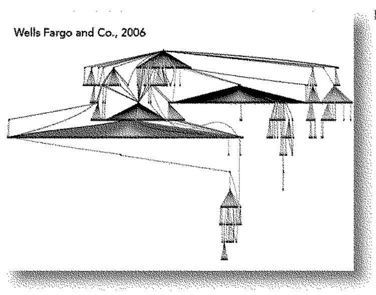
- **Firms peripheral to a central counterparty (CCP) network that are net sellers of credit protection contribute more to systemic risk in the credit derivatives market than do central counterparties at the core of the market.** A severe credit shock can trigger demands for large payments between counterparties in the U.S. credit default swaps (CDS) market. Researchers used anonymized market data to build a model of the CDS payment network. Under stress, the central counterparty contributes less to contagion than peripheral firms that are large net sellers of CDS protection. During a credit shock, these firms can suffer large shortfalls that create shortfalls for their counterparties, amplifying the initial shock. ("Contagion in the CDS Market," by Mark Paddrik, Sriram Rajan, and H. Peyton Young)



- **If the Federal Reserve requires banks to leave their capital buffers untouched during stress tests, banks would be more resilient during a financial crisis but would be required to hold more capital during less-stressed times.** U.S. bank regulators are phasing in new capital buffers, which are cushions of capital banks hold to absorb losses under stress. The Federal Reserve has not announced how stress tests will treat these new capital buffers. Should the tests require banks to leave buffers untouched? Or should banks be allowed to draw down buffers to pass stress tests? If a bank can't draw down its buffer, the U.S. G-SIBs would have to hold more capital. Without the change, however, stress tests could affect less-systemic banks more than G-SIBs. ("Capital Buffers and the Future of Bank Stress Tests," by Jill Cetina, Bert Loudis, and Charles Taylor)



- **Regulators could create systemwide stress tests of CCPs at minimal cost to companies by building on existing stress test results at individual CCPs.** A better U.S. systemwide stress test could be built to measure the strength of all CCPs based on existing stress tests by U.S. and European regulators. Models that combine existing data with statistical techniques and computer modeling would broaden and deepen the tests. Regulators would get a clearer view of systemwide risks from banks that work through multiple CCPs. This approach would require regulators to collaborate in sharing and analyzing data. ("Measuring Systemwide Resilience of Central Counterparties," by Stathis Tompaidis)



- **A new way of measuring complexity can support the resolution process after a bank holding company fails.** An approach for measuring the complexity of bank holding companies is based on the number, diversity, and geographic distribution of bank holding company subsidiaries. The approach combines network analysis and graph theory to measure complexity by identifying bank holding company subsidiaries that share a common property, such as business activity or geographical location, and then calculating how many ownership and control links must be disentangled to unwind the company if it fails. ("The Complexity of Bank Holding Companies: A New Measurement Approach" by Mark D. Flood, Dror Y. Kenett, Robin L. Lumsdaine, and Jonathan K. Simon, Sept. 29, 2017)

Status of the Efforts of the OFR in Meeting Its Mission

This chapter discusses OFR support for our key stakeholders, our national and international collaborations over the past year, current staffing levels, our budget, and information technology projects.

The OFR was created when the financial system and the economy were beginning to recover from the financial crisis, and regulators were beginning to implement regulations and policies to make the financial system more resilient.

The environment and stakeholders' needs have evolved since then. In the future, we plan to continue adjusting our focus on meeting the needs of our key stakeholders — the FSOC, FSOC members, the Treasury Department, Congress, the financial services industry, and the public — as their priorities evolve.

As a service organization, the OFR stands ready to respond quickly to stakeholders' needs and collaborate with stakeholders to achieve them.

The OFR will be a:

- **Trusted resource for meeting stakeholder needs.** We aim to fill gaps in stakeholder capabilities, give objective advice, and act as a sounding board for making difficult decisions.
- **Key source for financial data.** High-quality financial data that are secure, fit for their intended purpose, easy to access and compare, and inexpensive are essential for making good policy decisions.
- **Key source for research and analysis on financial stability.** On behalf of the FSOC, we conduct applied and essential long-term research on the causes of financial crises, develop tools for measuring and monitoring financial stability risks, and analyze the impact of policies related to financial stability.
- **Source for supplemental expertise.** The Dodd-Frank Act requires the OFR to maintain expertise to support the FSOC and its members. The OFR has this expertise in the fields of finance, regulation, economics, law, policy, data, and technology.

Support of Key Stakeholders

Financial Stability Oversight Council

The OFR meets the Dodd-Frank Act mandate of supporting the FSOC and FSOC members in a number of ways. The Office provides data, research, and analysis to the FSOC, its members, Congress, and the public. We are also charged with looking throughout the financial system to collect and standardize financial data, monitor and analyze risks, and perform policy research and analysis.

The FSOC obtains data from nonbank financial companies through the OFR.

Our Director is a nonvoting member of the FSOC, and members of the OFR staff work on a wide variety of FSOC activities and initiatives.

The OFR supports the FSOC and its members by:

- supplying monthly data and analysis on market trends;
- presenting updates of our monitors and delivering ongoing threat assessments to the FSOC Systemic Risk Committee;
- presenting to FSOC principals and deputies to inform their discussions of market events and potential policy steps;
- making presentations and participating in discussions for other FSOC working committees and groups, including the Regulation and

Resolution Committee and Financial Market Utilities Committee;

- assisting the FSOC in developing its annual report through analysis and writing support;
- leading the FSOC Data Committee and co-leading the committee's working group that updates the Interagency Data Inventory; and
- providing data and analysis to support the FSOC's nonbank designation process as the FSOC identifies nonbank financial companies that meet thresholds in the FSOC's initial quantitative metrics.

The FSOC Data Committee is a forum for sharing information and coordinating action on data-related topics that affect member agencies. The OFR leads the committee, which has overseen the development of the FSOC Interagency Data Inventory, designed as an initial step toward avoiding duplication and burden in regulatory reporting. The inventory, the catalog of data being collected by the FSOC member agencies, helps identify data that can be shared by serving as a common reference of regulatory datasets. It can also serve as a best-practices framework for categorizing information security levels, sharing data, and improving reporting efficiency.

We also co-chair the working group of the Data Committee that updates the inventory. Maintenance of the inventory is increasingly important as we strive to identify financial regulatory burdens on industry that can be reduced.

In addition, we serve the FSOC and its staff by collecting, maintaining, and appropriately sharing supervisory and commercial datasets. The OFR has purchased and maintains more than 65 datasets used by the FSOC staff. The OFR develops procedures and protocols for securely sharing data among the FSOC, its member agencies, and the OFR.

We regularly respond to requests by the FSOC and its staff for objective research and analysis. In addition, we have worked to determine the best methods for identifying systemically important banks. In this effort, we built on our earlier research to show how a multifactor approach for assessing systemic importance is superior to making determinations based solely on bank size.

Our research also helps the FSOC identify and prioritize threats to financial stability.

FSOC Members

The OFR offers objective evaluation of financial stability risks and the effectiveness of regulatory policies to FSOC members. The OFR has partnered with FSOC member agencies on a number of research and data projects, some at the specific direction of the FSOC or its member agencies, and others in a less formal response to concerns discussed.

Our work to meet the needs of the FSOC member agencies includes a project with the Federal Reserve to collect and analyze data in support of a reference interest rate as an alternative to LIBOR, an interest rate benchmark formerly known as the London Interbank

Offered Rate, but now called ICE LIBOR (Intercontinental Exchange LIBOR). We are also collaborating with the Federal Reserve on a project to fill critical data gaps in repurchase agreement (repo) transactions, which could support the reference rate project.

During fiscal year 2017, we improved our U.S. Money Market Fund Monitor, which tracks the investment portfolios of money market funds and shows trends and developments across the money market fund industry. The monitor uses data converted from the SEC Form N-MFP and presents the information in a graphic, user-friendly format on the OFR website. It makes the underlying data freely available for download by the industry and public for monitoring and analysis. The monitor is one of the most viewed items on the OFR website, with more than 14,000 page views in the year after its launch.

To improve data sharing among the FSOC member agencies, we are continuing to work with them to streamline the process of developing memorandums of understanding by developing best practices and a set of common provisions.

We anticipate that our ongoing work with standards organizations on identifiers and other data standards will benefit the FSOC member agencies as the quality and interoperability of financial data improves.

The OFR led the U.S. delegation on the global Legal Entity Identifier (LEI) initiative so the LEI could be developed to meet regulatory needs, including swap data repository collection requirements. This foundational standard was the result of a global effort that the OFR spearheaded, as Treasury's representative to the international initiative through the Financial Stability Board.

The LEI system now is routinely considered by others as a way to meet additional needs. For example, the LEI code has become the preferred identifier for parties engaged in swaps activities, and the International Standards Organization asked the foundation that runs the LEI system to maintain the international standard for "entity legal form" (such as a corporation).

Treasury

Because the OFR is an office of the Treasury Department and the Secretary is the FSOC chair, we regard Treasury as a key stakeholder. We share expertise and staff time on projects with the Department, consistent with the law, as we do with other FSOC members.

In addition to supporting the FSOC annual report project, the OFR has lent employees with special expertise to the Department on work details of up to six months.

We also provide Treasury offices access to purchased data on a reimbursable basis, generating significant cost savings compared with those offices obtaining the data directly (because they avoid administrative costs and pay only for the services they need).

