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MEASURING THE SYSTEMIC IMPORTANCE OF U.S. BANK HOLDING COMPANIES

HEARING

BEFORE THE

COMMITTEE ON BANKING, HOUSING, AND URBAN AFFAIRS UNITED STATES SENATE

ONE HUNDRED FOURTEENTH CONGRESS

FIRST SESSION

ON

EXAMINING THE APPROPRIATE CRITERIA THAT THE FEDERAL RESERVE AND OTHER REGULATORS COULD USE TO DETERMINE WHETHER AN INSTITUTION POSES A SYSTEMIC RISK TO THE FINANCIAL SYSTEM

JULY 23, 2015

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MEASURING THE SYSTEMIC IMPORTANCE OF U.S. BANK HOLDING COMPANIES

THURSDAY, JULY 23, 2015

U.S. SENATE,
COMMITTEE ON BANKING, HOUSING, AND URBAN AFFAIRS,
Washington, DC.

The Committee met at 9:32 a.m., in room SD–538, Dirksen Senate Office Building, Hon. Richard C. Shelby, Chairman of the Committee, presiding.

OPENING STATEMENT OF CHAIRMAN RICHARD C. SHELBY

Chairman SHELBY. The hearing will come to order.

Today, we will hear from experts on the best criteria and methods to determine the systemic importance of U.S. banks.

For nonbanks, Dodd-Frank set up a process governed by a council of Federal regulators to determine if an institution is systemically important. As imperfect as this process is, there is no such process for banks. Instead, Dodd-Frank deems a bank systemically risky if it has $50 billion or more in total assets. Moreover, once a bank reaches this arbitrary threshold, it is automatically designated as systemically important. Under this automatic framework, where there is no clear exit from the designation, a bank has little incentive to reduce its level of systemic risk.

Many experts have expressed concerns about the arbitrary $50 billion threshold as an automatic cutoff for systemic risk. Many of us share their concerns. In March, financial regulators testified right here that there are currently banks above $50 billion that were regulated as if they were systemically risky, even though they were not considered to be so. This regulatory framework should not capture institutions whose failure would not lead to systemic contagion. Doing so has a true cost to the financial system.

First, it imposes a layer of regulation on financial institutions that lend primarily to small businesses and local or regional communities.

Second, it unnecessarily spreads too thin the important resources of our financial regulators. This does not make the financial system safer.

As I have said before, systemic risk is difficult to measure, but 5 years after Dodd-Frank, the law that mandates systemic risk regulation, we have better tools to assess it and we should use them.

Last week at a hearing here in this Committee, Chairperson Yellen of the Federal Reserve testified that she would support giving some flexibility to the Federal Reserve to determine which banks should be subject to enhanced standards based on their set

of multiple criteria. In fact, the Federal Reserve uses a similar approach to determine the systemic importance of banks in its regulation of bank capital.

Earlier this week, the Federal Reserve finalized a capital surcharge rule for the Nation's largest and most systemically risky banks. This rule incorporates a framework based on many factors, including not only size, but also interconnectedness, cross-jurisdictional activity, substitutability, and complexity. According to the Fed, these five broad categories, quote, "are viewed as good proxies for and are correlated with systemic importance."

Today, I look forward to hearing the views of our panel of witnesses on measures that can be used by regulators to determine if a bank poses a systemic risk. Improving such measures will allow our regulators to focus their resources on the systemically important banks in order to protect American taxpayers and the U.S. economy from the next financial crisis.

Senator Brown.

STATEMENT OF SENATOR SHERROD BROWN

Senator BROWN. Thank you, Mr. Chairman, for holding this hearing. It was almost a year ago I held a similar Subcommittee hearing in which Professor DeYoung testified. Thank you again. I thank him and all of our witnesses for being here today.

Tuesday, as we know, is the fifth anniversary of the day that President Obama signed the Wall Street Reform Act into law. Our country was emerging from a devastating economic crisis, one caused in large part by financial institutions that ran wild and regulators that did little or nothing about it. Some Americans have recovered, but it is a slow process and every household's story is different. Wall Street Reform stabilized and strengthened our economy despite dire Republican predictions.