To support efforts to make the financial system more resilient to cyber threats, we are assisting Treasury's Office of Critical Infrastructure Protection and Compliance Policy in maintaining and updating their maps of the financial system. The goal of our network analysis of the maps is to gauge the resilience of U.S. financial markets to shocks.

In addition, through our regulatory reporting burden initiative, the OFR is addressing broad Treasury, Congressional, and industry interest in identifying areas of duplication, overlap, and inefficiency in regulatory reporting. We have identified, on a pilot basis, areas of potential overlap in regulatory reports relating to private funds (see **Reducing Regulatory Reporting Burdens**). This work, if expanded, could aid the FSOC in identifying and brokering the implementation of common data standards that would alleviate reporting burdens on firms and improve the quality of financial data for regulators.

Congress

The Dodd-Frank Act requires the OFR to report to Congress annually on our progress in meeting our dual data and research mandates. We do so through this report, and our Director testifies before Congress when invited. The OFR also submits quarterly reports to Congress as required by the Consolidated Appropriations Act. These reports describe the OFR's use of funds, staffing levels, and actions to achieve its goals and objectives.

In addition, our Government and Industry Affairs liaisons routinely interact with key members of Congress, their staffs, and committee staffs to respond to questions, address concerns, and share insights on issues related to financial stability.

Key members of the House Financial Services Committee and Senate Banking Committee have referenced OFR research during public proceedings, including our research on identifying systemically important banks. The OFR also has made presentations to staff members of the House Financial Services Committee and the Senate Banking Committee on the OFR's U.S. Money Market Fund Monitor and on issues including financial stability considerations related to bond market liquidity.

In addition, we are working with other agencies to respond to Congressional inquiries about assessing the benefits of cross-market surveillance for market oversight and financial stability monitoring, and the potential impact for financial firms of a new Chapter 14 of the Bankruptcy Code.

Industry

The OFR has had an industry outreach function since the early days of its existence. Our Government and Industry Affairs team meets with leaders of financial service companies on a regular basis, learning what issues concern financial experts to further inform our agenda.

Our pilot work to collect and anonymize repo data to produce reports about the bilateral repo market has been widely cited by market participants as a success. In addition, the industry Alternative Reference Rates Committee has expressed support for the repo-based reference rate (to replace LIBOR) that the OFR and the Federal Reserve Bank of New York would produce.

We also are working on a regulatory reporting burden project that would benefit industry and promote more efficient regulation by exposing expensive, duplicative, and inefficient regulatory reporting.

Industry trade groups have noted favorably the OFR's ongoing objective analysis on regulatory reform, including OFR analysis of bank stress tests, the approach for identifying systemically important banks, and the regulation of central counterparties.

The Public

The stability of the U.S. financial system is essential to the welfare of all Americans and their financial well-being. As a result, the American public is a beneficiary of OFR efforts to assess and report on vulnerabilities in the system. Our service stems from our critical function as both a research and data institution, our ability to look across the entire financial system to spot emerging threats to financial stability, and our unique data-related mandate.

Results of our work are made public on the OFR website, financialresearch.gov. In publishing our findings and monitoring tools, we support market discipline by making the vulnerabilities of the financial system more transparent.

Another channel for informing the public about the OFR and its work is our Twitter site, where we highlight key OFR activities and products, including graphics. We also send e-mail alerts to the more than 30,000 subscribers who subscribed through our website.

Our research is regularly cited in the media. We maintain working relationships with members of the news media and answer reporters' questions about the OFR.

To further meet the needs of the public, we have projects underway to enrich the information on the OFR website and to make it more usable and accessible by applying usability best practices. We are also working to expand our offerings of downloadable data and interactive monitors for members of the public and news media to understand the importance of OFR work and topics related to the stability of the financial system.

Collaboration

OFR staff experts and leaders participate in a wide variety of events related to financial stability research, data, and analysis. Collaboration with other researchers and regulators, as well industry experts domestically and abroad, is crucial to our success. The OFR has created a virtual research-and-data community to extend our reach and impact by collaborating with colleagues in government, industry, and academia in the United States and around the globe. Collaboration with others helps us to maximize our resources, support financial stability research, and promote standards that lead to high-quality data on the global financial system.

We regularly reach out to academic and financial industry groups for their input on current and emerging financial stability issues. We also collaborate with colleagues around the world on research and data projects by speaking at conferences and events and maintaining our involvement with global organizations. In addition, we hold and cosponsor conferences and other events to promote awareness and discussion about issues related to financial stability.

Our outreach includes remarks, presentations, and appearances in panel discussions by OFR Director Richard Berner and other members of the OFR staff. They speak at conferences and meetings sponsored by industry groups, government regulators, academic institutions, and others.

In addition, the OFR sponsors a Research Seminar Series for OFR employees to engage in discussion and debate with outside experts from government agencies, academic institutions, and international organizations. More than two dozen outside experts appeared at these seminars during the fiscal year. Presentations included:

- "Liquidity Requirements, Liquidity Choice, and Financial Stability"
- "Competition and Stability in Banking: The Role of Regulation and Competition Policy"
- "Do Bank Bailouts Reduce or Increase Systemic Risk? The Effects of TARP on Financial System Stability"
- "Liquidity Regulation and Unintended Financial Transformation in China"

Financial Research Advisory Committee

The OFR Financial Research Advisory Committee, a group of 29 experienced professionals with experience in business, economics, finance, data science, risk management, and information

2017 Financial Research Advisory Committee Meetings

February 23 Department of Treasury	The ninth meeting of the committee included discussions of financial stability risks identified by the OFR, the OFR initiative to develop a financial instrument reference database, adoption of the Legal Entity Identifier, and the research agendas of OFR programs on central counterparties and risks in financial institutions. The OFR also received updates from the committee's Financial Instrument Reference Database Viewpoint Working Group, Data Standards Working Group, and Financial Innovation Working Group.
July 20 Federal Reserve Bank of New York	This meeting included a presentation on improvements to the Financial Stability Monitor; a demonstration of the OFR's newest monitoring tool, the Financial Stress Index; an update on the OFR's efforts to identify obstacles to broader adoption of the Legal Entity Identifier; and a discussion of the OFR's work to monitor and analyze operational risks and cybersecurity risks. At the meeting, the OFR also received updates from the committee's Financial Innovation Working Group.

technology, enhances our annual research-and-data agendas with recommendations that help ensure the OFR is focusing on the most important and timely issues. Committee members are drawn from industry, academia, and the policy community.

The committee, established in 2012, gives the OFR the benefit of industry experts who bring diverse perspectives to inform our work and help the OFR to fulfill its mission. Under the governance of the Federal Advisory Committee Act, the full committee meets semiannually. The OFR makes the minutes and webcasts of the meetings available to the public.

The three subcommittees — Research, Data and Technology, and Financial Services and Risk Management — meet at different times during the year to develop committee work.

Developing Standards for Reporting Financial Data

The OFR's commitment to setting global standards — ranging from identifiers such as the LEI to mortgage standards — is integral to our mandates under the Dodd-Frank Act. To that end, the OFR provides analytical assistance on data standards, and promotes their development and use among the FSOC member organizations, in global regulatory forums, and through standards-setting bodies.

Our collaboration with public and private stakeholders during the past year reaffirmed that the time is right to establish clear, internationally mandated and coordinated standards for reporting financial data and metadata (the data describing data).

Implementation requires the use of standards for the design of data collections, either through coordinated global action or implementation of technical guidance. At its meeting in February, the OFR's Financial Research Advisory Committee recommended that the OFR engage key stakeholders of the LEI to identify obstacles to more complete adoption of the standard. The OFR is following that recommendation as it continues to lead the process of building implementation strategies and coordinating adoption plans with industry and regulatory colleagues in the United States and abroad.

Memorandums of Understanding

Memorandums of understanding (MOUs) are key to the OFR's strategy to promote data sharing, particularly among regulators. In May, the OFR and the European Central Bank signed an MOU that formalizes the processes for the staffs of the OFR and the bank to share analyses and information about emerging financial market risks in the United States and the eurozone.

This MOU is the OFR's second on cross-border cooperation. In April 2015, the OFR signed a similar information-sharing arrangement with the Bank of England, the United Kingdom Prudential Regulation Authority and the United Kingdom Financial Conduct Authority.

These types of cross-border agreements on information sharing are important tools for the OFR to meet its statutory mandate by monitoring global financial market risk, while potentially lowering regulatory reporting costs for firms that operate in the United States and abroad.

The OFR also has scores of MOUs with other agencies in the United States.

Standards for Derivatives Data

The OFR contributes to the global Working Group for Harmonization of Over-the-Counter Derivatives Data Elements. The group, sponsored by the Committee on Payments and Market Infrastructures – International Organization of Securities Commissions (CPMI-IOSCO), is focused on three distinct efforts: (1) a unique product identifier, (2) unique transaction identifier, and (3) standardizing critical data elements.

We collaborated with industry participants about the product identifier during meetings in January, April, and July of 2017. The identifier will enable unique identification of financial products for easier aggregation of data and analysis of potential asset-specific risks.

The transaction identifier will enable identification of unique individual over-the-counter derivative transactions to facilitate aggregation of transactions and enhance analysis. We contributed to the publication, Technical Guidance for the Harmonization of the UTI (unique transaction identifier). We also reviewed the industry's consultative responses and drafted the final recommendations of the guidance, published in February 2017. The technical guidance outlines the definition, format, and use of the transaction identifier.

We participate in the Financial Stability Board's working group on governance for both identifiers. Strong global governance is necessary for effective implementation and continued relevance of global standards.

In April 2017, the OFR took leadership of the governance assessment work stream for the unique transaction identifier. The final proposed governance arrangements for the transaction identifier were published for public comment in March 2017.

The work on critical data elements is aimed at producing clear guidance to authorities on definitions, format, and use of critical data elements (other than the transaction and product identifiers) for consistent and effective global aggregation of over-the-counter derivative contracts. Under OFR leadership, this work continued to focus on the potential for the International Organization for Standardization to manage data elements.

As co-chair of the work stream on critical data elements, the OFR continues to lead the revision of the Batch 1 CDE (critical data elements) Consultative Report, consisting of 14 data elements, as well as the analysis, finalization, and revision of the 27 data elements for the Batch 2 CDE Consultative Report. The Batch 3 CDE Consultative Report was published in June 2017.

Mortgage Standards

The OFR staff worked with the industry and global standards bodies during the year to develop standards that would affect a broad array of processes in the mortgage industry.

For example, we held a two-day workshop to align data fields and definitions between messaging standards by the International Organization for Standardization and the Mortgage Industry Standards Maintenance Organization.

The mortgage industry relies on electronic payments to transfer money between participants in mortgage financing, guarantee, and securitization processes. We worked with the mortgage industry to help its stakeholders (such as mortgage issuers and servicers) understand the potential impact of adopting the International Organization for Standardization's standard in the U.S. electronic payments system.

The OFR also continued to collaborate with industry and regulators to advance the adoption of a universal loan identifier. Such an identifier would help regulators and the industry assess risk by linking first and second liens, such as first mortgages and related home-equity loans — without revealing the personally identifiable information of borrowers. But without an industry-wide requirement to adopt a universal loan identifier, adoption has been slow.

As an example of voluntary adoption, government-sponsored enterprises Fannie Mae and Freddie Mac have committed to begin collecting the universal loan identifier for all applicable loans delivered to them. This new data collection becomes mandatory for loan delivery to these government-sponsored enterprises by May 2019.

Working Groups

Oct. - Nov. 2016	OFR Associate Director of Data Strategy and Standards and Acting Associate Director for Strategic Data Support attended a meeting on Oct. 28 of the Legal Entity Identifier Regulatory Oversight Committee's Executive Committee. They also attended meetings Nov. 1-2 of the Data Harmonization Working Group of CPMI-IOSCO.
FY 2017	OFR Acting Associate Director for Current Analysis participated in the Financial Stability Board's Data Experts Group, which is responsible for developing standards for a global data collection on securities financing transactions and implementing the collection. The group met to develop the implementation guidelines for the collection.

FY 2017	OFR staff members represented the Treasury Department at several meetings of the global LEI system and led or participated in several work streams.
FY 2017	OFR staff members represented the Treasury Department in an initiative to establish a governance structure for sharing aggregated and anonymized data on securities financing transactions with financial authorities overseas through a secure data center hosted by the Financial Stability Board and Bank for International Settlements.
FY 2017	OFR senior researchers contributed to the Financial Stability Board's working groups on the over-the-counter derivatives market, contributing to a review of effectiveness of market reforms.
FY 2017	OFR staff members represented the Treasury Department in the Financial Stability Board's Financial Innovation Network. The events included a case study on artificial intelligence and machine learning in financial services. The OFR contributed to drafting a report analyzing potential benefits and risks for financial stability stemming from applications of artificial intelligence and machine learning.
April 2017	OFR staff members acted as U.S. government observers of the Joint Expert Group on Interconnectedness at the invitation of the European Systemic Risk Board. The group meets to share data and analyses on financial stability issues in the European Union. The OFR participation allowed the staff members to share views about financial stability concerns with their European counterparts.
April 2017	OFR Associate Director for Data Strategy and Standards, a Senior Standards Specialist, and a Policy Advisor attended the quarterly meeting of CPMI-IOSCO sponsored by the Data Harmonization Working Group.
July 2017	OFR Associate Director for Data Strategy and Standards, a Senior Standards Specialist, and a Policy Advisor attended the quarterly meeting of the Financial Stability Board's Working Group on the Unique Transaction Identifier & the Unique Product Identifier and the CPMI-IOSCO Data Harmonization Working Group.

OFR Speeches, Conferences, and Events

Speeches

OFR Director Richard Berner made remarks at the following events:

Oct. 2016	**New Pedagogy of Financial Regulation** conference at the Columbia Law School on "The Interdisciplinary Approach to Financial Stability Analysis."
Jan. 2017	**Power of Transparency Speaker Series** hosted by the Atlantic Council and Thomson Reuters.
March 2017	**Financial Data Summit** hosted by the Data Transparency Coalition on "Reducing the Regulatory Reporting Burden."

OFR staff members made public remarks and presentations at many events, including:

Oct. 2016	**American Society of International Law and the Institute of International Economic Law Biennial Conference** OFR's Senior Advisor for International Affairs spoke on the "Systemic Risk Aspects of International Financial Law."
Oct. 2016 Jan.- Feb. 2017	**Securities Lending** conference **and Securities Finance Collateral Management** conference An OFR Senior Financial Analyst gave presentations about the OFR's securities lending data pilot during events sponsored by the Risk Management Association and the Information Management Network.
April 2017	**Enterprise Data World** conference An OFR Senior Standards Specialist shared her ontology expertise and how the use of ontologies are helpful when managing information from disparate data sources in varied formats.
April 2017	**Eurofi High Level Seminar** The OFR Deputy Director for Research and Analysis participated in a panel on "Emerging Risks in Global & EU Financial Markets."

May 2017	**Financial Information Management** conference The OFR Deputy Director and Chief Data Officer spoke about OFR initiatives to improve data quality through collaborative standards development efforts with regulators and industry.
July 2017	**Society for Economic Measurement 4th Annual Symposium** An OFR Senior Advisor participated in a panel highlighting the benefits FinTech and RegTech can provide to the financial industry. He discussed evolving analytical approaches in response to explosive growth in data volumes.

FY 2017 Conferences and Events

Oct. 2016	**Big Data: Improving the Scope, Quality, and Accessibility of Financial Market Data** The OFR and the Center on Finance, Law, and Policy at the University of Michigan hosted a conference that explored ways to make date more useful, accessible, and secure.
Dec. 2016	**Conference on Innovation, Market Structure, and Financial Stability** The OFR and the Federal Reserve Bank of Cleveland cosponsored this event. It brought together academics, policymakers, and market participants to discuss financial and technological innovations and their impact on financial stability.
March 2017	**Setting Global Standards for Granular Data: Sharing the Challenge workshop** The third workshop cosponsored by the OFR, Bank of England, and European Central Bank brought together policymakers, international organizations, and financial industry practitioners from around the world. The three sponsoring institutions are continuing their work along with other organizations under the theme "Sharing the Challenge." OFR Director Richard Berner and representatives of the OFR's Data and Research Centers participated in various panels.
Sept. 2017	**Conference on Heterogeneous Agents and Agent-based Modeling** The OFR, Brandeis University, and Bank of England cosponsored this event. It highlighted research on the impact of individual heterogeneity for financial system stability and economic outcomes.

Organization, Staffing, and Offices

Organization

To achieve the goals set by the Dodd-Frank Act, the OFR has three centers (see Figure 11):

1. The Data Center acquires and manages data and leads global initiatives to develop standards for efficiencies in data reporting and analysis.
2. The Research and Analysis Center conducts research, performs analysis, and evaluates policies related to the stability of the U.S. financial system.
3. The Technology Center is responsible for OFR information technology systems and system security, including an information technology platform to support analysis with large datasets.

Three divisions support the centers:

1. The Operations Division provides expertise, program management, implementation, policy, and oversight for budgeting, travel, human resources, procurement, and facilities.
2. The External Affairs Division produces OFR publications and graphics and maintains relationships and communicates with a broad array of stakeholders, including Congress, industry, the news media, and the OFR workforce.
3. The Office of the Chief Counsel, part of the Treasury Department's Office of General Counsel, offers legal guidance on policy initiatives, analysis and research, data acquisition and usage, procurements, and agreements with other organizations. It also oversees risk management work and audits.