The financial crisis was caused by poor mortgage underwriting, lax capital standards, lax liquidity standards, inadequate risk management, regulators that failed to challenge the banks that they supervised. Congress through Dodd-Frank crafted a reasonable response, directing agencies to institute standards for capital and liquidity and risk management and stress testing to lower the likelihood and the costs of large bank holding company failures, called for heightened rules for banks over $50 billion in total assets, 31 of the largest bank holding companies. It urged regulators not to take a one-size-fits-all approach, allowing for tailoring based upon a variety of factors, so the $50 billion bank would not be treated the same way as a $2 trillion bank.

On Tuesday, for example, as the Chairman said, the Fed finalized a rule to increase capital standards. That rule applied to the eight largest United States banks. Many of the powers in Title I of Dodd-Frank were not new, but after regulators failed to use their authority leading up to the crisis, Congress wanted to ensure that regulators used their authorities in ways that have teeth. The new rules were not meant to cover only systemically important or too-big-to-fail banks. In fact, these words are not even used in the law. Enhanced prudential standards are intended to respond to the last crisis, more importantly, though, to prevent the next one.

We all agree that a regional bank is not systemic in the same way that a large money center bank is. The failure of one regional bank, assuming it is following a traditional model, will not threaten the entire system.

But, as we have heard in past hearings, the failure of a single large institution can create systemic risk, but so can multiple failures of similar small or midsize institutions, as we saw in 2008. Systemic importance is also about the importance of an institution to homeowners and small businesses in the economic footprint where that bank operates. Congress should only open up Dodd-Frank if it can identify real problems affecting actual institutions, and it should be careful to do so without undermining safety and soundness or consumer protection.

That is why I am concerned by Title II of the bill that was passed by this Congress along party lines in May and the language that was included in an appropriations markup yesterday. Secretary Lew said this proposal was, quote, "designed to gut the heart of Dodd-Frank," unquote. So, if the goal is to have something signed into law, we need to take a more modest approach.

I would appreciate hearing today which specific prudential standards are inappropriate for regional banks and why, and whether the concerns being raised stem from implementing regulations or from the law itself. We need to strike the right balance. If the Fed should use its authority to tailor its regulations to the institutions and activities that it thinks present the most risk, but it should not become complacent and take its eyes off of all possible sources of risk.

I thank the witnesses for joining us today.

Chairman SHELBY. Thank you, Senator Brown.

Our witnesses today include, and we will start with Professor DeYoung. He is the Capital Federal Distinguished Professor of Finance at the University of Kansas.

Professor Deborah Lucas, the Sloan Distinguished Professor of Finance and Director at the MIT Center for Finance and Policy.

Professor Jonathan Macey, the Sam Harris Professor of Corporate Law, Corporate Finance, and Securities Law at the Yale Law School.

And the Honorable Michael Barr, who is no stranger to this Committee, the Roy F. and Jean Humphrey Proffitt Professor of Law at the University of Michigan Law School.

All of your written testimony will be made part of the hearing record.

We will start with you on the left, Professor DeYoung. You are recognized.

STATEMENT OF ROBERT DEYOUNG, CAPITAL FEDERAL PROFESSOR IN FINANCIAL MARKETS AND INSTITUTIONS, UNIVERSITY OF KANSAS SCHOOL OF BUSINESS

Mr. DEYOUNG. Thank you, Chair. You asked us to share our perspective on which factors are important for determining the systemic risk of bank holding companies and to provide explicit examples of which rules and regulations or factors might be inappropriate, and I will get to the latter during the discussion. I will get to the former during my remarks here.

Bank size is, of course, the most immediate consideration. Larger bank holding companies tend to have more volatile earnings, tend to be less liquid, tend to be more interconnected, and tend to be more difficult to value in a resolution. But, by itself, as we all have discussed, the bank size is neither a necessary nor a sufficient indicator of its systemic risk. Drawing a bright line at $50 billion, or at $200 billion, or at any other place, will capture some nonsystemic banks.