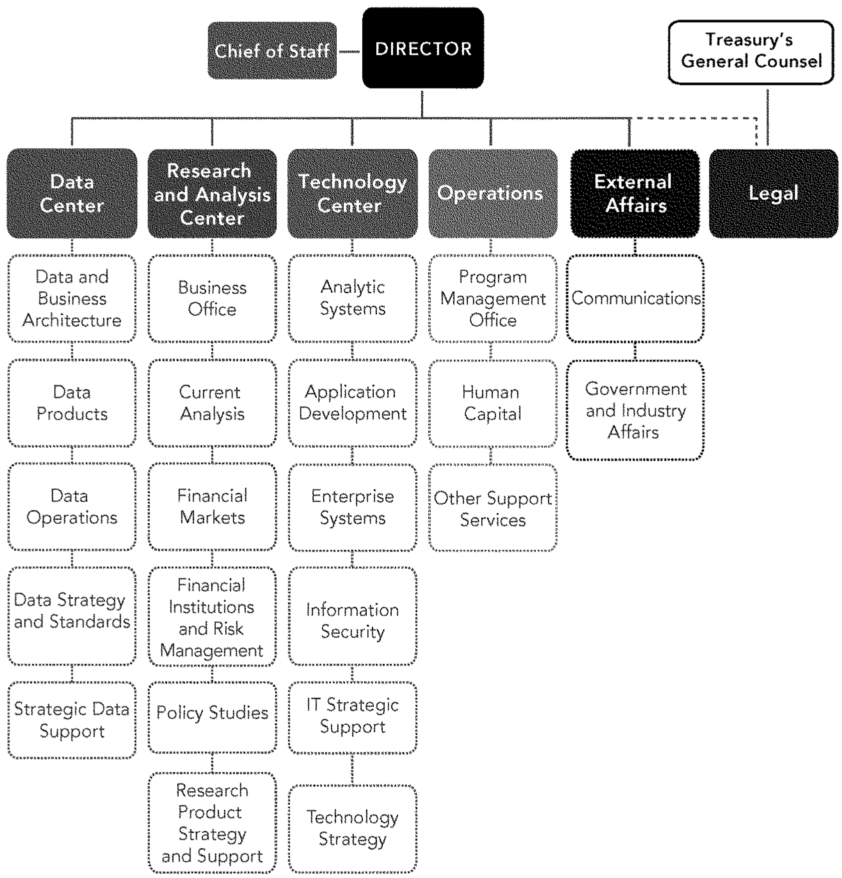
Staffing

The OFR's work was supported during the fiscal year by 210 employees: 203 permanent, six term, and one temporary. (This count does not include employees on detail from other agencies or serving under the Intergovernmental Personnel Act of 1970.) Only the Director is a political appointee.

Two leadership groups govern the OFR. The Director and seven deputy directors and chiefs make up the senior management team. The leadership group includes those eight senior managers plus 20 associate directors who lead the teams under the senior managers.

In consultation with the FSOC, FSOC members, and other stakeholders, the OFR developed an FY 2017 plan that reflects our mission, five-year strategic plan, key stakeholder needs, critical infrastructure needs, and budget parameters. The FY 2017 plan was a roadmap for the OFR to meet the needs of key stakeholders within the President's Budget parameters. All OFR employees were assigned work that contributed to meeting stakeholder needs, statutory requirements, and the building and operating of critical infrastructure.

Figure 11. OFR Organizational Chart



OFR Budget and Accountability

OFR funds obligated in FY 2017 were $92.9 million — 54 percent for labor and 46 percent for other expenses (see Figure 12). This ratio differs significantly from the two-thirds labor, one-third nonlabor split in the budgets of most agencies, largely due to significant OFR expenses for data acquisitions ($8.8 million) and technology software and hardware ($13 million) to support the OFR's unique mandates.

The OFR is an office within the U.S. Department of the Treasury, overseen by Congress and government auditors. Since its establishment, the OFR has answered four audit requests from the Government Accountability Office, and interviewed for another five; six audits by the Treasury Inspector General; and one audit by the Council of Inspectors General on Financial Oversight. OFR leaders have testified before Congress on four occasions: Director Richard Berner has testified three times as Director, and a former Chief Operating Officer testified once before the Director's confirmation.

Though part of the Treasury Department, the OFR is not funded by annual Congressional appropriations, but by semiannual assessments from bank holding companies with total consolidated assets of $50 billion or more each and nonbank financial companies supervised by the Board of Governors of the Federal Reserve System.

The OFR pays the Treasury Department nearly $10 million per year for support

Figure 12. OFR Funds Obligated in Fiscal Years, 2013 - 2017 ($ thousands)

	2013	2014	2015	2016	2017
Compensation	15,339	24,168	29,036	32,485	37,379
Benefits	4,885	7,968	9,507	11,322	13,054
Labor Total	20,224	32,136	38,543	43,807	50,434
Travel	246	296	453	556	447
Communication and Utilities	4,717	5,332	3,811	62	179
Printing and Reproduction	24	27	31	26	22
Other Services	22,683	23,558	25,033	35,794	31,823
Supplies and Materials	3,916	4,947	8,060	8,312	6,508
Equipment	13,495	16,970	8,785	5,997	3,459
Grants				320	
Nonlabor Total	45,081	51,130	46,173	51,067	42,439
TOTAL	65,305	83,266	84,716	94,874	92,873

Note: Other services include rent and administrative support for human resources, conferences and events, facilities, and procurement.

Source: OFR analysis

for OFR human resources, budget, travel, and acquisitions activities. In addition, the Office pays Treasury more than $6 million annually for information technology circuits; payroll services; and agency-wide systems for training, performance management, and human resources management. The OFR Director must consult with the Treasury Secretary in establishing the OFR budget and workforce.

Information Technology

Information Security

Information security is one of the OFR's highest priorities, and we have built a strong security and privacy awareness program over the past several years dedicated to ensuring that our systems and our data are secure and will remain secure. All OFR employees take annual security and privacy training, and employees who have access to nonpublic data are subject to heightened post-employment restrictions.

The OFR brings large quantities of data into its analytical environment, which was designed and built specifically for the OFR to securely support computing-intensive work with large datasets. In FY 2017, we renewed our commitment to maintaining the confidentiality, integrity, and availability of our systems and the information they hold. We conducted our annual internal and external "penetration tests," which were completed by an independent third party, with no major findings identified. We also deployed several additional controls and tools that strengthened our security posture.

The OFR operates two storage systems. One system is used exclusively for analytics; the other system is for general purposes. One of our projects during FY 2017 involved enabling the encryption of data not being used (referred to as "data at rest") on both systems to boost our security.

The OFR follows the National Institute of Standards and Technology guidance for the implementation and operation of a government information security program.

Disaster Recovery and Web Infrastructure Security

We also reassessed our business needs for disaster recovery in FY 2017. The OFR has an alternate processing center and disaster recovery center outside of Washington, D.C. We conducted a number of tests using several scenarios to determine that the center would be ready in the event of an emergency, and we put additional technology and controls in place to ensure its readiness.

The OFR uses this disaster recovery data center as an alternate processing center and not just as a standby. When not in disaster-recovery mode, we maximize our investment in this resource by using it for additional computing power for the OFR's day-to-day operations.

During the year, we also assessed our public website, financialresearch.gov, and determined that we needed to increase the security level of the site's infrastructure to handle new requirements. In anticipation of creating a restricted, password-protected area on the website in the future, we built a platform that would allow researchers or other approved stakeholders from outside the OFR (such as the FSOC and FSOC members) to have access to certain protected resources. This project also required creating an authentication mechanism and process to ensure only selected users approved for access and having user accounts and passwords will be allowed.

Finally, we upgraded the OFR's mobile-device-management platform, increasing the security of our mobile phones, while enabling capabilities that allow OFR employees to securely use on-site services, such as our time-and-attendance system.

Technology Projects

When we launched the OFR analytic systems at the end of 2013, we decided not to use external "cloud" services. Cloud services allow organizations to pay only for the computing and storage capacity they use, instead of procuring, creating, and maintaining entire in-house systems. Over the past four years, rapid technology development and improvements, coupled with improvements in security, have advanced external cloud options significantly.

Now, our analytic systems are nearing the point of requiring significant investment in new machinery and hardware. After extensive research and work to determine the most cost-effective way forward, we launched a project in FY 2017 to begin to migrate a number of our systems to the cloud. Consequently, the eventual cloud migration of key services guided many decisions we made during the year about architecture, new investments, ongoing maintenance and support arrangements, and our existing product portfolio.

To support a cloud migration, we also developed a new system architecture that effectively and efficiently ties internal systems with cloud and Web-based systems, and we made prudent investments in new technology for internal systems.

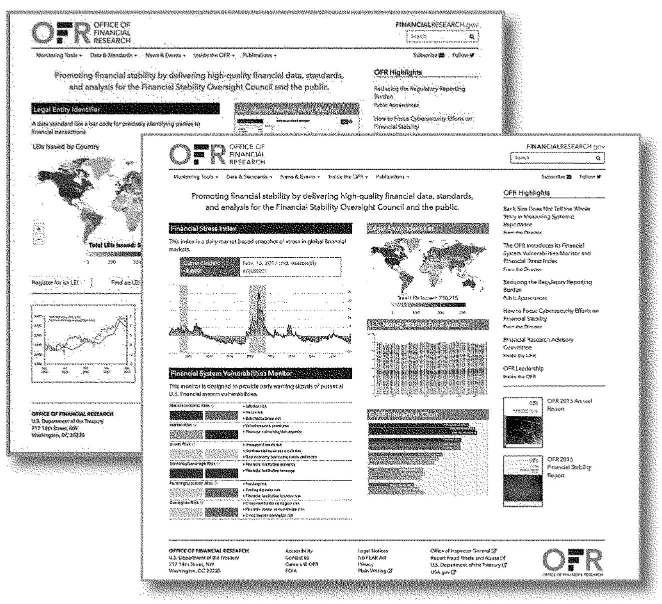
As a result, we decommissioned several systems and discontinued certain products in favor of better and more cost-effective alternatives. We also found opportunities to reduce or eliminate some unused or less-needed services and capabilities, develop a streamlined review process for new system and software requests, and reduce our dependency on less-effective traditional database management systems.

We are taking the steps necessary to ensure that our cloud infrastructure will provide the same level of protections as our internal infrastructure, and will comply with all federal security guidance.

Other Initiatives

The OFR Technology Center supported a number of other projects during FY 2017, including:

- redesigning www.financialresearch.gov, our public website;
- developing publicly available monitoring tools;
- enhancing our internal knowledge catalog and metadata repository;
- helping OFR researchers and analysts make the best use of the power of our analytic systems, reducing the processing time of models that require high-performance or high-volume computing;
- upgrading our internal collaboration and workflow automation platform; and
- expanding use of our chart and data automation systems.



2017 redesign of the OFR website, **FINANCIAL**RESEARCH.gov

LOOKING AHEAD

We are basing our agenda for FY 2018 on the needs of our key stakeholders. To implement this agenda, we have identified our key stakeholders and their needs and mapped out strategies for determining and serving those needs during the year.

Our priorities include:

- **Support alternative reference rates and collect bilateral repo data** – We have been collaborating with the Federal Reserve and Federal Reserve Bank of New York to develop an alternative to LIBOR, an interest rate benchmark that was formerly known as the London Interbank Offered Rate but is now called ICE LIBOR (Intercontinental Exchange LIBOR). We also collaborated with the Federal Reserve and the SEC on two voluntary pilot projects in 2015 to explore how to collect data about bilateral repurchase (repo) agreements and securities lending transactions. In FY 2018, we plan to undertake a rulemaking to establish an ongoing data collection covering some repo transactions. These data might be useful in calculating the selected LIBOR alternative, called the Secured Overnight Financing Rate.
- **Evaluate potential bankruptcy changes** – The OFR and the Government Accountability Office are evaluating whether potential changes to bankruptcy laws could improve the resolution — successful restructuring or liquidation — of a failing systemically important financial institution. As we said in Chapter 1, the failure of large and complex financial companies could transmit distress to other firms, with potentially adverse consequences for the economy.
- **Evaluate the value of cross-market surveillance** – To understand the vulnerabilities in the financial system that could be exposed by shocks, we are studying the interconnectedness of financial markets in cooperation with the SEC and the CFTC. This project to assess the cross-market connections arising from the positions of key market participants will help us understand how these connections could spread risk through the financial system.

- **Map systemic effects of cybersecurity threats and operational shocks** – We plan to continue analyzing the threat to financial stability that cybersecurity incidents and other operational failures can pose. We described this threat in Chapter 1. We also discussed in Chapter 2 our project to combine network analysis with maps (loaded with real-world data) of the financial system to identify cybersecurity threats and other operational vulnerabilities.

- **Bring about broader adoption of the Legal Entity Identifier (LEI)** – We support a recent recommendation from our Financial Research Advisory Committee to spur wider adoption of the LEI — and achieve the full benefits of this essential data standard. We are following the recommendation by brokering a series of discussions with financial industry executives and government officials to explore costs and benefits and identify hurdles that impede widespread adoption. The next step will be to find ways to overcome these hurdles.

In the next fiscal year, we also plan to explore financial data services initiatives that the FSOC could adopt to increase efficiency by reducing the time and resources expended for financial data acquisitions. We are already working with the Treasury Department's Bureau of the Fiscal Service on pilot data acquisition contracts with selected FSOC member agencies. These contracts are for procuring financial data more efficiently and, potentially, at lower cost.

To increase efficiency, maximize performance, and reduce costs, our Technology Center will begin moving our analytic services to the cloud in FY 2018, following the plan developed during and after FY 2017. Using cloud services, organizations pay only for the capacity they use, rather than developing and maintaining complete in-house systems.

We will also relocate our OFR Web infrastructure to a new provider in fiscal 2018. The architecture we developed will allow Web and internal and external cloud systems to be seamlessly and securely integrated. This new architecture will be the foundation of the data-centric capabilities the OFR plans to develop to support FSOC members.

OFFICE OF FINANCIAL RESEARCH

United States Government Accountability Office

GAO

Statement for the Record to the Subcommittee on Oversight and Investigations, Committee on Financial Services, House of Representatives

For Release on Delivery
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OFFICE OF FINANCIAL RESEARCH

Observations on GAO Access to Information on Programs and Activities

Statement for the record by
Lawrance L. Evans, Jr., Managing Director,
Financial Markets and Community Investment

GAO-18-255T

December 7, 2017

OFFICE OF FINANCIAL RESEARCH

Observations on GAO Access to Information on Programs and Activities

GAO Highlights

Highlights of GAO-18-255T, a statement for the record to the Subcommittee on Oversight and Investigations, Committee on Financial Services, House of Representatives

Why GAO Prepared This Statement

In September 2014, the House Committee on Financial Services requested that GAO review OFR, an office within the Department of the Treasury. Among other things, GAO was asked to assess the agency's usefulness to regulators and Congress in assessing systemic risk in the financial system and any delays or set-backs in its major undertakings. GAO subsequently initiated a review of OFR in January 2015. However, during the course of its review, GAO encountered substantial delays in obtaining access to agency officials and information. Separately, whistleblower allegations and an ongoing Treasury OIG investigation led GAO to terminate the engagement.

This statement discusses (1) GAO's audit standards and protocols regarding access to agency information, (2) issues GAO encountered in accessing information at OFR, and (3) GAO's decision to terminate the engagement without issuing a product.

View GAO-18-255T. For more information, contact Lawrance L. Evans, Jr., at (202) 512-8678 or evansl@gao.gov

GAO Views

GAO has broad statutory authority to audit and evaluate agency transactions, programs, and activities, as well as a broad statutory right of access to agency records. Auditing standards require that analysts and financial auditors promptly obtain sufficient, relevant evidence to provide a reasonable basis for any related findings and conclusions. Therefore, prompt access to all records and other relevant information is needed for the effective and efficient performance of GAO's work. GAO has promulgated protocols describing how it will interact with the agencies it audits. Among other things, GAO expects that agencies will promptly comply with requests for all categories of needed information. GAO also expects to receive full and timely access to agency officials who have stewardship over the requested records and to agency employees responsible for the programs, issues, and other factors covered by such records.

During the course of its review of the Office of Financial Research (OFR), GAO experienced repeated problems with gaining access to both people and documents. Many meetings took months to schedule, some were canceled with short notice, and responses to requests for documentation and other information were delayed. GAO made repeated attempts to obtain required documentation and to schedule interviews with agency officials. These attempts included frequent follow-up emails and phone calls, the imposition of deadlines for document delivery that were either not complied with or resulted in production of some but not all required documents, and a discussion between GAO Counsel and the Chief Counsel of OFR regarding the agency's continuing delays. Despite these extensive efforts, GAO experienced significant delays in getting access to officials and agency documents.

Whistleblower allegations raised additional concerns about the quality of information that OFR provided GAO. As GAO discussed with House Committee on Financial Services staff, in June 2016 GAO was contacted by an anonymous whistleblower who alleged that OFR had manipulated the information it provided. GAO subsequently learned that the Department of the Treasury's Office of Inspector General (Treasury OIG) was conducting an investigation of similar allegations from whistleblowers. Because of concerns about the quality of OFR's information and the fact that the Treasury OIG was conducting an investigation, GAO decided to terminate the engagement consistent with GAO protocols and practices. However, GAO agreed with Committee staff that, following the completion of the Treasury OIG's investigation, GAO would be in a better position to initiate a new review of OFR.

Chairman Wagner, Ranking Member Green, and Members of the Subcommittee:

I am pleased to submit this statement on our access to information at the Office of Financial Research (OFR), within the Department of the Treasury, and the reasons for our termination of a recent review of OFR. My statement will provide information on our audit standards and protocols regarding our access to agency information, the information access issues we encountered at OFR, and our concerns about the quality of OFR's information and the factors that led to our decision to terminate our review.

As you know, the Dodd-Frank Wall Street Reform and Consumer Protection Act (Dodd-Frank Act) established OFR to serve the Financial Stability Oversight Council (FSOC) and its member agencies by improving the quality, transparency, and accessibility of financial data and information, conducting and sponsoring research related to financial stability, and promoting best practices in risk management. Since OFR was created, we have analyzed various aspects of the agency's operations as part of our body of work related to financial markets, such as the agency's early efforts to establish management structures to carry out its mission and its role in monitoring systemic risk to financial stability.[1]

In September 2014, the House Committee on Financial Services requested that we review OFR to assess, among other things, the agency's usefulness to regulators and Congress in assessing financial risk and setting regulatory policy and any delays or set-backs in its major undertakings and the reasons for them. This request was the first time we had been asked to focus solely on OFR. In response to that request, we initiated a review of OFR in January 2015.

As detailed in the remainder of my statement, during the course of this review we encountered substantial delays in obtaining access to information, and the information we were provided was often of limited value. While we had made a commitment to the Chairman to complete our work and issue a product by November 17, 2015, these delays

[1]GAO, *Financial Stability: New Council and Research Office Should Strengthen the Accountability and Transparency of Their Decisions*, GAO-12-886 (Washington, D.C.: Sept. 11, 2012) and *Financial Regulation: Complex and Fragmented Structure Could Be Streamlined to Improve Effectiveness*, GAO-16-175 (Washington, D.C.: Feb. 25, 2016).

prolonged the engagement until June 2016. As we informed your staff, we also spoke with a whistleblower who alleged, among other things, that OFR had manipulated the information it provided to us. We subsequently learned that the Department of the Treasury's Office of Inspector General (Treasury OIG) was conducting an investigation into similar allegations from whistleblowers. Because the whistleblowers' allegations raised concerns about the reliability of the information OFR had provided to us, and because the Treasury OIG was conducting an investigation into the same or similar allegations, we decided to terminate the engagement consistent with GAO protocols and practice. However, we agreed with committee staff that, following the completion of the Treasury OIG's investigation, we would be in a better position to initiate a new engagement. This statement was prepared in accordance with those sections of GAO's Quality Assurance Framework that were relevant to our objectives.