A good example is Washington Mutual, which held over $300 billion in assets at the time of its failure in 2008. The FDIC was able to resolve WAMU without systemic consequences, without Government financial support. So, resolvability, in addition to assets, is another important factor in addition to bank size for determining whether or not a banking company poses a systemic threat.

The bill in question here would redraw the bright line at $500 billion of assets, but it is not as bright a line as that seems. It would also rely on the Federal Reserve and the Financial Stability Oversight Council to evaluate the systemic importance of banking companies below this asset size threshold. This approach would automatically define the six largest bank holding companies in the U.S. as systemically important and, of course, not so coincidentally at all, on Monday, the Federal Reserve announced systemic risk capital surcharges on these same six firms.

For smaller firms, the Fed and the FSOC will be free to consider multiple indicators of systemic risk other than asset size—off-balance sheet positions, earnings volatility, interconnectedness, cross-country exposures, and many others.

A good example, I think, of this type of multifactor approach could be found in a recent policy brief from the Office of Financial Research. Now, I am not in a position to endorse the exact formulations within the OFR methodology, but I do strongly endorse the general approach that it takes. It uses predefined weights to translate each bank's size, business activities, financial complexity, and interconnectedness into a quantitative score that represents each bank's relative systemic importance. This approach applies the same filters to every banking company, so in a way, human discretion does not play a role in determining the relative outcomes.

Now, the natural concern is that one or more banks that pose systemic threats would be mistakenly left off this list, and in order to err on the side of caution, we should maintain a low asset size threshold. I understand this concern, but given what we have learned, I believe it is somewhat unwarranted. In any case, mistakenly putting nonsystemic banks on the list imposes costs, as well, and we have to recognize those costs. The size of a banking company is just one potential indicator of systemic risk.

For example, consider four U.S. bank holding companies that are each similar sized, between $300 and $400 billion: U.S. Bank Corp., PNC, Bank of New York Mellon, and State Street. In the Office of Financial Research's scoring exercise, two of these banks, U.S. Bank Corp. and PNC, get relatively low systemic risk scores because they practice traditional banking. They hold a diversified portfolio of loans. Those loans are fully funded by stable core deposits. They have very little off-balance sheet exposures, and their clientele is almost completely domestic.

The other two banks, in contrast, the Bank of New York Mellon and State Street, get relatively high systemic risk scores in this method because they hold very few loans, rely on relatively unstable deposit funding, have large cross-country exposures, and provide infrastructure and logistics that are essential for the smooth operations of securities markets.

Of course, under such an approach, the Fed and the FSOC would still have to determine where to draw the line. That is where discretion happens. I strongly suspect that these agencies will err on the side of caution when drawing this line, and I think we can look at the example of MetLife, which was designated as a SIFI, as a case study of this.

In closing, I want to reemphasize one of the factors I talked about before, and that is the importance of resolvability in determining a bank's systemic importance. If a bank holding company can be resolved without causing disruptions in financial markets or contagion to other banks, either through regular bankruptcy or through orderly liquidation authority, then that bank should not be considered to be systemically important.

It is not the job of bank regulators to prevent insolvencies at poorly run banking companies. I think we could all agree that poorly run banking companies should exit the market and stop wasting society's scarce resources. Our goal should be a safe resolution for these banks, not additional regulatory and supervisory safeguards that, by keeping poorly run banks out of trouble, keeps them operating and keeps them in business.

So, I will end there. Thanks for your time this morning. I hope my remarks are useful. I look forward to answering your questions.

Chairman SHELBY. Thank you.

Professor Lucas.

STATEMENT OF DEBORAH LUCAS, SLOAN DISTINGUISHED PROFESSOR OF FINANCE, AND DIRECTOR, MIT CENTER OF FINANCE AND POLICY, SLOAN SCHOOL OF MANAGEMENT

Ms. LUCAS. Thank you. Chairman Shelby, Ranking Member Brown, distinguished Members of the Committee, thank you for inviting me to speak with you today. I have been asked, too, to comment on the appropriate criteria for determining whether a bank holding company poses the systemic risk to the financial system.

Banks deemed to be strategically important financial institutions, or SIFIs, are subject to a higher level of oversight and, often, higher capital requirements. Those measures reduce the likelihood of distress and spill-overs to the financial system, but also entail additional costs for the banks. Ideally, banks would only be designated as SIFIs when the financial stability benefits outweigh those costs.

Unfortunately, those cost-benefit tradeoffs are difficult to quantify. Major systemic risk events are rare, but extremely costly. History may be a poor guide to the future.

The good news is that, despite the challenges, the results of recent analyses using new data suggest that the current criteria used for SIFI designation could be improved upon in several ways. I have two main conclusions.

The first is that the threshold for automatic SIFI designation for bank holding companies could be raised substantially from its current level of $50 billion of assets without significantly increasing systemic risk. That conclusion rests on the findings of several regulatory and academic studies that use a variety of approaches to identify SIFIs. It also reflects the common sense observation that the very largest bank holding companies are enormously more complex and interconnected than their midsized or even large peers.

What is striking about those analyses is that quite different measurement approaches come to very similar conclusions, with just eight of the largest U.S. bank holding companies standing out for their likely systemic importance. The smallest of those, State Street, has assets now of about $280 billion, which is more than five times the current $50 billion threshold for SIFI designation.

Consistent with that emerging evidence, and as Senator Shelby and Senator Brown noted, the Federal Reserve issued a white paper last week that contemplates replacing the $50 billion asset size threshold with one of three alternatives that effectively would increase the cutoff to at least $250 billion. The Fed's analysis also suggests the possibility of setting a threshold based on the relative systemic risk score rather than setting a dollar-size cutoff. Such an approach would have the advantage of automatically adjusting over time and certainly deserves further consideration.

My second conclusion is that it would be advisable for regulators to use several criteria in addition to asset size to more accurately identify SIFIs. There seems to be general agreement that size alone is not the best proxy for an institution's contribution to systemic risk, and financial regulators in the U.S. and abroad have identified five broad categories of factors to consider, including size, interconnectedness, substitutability, complexity, and cross-jurisdictional activity. Several of the analyses I referred to earlier incorporate those criteria into the risk scores used to identify the most systemically risky bank holding companies.

Nevertheless, incorporating multiple criteria involves several significant challenges. The first is creating well-defined metrics for each criterion. The second is designing a weighting scheme that determines the relative importance of each in an overall risk score. And making those choices, considerations, include data availability, stability of outcomes, avoiding excessive complexity, and preserving transparency.

Choosing a weighting scheme is particularly difficult. There is not a precise definition nor even complete agreement about what makes a financial institution systemically risky, and there is little evidence about the relative importance of the different criteria or their predictive accuracy. It is, nevertheless, promising that the various approaches now under consideration point to a consistent set of bank holding companies as SIFIs and that asset size is highly correlated with all of the leading measures.

However, the metrics that regulators are beginning to adopt are still new and evolving. Hence, I think it is advisable to allow some latitude for revising the methodology as new data becomes available and as market practices and perceived risks change over time.

I only have a few seconds left, so I would like to use this opportunity to just briefly discuss what I see as the most serious defi-

ciency in systemic risk oversight as it is currently conducted, and that is the exemption of major Government-run financial institutions from SIFI designation and, hence, from any formal oversight by systemic risk regulators.

Government financial institutions, particularly Fannie Mae, Freddie Mac, FHA, and so forth, are collectively much larger than the bank holding companies currently classified as SIFIs. They satisfy most of the other criteria for SIFI designation, such as high degrees of interconnectedness. So, these sorts of considerations support the idea that Government financial institutions are an important source of systemic risk and, hence, also should fall under FSOC's mandate.

Thank you very much.

Chairman SHELBY. Thank you.

Professor Macey.

STATEMENT OF JONATHAN R. MACEY, SAM HARRIS PROFESSOR OF CORPORATE LAW, CORPORATE FINANCE, AND SECURITIES LAW, YALE LAW SCHOOL

Mr. MACEY. Thank you, Senator Shelby and Ranking Member Brown and Members of the Committee, former law professor colleagues. It is a professor to be here to talk about whether it is appropriate to continue to assume that all banking companies with more than $50 billion in assets are systemically important and, therefore, subject to a heightened level of prudential regulation.