GAO Conducts Audits and Evaluations in Compliance with Auditing Standards and Has Broad Authority to Access Information

GAO has broad statutory authority under title 31 of the United States Code to audit and evaluate agency transactions, programs, and activities. To carry out these audit and evaluation authorities, we have a broad statutory right of access to agency records. Using the authority granted under title 31, we perform a range of work to support Congress, including the following:

- Evaluations of federal programs, policies, operations, and performance.
- Management and financial audits to determine whether public funds are being spent efficiently, effectively, and in accordance with applicable laws.
- Investigations to assess whether illegal or improper activities may have occurred.
- Engagements in which we work proactively with agencies, when appropriate, to help guide their efforts toward transformation and achieving positive results.

We carry out our audit and analytical work in accordance with generally accepted government auditing standards.[2] Our analysts and financial

[2]GAO, *Government Auditing Standards, 2011 Revision*, GAO-12-331G (Washington, D.C.: December 2011).

auditors are responsible for planning, conducting, and reporting their work in a timely manner without internal or external impairments. These standards and responsibilities require that analysts and financial auditors promptly obtain sufficient and relevant evidence to provide a reasonable basis for any related findings and conclusions. Therefore, prompt access to all records and other relevant information is needed for the effective and efficient performance of our work.

Our work involves different collection approaches to meet the evidence requirements of generally accepted government auditing standards. Such evidence falls into four categories:

- physical (the results of direct inspection or observation);
- documentary (information created by and for an agency, such as letters, memorandums, contracts, management and accounting records, and other documents in various formats, including electronic databases);
- testimonial (the results of face-to-face, telephone, or written inquiries, interviews, and questionnaires); and
- analytical (developed by or for GAO through computations, data comparisons, and other analyses).

We have promulgated protocols describing how we will interact with the agencies we audit.[3] We expect that agencies will promptly comply with our requests for all categories of needed information. We also expect that we will receive full and timely access to agency officials who have stewardship over the requested records; to agency employees responsible for the programs, issues, events, operations, and other factors covered by such records; and to contractor personnel supporting such programs, issues, events, and operations. In addition, we expect that we will have timely access to an agency's facilities and other relevant locations while trying to minimize interruptions to an agency's operations when conducting work related to requests for information.

[3]GAO, *GAO's Agency Protocols*, GAO-05-35G (Washington, D.C.: Oct. 21, 2004).

Access Issues with OFR Included Difficulties with Scheduling Meetings and Obtaining Documents

During the course of our review of OFR, we experienced repeated problems with gaining access to both people and documents. Many meetings with OFR officials took months to schedule, some were canceled with short notice, and requests for documentation and other information were delayed. We had to make repeated attempts to obtain required documentation and to schedule interviews with agency officials. These attempts included frequent follow-up emails and phone calls, the imposition of deadlines for document delivery that were either not complied with or resulted in production of some but not all required documents, and a discussion between GAO counsel and the Chief Counsel of OFR regarding the agency's continuing delays. Despite these extensive efforts, we experienced significant delays that prevented us from completing our audit work within originally planned time frames. Examples include the following:

- **OFR delayed and canceled meetings:** We first emailed the OFR liaison to request an entrance conference—a meeting between GAO and the agency under review that marks the beginning of an engagement—on February 6, 2015. OFR officials agreed to meet with us in person on March 10, in part to accommodate our plans to bring field staff to Washington, D.C. We sent numerous emails to the OFR liaison attempting to confirm the meeting logistics and attendees but did not receive a response. On March 4, we provided OFR with a set of questions to guide the entrance discussion. However, on March 9—one day before we were scheduled to meet—the OFR liaison emailed to cancel the meeting. Although we provided several options for meeting with agency officials, we were unable to hold the entrance conference with OFR until April 8, more than 2 months after our first meeting request.

  In another example, we requested a follow-up interview with OFR officials on June 30, 2015, to discuss OFR's (1) statutory mandate and how the agency planned projects to meet it and (2) functional issues, such as how the agency manages data collection and data sharing efforts among federal financial agencies. However, OFR did not acknowledge receipt of our meeting request until July 27—almost a month after our initial request. Further, the agency proposed delaying our requested meeting for another month—specifically, until August 26. We expressed disappointment at the lengthy time frames and described the impact they could have on our work, but again, on August 25—one day before we were scheduled for an in-person meeting—the OFR liaison emailed to cancel the meeting.

- **OFR repeatedly delayed fulfillment of document requests:** On May 11, 2015, we requested copies of several documents that OFR described during the April 8 entrance conference. On May 20, the OFR liaison emailed to let us know that officials were discussing our request and said she would soon let us know when we could expect the documents. A week later the liaison notified us that OFR would fulfill the document request in two parts: one by June 5 and the second by June 12. We followed up with the liaison on numerous occasions before receiving all documents in the original request on June 19—5 weeks after our May 11 request. In another example, after meeting with OFR officials who could not respond to questions that had been sent in advance, we made a formal request on October 16, 2015, that OFR respond to the questions in writing. We also requested that OFR provide additional documents detailing, for example, OFR's performance measures and project management policies and practices. We made several follow-up attempts by email and phone before receiving the documents 2 months later (December 14, 2015) and written responses almost 4 months later (February 3, 2016).

In addition to these difficulties with scheduling meetings and obtaining documents, officials we met with were frequently unable to answer our questions. In some cases, OFR officials in the best position to answer our questions were unable to provide answers or would direct us to ask others in the agency, who also told us they were not able to answer. For example, on September 11, 2015 we met with OFR's Acting Deputy Director of Research and its Chief Data Officer and were able to learn about the agency's data collection and data sharing efforts. However, although we provided OFR with an agenda nearly 2 months in advance, both officials were unable to respond to agenda items covering how certain aspects of OFR's strategic plan and performance measures relate to its data collection and data sharing functions, which are statutorily mandated.[4] Instead, we were told that the questions should be posed to OFR's Chief Operating Officer. We met with OFR's Chief Operating Officer on September 30 and posed the same questions; however, we were told that they were best answered by the Acting Deputy Director of Research and the Chief Data Officer.

[4] The Dodd Frank Act requires OFR to set up a data center and a research and analysis center to, among other things, collect and provide data to FSOC and its member agencies, perform applied and essential long-term research, and develop tools for risk measurement and monitoring.

Agency officials gave several explanations for their delays, including that the required parties were very busy or traveling, that they did not receive an email (despite our logs showing that the emails were transmitted), that particular months were busy at the agency, and that they did not fully understand our requests. We continued to pursue our information requests, analyze the information we obtained from OFR, and moved forward with our efforts to respond to the Committee's request. However, as a result of OFR's repeated delays, we were unable to issue a report by November 2015, as committed to the Chairman, and ultimately were still conducting audit work in June 2016.

Whistleblower Allegations and a Separate Investigation Led GAO to Terminate Its Review of OFR

In June 2016—during the course of our audit work—GAO's then Managing Director of Financial Markets and Community Investment was contacted by an anonymous whistleblower. The person stated that they worked at OFR and alleged, among other things, that OFR had manipulated certain information provided to us and misled us during interviews. In an effort to corroborate the whistleblower's allegations, we reached out to officials at the Treasury OIG, who told us that they too, were conducting an investigation into OFR's activities. They advised us that they had also been approached by whistleblowers with similar allegations. As we have discussed previously with Committee staff, the whistleblower allegations we and the Treasury OIG received raised serious questions about the reliability of some of the information we had obtained from OFR. Because of these concerns and because the Treasury OIG was conducting an ongoing investigation into the same or similar allegations, we decided to terminate the engagement in July 2016 consistent with our protocols and practice. However, we agreed with Committee staff that, following the completion of the Treasury OIG's investigation, we would be in a better position to initiate a new engagement.

Chairman Wagner, Ranking Member Green, and members of the subcommittee, this concludes my statement for the record.

For further information about this statement, please contact Lawrance L. Evans, Jr., Managing Director, Financial Markets and Community Investment, at (202) 512-8678 or evansl@gao.gov. Contact points for our Offices of Congressional Relations and Public Affairs may be found on the last page of this statement. GAO staff that made key contributions to this testimony are Kay Kuhlman (Assistant Director), Tiffani Humble (Analyst in Charge), Robert Lowthian, Jessica Sandler, and Jennifer Schwartz.

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STATEMENT OF ERIC M THORSON

INSPECTOR GENERAL

DEPARTMENT OF THE TREASURY

OFFICE OF INSPECTOR GENERAL

BEFORE THE HOUSE FINANCIAL SERVICES COMMITTEE

SUBCOMMITTEE ON OVERSIGHT AND INVESTIGATIONS

DECEMBER 7, 2017

10:00 AM

Chairman Wagner, Ranking Member Green, and Members of the Subcommittee, thank you for the opportunity to provide this statement for the hearing on "Examining the Office of Financial Research." I will discuss our office's investigative and audit oversight of the Department of the Treasury's (Treasury) Office of Financial Research (OFR).