Currently under consideration is a proposal that would move the automatic threshold to $500 billion and then authorize the Fed and the Financial Stability Oversight Council to evaluate the systemic importance of banking companies below that $500 billion asset size threshold. This bill would reduce from 36 to 6 the number of financial institutions subject to the automatic designation as systemically important, and I support this approach for the following five reasons.

First, the bill would reduce some of the distortive effect of the current regulatory regime, which provides incentives for midsize banks to stop growing in order to avoid the SIFI designation and provides incentives for institutions above the threshold to grow until they approach the size of the so-called big six in order to be able to amortize the additional cost of regulation placed on such institutions designated as systemically important.

Second, the bill would inject a greater degree of intellectual rigor into the SIFI designation process. In particular, regulators would not be able to focus solely on an arbitrary measure and would have to look at the kinds of objective factors that Professor Lucas was describing, and I think it is useful to remember that when Dodd-Frank was initially proposed, it was marketed as eliminating the longstanding practice of treating some institutions as too big to fail. But, if we look at what I regard as the flawed process by which MetLife was designated as a SIFI, we do have a need to impose better analytics and more intellectual rigor on the designation process.

Third, I think that the bill would promote fairness by reducing reliance on an arbitrary line of demarcation that nobody has been able to support or defend, either analytically or empirically.

Fourth, I think the bill would reduce some of the pathologies in bank regulation that Dodd-Frank created. The financial system is more concentrated, more interconnected, and more opaque than it was before the financial crisis. Much of this, I acknowledge, happened during the financial crisis, but things are not getting any better. Massive concentration caused by Bank of America acquiring Countrywide and Merrill Lynch, JPMorgan acquiring Washington Mutual—although that was a good deal, I agree with that—and also acquiring Bear Stearns, and Wells Fargo's acquisition of Wachovia. Now, the six largest financial institutions hold over 60 percent of all of the assets in the financial system and hold a virtual 100 percent market share of shadow banking activities.

For people like me who think that the administrative State should be subject to the rule of law, Dodd-Frank poses significant challenges. Never has so much rulemaking authority and discretion been granted so broadly. As I have observed before, Dodd-Frank, for all of its merits, it is not really directed at people. It is an outline, a very long outline, directed at bureaucrats and it instructs them to make still more regulation and to create still more bureaucracies. And, the efforts to designate mutual funds and other businesses that really do not provide any systemic risk are really illustrative of that.

And, fifth, the—for people like me who think the best way to avoid having financial institutions that are too big to fail is to reduce to zero the number of institutions that are too big to fail, the proposed legislation provides positive incentives for banks to be smaller and negative incentives on banks to become larger. Like the Fed's new capital requirements for the eight largest financial institutions, the proposed statute imposes some cost on the very largest financial institutions, which I support.

Regulators, left to their own devices, have incentives to increase the list of systemically important financial institutions. These incentives are unfortunate. Regulators should be given incentives to reduce, not to expand, the list of SIFIs, and if the concept of systemic risk is to have any meaning, it must be the case that reducing systemic risk by reducing the number of firms that pose such risk is an important goal for any regulator.

Thank you.

Chairman SHELBY. Thank you.

Professor Barr.

STATEMENT OF MICHAEL S. BARR, ROY F. AND JEAN HUMPHREY PROFFITT PROFESSOR OF LAW, UNIVERSITY OF MICHIGAN LAW SCHOOL

Mr. BARR. Chairman Shelby, Ranking Member Brown, distinguished Members of the Committee, it is my pleasure to appear before you today, 5 years after enactment of the Dodd-Frank Wall Street Reform and Consumer Protection Act.

That Act was passed in response to the worst financial crisis since the Great Depression. In 2008, the United States plunged into a severe financial crisis that shuttered American businesses, that cost millions of households their jobs, their homes, and their livelihoods. The crisis was rooted in years of unconstrained excess

and prolonged complacency in major financial capitals around the world. The crisis demanded a strong regulatory response.

I want to focus today on aspects of prudential oversight established in the Dodd-Frank Act. Under the Act, the Fed is directed to provide for a graduated system of regulation with increased stringency depending on the risk that the firm poses to financial stability. The Fed may tailor these prudential standards for individual firms or categories of firms.

The enhanced prudential measures include risk-based capital requirements and leverage limits, liquidity requirements, risk management, resolution planning, credit exposure reporting, concentration limits, and annual stress tests.

The Fed under the Act is not required to apply these more stringent standards to bank holding companies with assets under $50 billion. Annual firm-led stress tests, however, are required for firms between $10 and $50 billion in size, and publicly traded bank holding companies $10 billion and above must establish risk committees.

None of these enhanced measures apply to about 95 percent of banks, the category commonly described as community banks, those under $10 billion in assets, more than 6,000 banks in communities all across the country.

Graduated standards are already at work. Fed stress testing applies to the largest firms in the country, the 31 firms with assets of $50 billion and above. The largest and most complex banks face more stringent standards. The Fed, for example, imposes a supplementary leverage ratio, a countercyclical capital buffer, and detailed liquidity coverage rules on only 14 firms with over $250 billion in assets. The eight largest banks are subject to even tougher standards, including capital surcharges, more stringent leverage ratios, and long-term debt requirements. This graduated approach makes sense.

Some have argued that the size threshold for heightened prudential standards should be substantially increased, while others have argued that banks should not be subject to any heightened standards unless they are specially designated as systemic. Both approaches, in my judgment, are mistaken.

First, some have mistakenly said that the Act describes firms with $50 billion in assets as systemic, but that is simply not the case. There is no automatic designation under the Act. Congress set the $50 billion threshold as a floor, to establish a floor under which smaller firms would know that they are not subject to the new rules. But, the rules were not meant to apply only to the very few largest firms in the country. They are not intended to apply only to systemically important firms. They are designed, as I said, to work in a graduated and tailored way.

Second, others have argued that bank holding companies should have to be designated for heightened supervision by the same process FSOC uses for nonbank firms. But, that runs counter to the purposes of nonbank designation. Bank holding companies should not be required to be designated in order to be supervised. Bank holding companies are already supervised by the Fed, and the Fed already has the authority to impose heightened prudential stand-

ards on such firms on a graduated basis as they increase in size and complexity.

The reason for the designation process for nonbank financial institutions is that such institutions were not subject to meaningful consolidated supervision by the Fed at all. Firms such as Lehman Brothers and AIG could operate with less oversight, more leverage, and riskier practices. Recognizing that policing the boundaries of financial regulation is critical to making the financial system safer, the Dodd-Frank Act established a process for bringing such nonbank financial institutions into the system of regulatory oversight. It makes little sense to require designation of firms that are already supervised by the Fed, and it will dramatically slow down and disrupt the Fed's existing oversight.

None of these changes would help community banks. There is undoubtedly much that could be done to reduce the regulatory burden on the smallest banks. For example, small community banks would benefit from clear safe harbors and short plain language version of rules that apply to them, longer exam cycles, and streamlined reporting.

Today, the U.S. financial system is more resilient, but there is still much more work to do together. Thank you.

Chairman SHELBY. The Federal Reserve currently employs a multifactor test to determine if a bank is globally systemically important for the purposes of determining capital requirements. I will direct this to you, Professor Lucas and Professor Macey. In your opinions, what are the greatest benefits of using criteria like this rather than solely the $50 billion asset threshold to regulate systemic risk?

Ms. LUCAS. Well, the reason is, as some of the examples cited, demonstrated that there are financial institutions that are larger than $50 billion who, nevertheless, operate as very traditional banks. There is nothing particular about their activities that would suggest singling them out as being systemically important. As people have noted, you can get systemic importance when a lot of banks act in the same way, but it does not make sense to apply special regulations to banks that in most respects act like much smaller institutions.

Chairman SHELBY. Professor Macey.