TREASURY OFFICE OF INSPECTOR GENERAL

Before I discuss the details of our oversight work, I would like to give you some background about our office. Our office provides independent audit and investigative oversight of the Department of the Treasury's programs and operations as well as its bureaus, excluding the Internal Revenue Service and the Troubled Asset Relief Program. We oversee Treasury programs and operations to manage Federal collections and payments systems, manage and account for the public debt, maintain government-wide financial accounting records, regulate national banks and federal savings associations, manufacture the Nation's currency and coins, collect excise taxes on alcohol and tobacco products and regulate those industries, operate the Federal sanctions and anti-money laundering and anti-terrorist financing programs, provide domestic assistance through the Office of the Fiscal Assistant Secretary and the Community Development Financial Institutions Fund and international assistance through multilateral financial institutions, and promote lending to small businesses through the Small Business Lending Fund. We also oversee the Gulf Coast Restoration Trust Fund and the Gulf Coast Ecosystem Restoration Council, an independent Federal entity.

OFFICE OF FINANCIAL RESEARCH

Title I of Dodd-Frank Wall Street Reform and Consumer Protection Act,[1] enacted July 21, 2010, created the Office of Financial Research within Treasury. OFR's mission from Fiscal Years 2012 to 2014 was to support the Financial Stability Oversight Council (FSOC),[2] its member agencies,[3] and the public by (1) improving the quality, transparency, and accessibility of financial data and information; (2) conducting and sponsoring research related to financial stability; and (3) promoting best practices in risk management. As part of its Strategic Plan for Fiscal Years 2015 – 2019, OFR updated its mission. Its current mission is to promote financial stability by delivering high-quality financial data, standards, and analysis for the Financial Stability Oversight Council and the public.

TREASURY OFFICE OF INSPECTOR GENERAL OFR OVERSIGHT

Although OFR has always been a part of our annual audit plan and risk assessment, in 2016 our office began receiving information that prompted an increased audit and investigative focus on OFR. Specifically, beginning in early February 2016, our counsel, who also serves as Treasury's Whistleblower Protection Ombudsman, was contacted by OFR employees seeking information about whistleblower protection. In addition, in early June 2016, the Government Accountability Office (GAO) contacted me about concerns with OFR.

GAO received information from a whistleblower while they were conducting an audit of OFR. GAO's audit was initiated in February 2015 and focused on the examination of (1) OFR's function, (2) OFR's activities since it was established, and (3) any challenges OFR had faced in carrying out its activities to date and potential challenges it might face in its future effort. Based on the whistleblower concerns GAO decided to stand down their audit and reach out to us. The process of getting the particulars from GAO, as well as access to their evidence,

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[1] P.L 111-203, July 21, 2010.

[2] FSOC, also established by Dodd-Frank, is charged with identifying threats to the financial stability of the U.S.A., promoting market discipline, and responding to emerging risks to the financial stability of the U.S. financial system.

[3] FSOC members are the Secretary of the Treasury, the Chairman of the Board of Governors of the Federal Reserve System, the Comptroller of the Currency, the Director of the Bureau of Consumer Financial Protection, the Chairman of the Securities and Exchange Commission, the Chairperson of the Federal Deposit Insurance Corporation, the Chairperson of the Commodity Futures Trading Commission, the Director of the Federal Housing Finance Agency, the Chairman of the National Credit Union Administration, an independent member with insurance expertise, the Director of the Office of Financial Research, the Director of the Federal Insurance Office, a state insurance commissioner, a state banking supervisor, and a state securities commissioner.

progressed throughout the summer. In early September 2016 we asked to meet with GAO to clarify what concerns prompted them to stand down their audit and reach out to us. The clearances needed for that consumed some time, and we were able to pose our questions to their auditors at the end of November 2016. The meeting with GAO revealed that while the GAO team had no specific evidence to verify Whistleblower complaints received, they believed that the allegations warranted further review and that our office was in the best position to perform this investigation.

The following is a summary of the oversight activities related to OFR for the Office of Investigations and the Office of Audit.

OFFICE OF INVESTIGATIONS

Investigations - Whistleblower Retaliation

As a result of the information received from OFR employees, our office has been investigating multiple issues of whistleblower retaliation at the Office of Financial Research. Among the issues raised and being reviewed are claims of wrongful intervention in performance ratings, wrongfully pressuring employees to request transfers, and wrongful intervention in a promotion decision.

While conducting this extensive investigation, which included many witness interviews and reviews of considerable documentary evidence including thousands of emails, I must report that there is still more work to be done. Our investigators are still carefully evaluating whether their interviews and review of materials clearly support a conclusion of unlawful whistleblower retaliation, or any other prohibited personnel practices. The key issue in retaliation cases is, after finding a protected disclosure and a subsequent personnel action, to prove that the personnel action was taken as retaliation for the disclosure, and lacked another, proper purpose. And, as we must remember, interpretations of actions are not always objective, nor borne out by rigorous analysis.

On the ratings issues, I must advise that, based on what our investigators know at this time, the rating direction could be convincingly argued to be the act of a senior executive assuring that ratings are justified and appropriate.

Similarly, the transfer action could be convincingly argued, at this time, as a managerial decision to assure positions are filled with the most qualified people. And on the promotion matter, the evidence indicates that the decision was made by a five member panel which was unanimous in its promotion decision, which argues strongly that the decision was not tainted. While the participation of a supervisor who was aware of protected disclosures participating in the promotion process is from an appearance standpoint problematic, it would only violate prohibited personnel practices if that supervisor influenced the selection process.

This investigation is currently continuing and we expect to begin reporting on the results of our work later this month with work continuing into early 2018.

Investigation- Vandalism Incident

In addition to the investigation noted above, in December 2016 my office opened an investigation regarding a vandalism incident where phallic symbols and the words "get fired" were drawn on the windows of several OFR supervisory personnel. Our investigation into that matter identified the subject who drew the offensive symbols and words. That subject no longer works for OFR or the Treasury. During that investigation multiple interviews of OFR employees were conducted and widespread issues of mismanagement and low morale were alleged, which appeared consistent with problems identified in previous federal employee viewpoint surveys, and which are the subject of the current audit and investigative work described in this testimony.

OFFICE OF AUDIT

Our office has audited OFR since early 2011. Following is a summary of our audit work.

Audit- Treasury Has Made Progress to Stand-up OFR

In June of 2012, our office reported on the effectiveness and status of Treasury's process to establish the Office of Financial Research. We reported that as of April 2012, 21 months after OFR was created, efforts to establish the office were still in progress. The officials responsible for establishing the office initially engaged in high-level strategic and organizational planning and sought to hire key personnel. They also focused on developing and facilitating the global acceptance of a universal Legal Entity Identifier[4] while leveraging Treasury's Departmental Offices to support administrative functions. In the summer of 2011, after key operational personnel were brought on board, progress toward establishing a comprehensive implementation planning and project management process accelerated. This

[4] Legal Entity Identifier is being developed as the universal standard for identifying all parties to financial contracts. It is a key element in OFR's effort to understand and monitor risks to financial stability and meet its statutory mandate to develop and promote data standards.

culminated in the approval of OFR's Project Management Methodology in January 2012, OFR's Strategic Framework in March 2012, and OFR's Strategic Roadmap in April 2012. While not finalized until well over a year after it was established, these documents and methodology, taken together, provide OFR with a comprehensive implementation plan.

Concurrent with the development of its comprehensive implementation plan, OFR also began to develop its analytic and data support for FSOC. As of April 2012, its Research and Analysis Center had sponsored seminars and published two working papers on risk assessment topics.

We recommended that OFR monitor its progress in carrying out the activities in the comprehensive implementation plan and take actions timely to address any slippages or otherwise make adjustments so as to achieve the objectives and timeframes in the plan. The office's planned corrective action was responsive to our recommendation. **(OIG-12-057)**

As of August 2012, OFR reported that it has a system in place to ensure that it monitors its progress. OFR senior managers hold regular meetings to review OFR's activities. As of this date, we have not performed a corrective action verification relating to the action taken to address our recommendation.

Audit - Office of Financial Research Funds and Activities Were Separate from Treasury's Departmental Offices

In March 2015, our office reported on Treasury's controls over the separation of funds and activities between OFR, the Office of Domestic Finance (ODF), and the Office of Economic Policy (OEP) within Treasury's Departmental Offices. We initiated this audit in response to Congressional interest in the separation of funds and activities between mandatory-funded offices, such as OFR, and discretionary-funded offices that carry out potentially related or overlapping work, such as ODF and OEP.

We found that the funds and activities of OFR were separate from ODF and OEP. In accordance with Dodd-Frank, Treasury established the Financial Research Fund to account for the financial activity of OFR and the Financial Stability Oversight Council (FSOC). Activities such as assessments and outlays for labor and non-labor expenditures were properly posted to the fund; however, we did note a weakness in the coding of certain payroll transactions that increased the risk that certain Departmental Offices' labor expenses could have been applied to the Financial Research Fund. Furthermore, while the OFR Director is organizationally located within ODF, we found no evidence of commingling of resources among projects undertaken by OFR and projects undertaken by ODF and OEP.

We recommended that Treasury enhance controls over the coding of payroll transactions by Departmental Offices' personnel who provide support to OFR and FSOC. Treasury's planned corrective actions met the intent of our recommendation. **(OIG-15-027)**

As of October 2015, OFR reported that training had been developed and implemented for all Departmental Office personnel that allocate time to the OFR payroll code. Additionally, OFR reported a process was established to review payroll charges to the OFR Intra-agency Agreement before such transactions are approved.

Audit - Financial Stability Oversight Council and Office of Financial Research Data Requests Are Not Duplicative

In August 2015 we issued a report responsive to the directive in House Report 113-508 on the Financial Services and General Government Appropriations Bill, 2015, which required us to assess whether data reporting required by FSOC and OFR from financial companies, or any related entities, is duplicative of data reporting required by other regulators and burdensome. Based on our inquires and review, we found no indications that data reporting required or requested of financial companies by FSOC and OFR has been duplicative of data required by primary financial regulatory agencies or unduly burdensome on those companies or any related entities. We did not make any recommendations to FSOC or OFR. **(OIG-15-043)**

Audit - Performance Measures

One of our ongoing audits is an audit to assess the design of Office of Financial Research's performance measures and the implementation of these measures. As a result of the whistleblower information received from GAO, this work was put on hold. Additionally, as required by Government Auditing Standards, our auditors must conduct additional procedures to determine the effect, if any, the information provided by the whistleblowers will have on the results of the audit.

Audit - Procurement Activities

Another ongoing audit engagement is seeking to determine if (1) the Office of Financial Research's procurement activities ensure that the Office of Financial Research effectively and efficiently acquires the goods and services needed to accomplish its mission and (2) whether these acquisitions are made in compliance with applicable procurement regulations. As a result of information received from the whistleblowers, we expanded the scope of this audit and decided to conduct this audit in two phases. The first report will discuss the OFR's Government Purchase Card transactions. The second report will cover OFR's contracting practices. We expect to issue our first report in January 2018.

Audit - Review of the Office of Financial Research's Hiring Practices and OFR's Response to Its Federal Employee Viewpoint Survey (FEVS) Results

Lastly, in August of this year our office initiated an audit of OFR's Hiring Practices and response to its Federal Employee Viewpoint Survey Results. The objectives of this audit are to determine whether (1) OFR's hiring practices are in accordance with Office of Personnel Management, Treasury, OFR, and other Federal requirements; and (2) OFR's process for reviewing and responding to FEVS results are in accordance with Federal requirements including Treasury policies and procedures. This work is currently being conducted and we expect to begin reporting on the results of our work in early 2018.

CONCLUSION

In the spring of 2017 we provided updates on our work to your staff and advised on what we had learned from GAO and our work. At the end of June 2017 Chairwoman Wagner and I discussed the matter, and in October 2017 I and my Counsel briefed your staff as well as minority staff on where we were and what we had found.

Thus, we have to advise that, at this time, we cannot say that there is clear evidence of whistleblower retaliation and other instances of prohibited personnel practices. And information about further, and more widespread, management deficiencies must still await the completion of the on-going audit work, and receipt of further allegations that are substantiated upon further investigation.

BankThink Mnuchin shows no interest in continuing FSOC's hedge fund inquiry

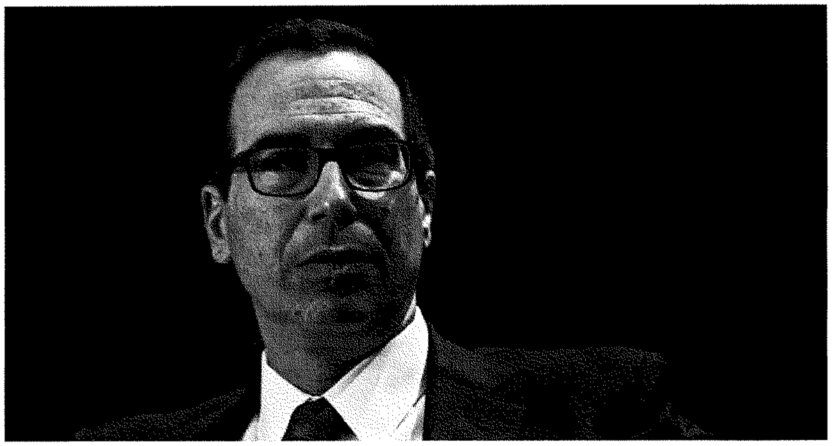
By Gregg Gelzinis
Published September 22 2017, 4:26pm EDT

More in Policymaking, Hedge funds, Asset management, SIFIs, Steven Mnuchin, FSOC

In 2014, under the Obama administration, the Financial Stability Oversight Council kick-started an initiative aimed at better understanding the risks posed by the asset management sector. The willingness of the Trump administration to continue that work — particularly as it pertains to hedge funds — has been a looming question. The early signs, unfortunately, are not encouraging.

Before the Dodd-Frank Act created the FSOC, regulators only focused on their specific slice of the financial sector, with no systemic risk mandate. The lack of a systemic risk regulatory body to foster sustained communication and collaboration among disparate regulators was a key flaw in the financial regulatory structure prior to the financial crisis. Bringing together the different financial regulators around one table, the council gives them the authority to investigate risks to financial stability and the tools necessary to mitigate those financial stability threats across the financial system.

The FSOC under former Treasury Secretary Jack Lew initiated the work stream on asset managers with a public conference. As this work stream progressed, the FSOC identified the $3 trillion hedge fund industry as a subsector worthy of enhanced scrutiny, and formed a working group to investigate the issue further. In November 2016, the hedge fund working group provided a public update on the progress of this inquiry and outlined a compelling framework for how hedge funds could pose a systemic risk to the financial sector.



On Friday, Treasury Secretary Steven Mnuchin was scheduled to preside over his fourth meeting of the FSOC. Once again, an update on work investigating potential financial stability risks posed by hedge funds was missing from the agenda.
Bloomberg News

But there is growing concern that the council led by current Treasury Secretary Steven Mnuchin will drop the inquiry.

On Friday, Mnuchin was scheduled to preside over his fourth meeting of the FSOC since he assumed the chairmanship of the panel in February. Once again, an update on the council's work investigating potential financial stability risks posed by the hedge fund industry was missing from the agenda. The lack of progress by the Trump administration to date in following up on the hedge fund inquiry is particularly troubling in light of the ties of Mnuchin and other key Trump backers to the hedge fund industry.

The FSOC's framework discussed under the Obama administration revolves around the potential risk posed by highly leveraged hedge funds. When a hedge fund employs leverage — through repurchase agreements, loans or derivatives contracts — it increases its risk of failure because it diminishes its capacity to absorb losses in the face of a financial shock. While the hedge fund industry is not highly levered in the aggregate, there are several highly leveraged funds, and the strategies that use the most leverage are growing as a percentage of the industry's assets.

According to the Office of Financial Research, the top 10% of macro and relative-value hedge funds, which control over $800 billion in gross assets, are leveraged at roughly 15-to-1. Higher leverage certainly increases the chance a hedge fund will be wiped out in times of severe stress, but the key question for financial stability purposes is whether hedge funds then transmit that stress throughout the financial system.

The FSOC pointed to two likely transmission channels: counterparty exposure and asset fire sales. If a large and highly leveraged hedge fund were to fail, it would not be able to pay off its loans or meet its derivatives obligations, which would transmit stress to its counterparties — many of which are systemically important banks. Moreover, after a financial shock, a large leveraged hedge fund may scramble to unwind its positions to meet its obligations by selling off assets at fire-sale prices. The sell-off may push down prices across an asset class, potentially causing margin calls from concerned creditors at other financial institutions, propagating further fire sales.

Both of these scenarios are plausible ways that hedge funds could disrupt financial stability. The FSOC's hedge fund working group had also outlined a series of data limitations that must be addressed to give policymakers a better understanding of potential hedge fund financial stability risks.

This framework is not only theoretical. In September 1998, the Federal Reserve Bank of New York facilitated a private bailout of Long Term Capital Management, a highly leveraged hedge fund. LTCM was leveraged at 30-to-1, with $4 billion in net assets, but $125 billion in gross assets. The leverage figure was even more staggering when factoring in synthetic leverage from derivatives. Major Wall Street banks were highly exposed to LTCM and if it had failed, the ensuing stress at these major banks could have sparked a financial crisis. Moreover, research from the Federal Reserve Bank of San Francisco found that during the 2007-2008 financial crisis, hedge funds were a key vehicle through which stress was transmitted throughout the financial sector and concluded that further research into hedge fund risks was warranted.

Not only is the hedge working group's conspicuous absence from the FSOC's agenda over the past eight months troubling, but the Trump administration also endorsed the House-passed Financial Choice Act. The Choice Act slashes the FSOC's budget in half and eliminates its authority to subject systemically important nonbank firms, including hedge funds, to enhanced regulation and oversight by the Federal Reserve Board.

At the next FSOC meeting, Secretary Mnuchin should affirm the necessity of the hedge fund working group and provide an update on its findings, including the actions the FSOC has taken to rectify the data limitations outlined in its previous public update. This inquiry is too important to be shut off or hidden from public view.

Gregg Gelzinis

Gregg Gelzinis is a special assistant for the economic policy team at the Center for American Progress.

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