Mr. MACEY. Yes. I mean, it seems kind of straightforward to me, simple, really. If I am running a bank, because being designated as systemically important is costly, if there were a multifactor approach and not a bright line $50 billion approach, then I could take steps to avoid being systemically important without shrinking dramatically, and I think that is the kind of incentives we, as a regulatory—as people thinking about regulation—want to give to people running banks, that we want them to engage in activities that do not impose systemic risk, to, all else equal, decline or refrain from excessive engagement in activities that are systemically risky, and this sort of multifactor test is the only way to get there. Or, to put it differently, having a bright line cutoff at $50 billion eliminates that incentive.

Chairman SHELBY. Thank you.

Professor DeYoung, how does resolvability relate to systemic risk, and is it possible for a bank to be large in terms of total assets but still be easy to resolve if they had some challenges?

Mr. DEYOUNG. Yes. We often equate the two terms, systemically important and too big to fail, correct. But, now, I would not necessarily divide things up that way. I would say that if a bank can be resolved, then I think what I stated was that I do not think we should—we should not consider that bank to be systemically important.

Now, what does it take for a bank to be resolved? A bank needs to have assets that are easily valued, right. We need to have buyers who can take a look at that bank, or FDIC evaluation staff and take a look at that bank——

Chairman SHELBY. Sure.

Mr. DEYOUNG. ——and figure out what the assets are worth, play that off against the liabilities, do this to some high degree of accuracy, not perfectly, but a high degree of accuracy, and at that point, we have a value for the bank.

Once we have a value for the bank, two things could happen. Another bank could purchase that failed bank, or we could have a resolution process in which the bank's assets are sold off in pieces, because, as I said, they are easy to value.

Now, if we have an organization that has much off-balance sheet activity, a lot of counterparties, derivatives that are traded over the counter which are not always easily valued, any kind of assets or liabilities that are traded in thin markets, these are the kind of banks that——

Chairman SHELBY. That situation makes everything more complex, does it not?

Mr. DEYOUNG. Yes, that is exactly right. And a key—I want to come back just to the key—is that at that point, we cannot value the bank, in which case makes resolution very difficult, because we cannot find a buyer for the bank or we cannot find—we do not know how big the hole is, right. We do not know what the cost would be to resolving that bank.

Chairman SHELBY. Thank you.

Mr. DEYOUNG. So, banks like that need to operate under different rules.

Chairman SHELBY. Professor Lucas, what are the risks of grouping banks whose failure would not be contagious to the system with banks who are systemically risky institutions?

Ms. LUCAS. I do not think it is a risk to the system to include those smaller banks, but I think the integrity of the regulatory process should not draw into its net institutions that do not need to be there. So, that is basically the argument. And, actually, to take what Dr. Barr said and turn it a little bit, those smaller banks are already heavily regulated by the Federal Reserve, and so if I did not believe that there was already a substantial amount of oversight, I might not be arguing for lifting the limit, but because there is, it is not clear that you need this additional layer of regulation.

Chairman SHELBY. Professor DeYoung—my last question—you said in your testimony that even large banks with total assets of over $300 billion might have little systemic risk. Other witnesses

give some examples. Could you explain to the Committee how a bank might be so large and yet exhibit little systemic risk. It is because of what kind of banking they are doing and the risk they take?

Mr. DEYOUNG. Yes. We speak about traditional banking, and this is an excellent question. If you look at a bank that is very large and then you take a look at its balance sheet and it has got the loans, maybe the mortgage loans, maybe the business loans, maybe the credit card loans, whatever, and they are performing, the other side of the balance sheet shows how those loans are funded. If these loans are funded with stable deposit liabilities, which we tend to call core deposits, these are deposits that will not run if there is some kind of financial crisis, so we will not have a liquidity problem, OK, so that we will not have a liquidity problem there.

On the other side of the balance sheet, these loans are easy to value in whole or in part, depending on what kind of loans they are. So, once again, I get back to my point that if a bank can be valued, then it becomes resolvable and nonsystemic.

Chairman SHELBY. Thank you.

Senator Brown.

Senator BROWN. Thank you, Mr. Chairman.

Professor Barr, thank you for pointing out, in spite of what we hear from many in this town and at many different hearings, that Dodd-Frank does not actually designate banks systemically important, that it is just not part of Dodd-Frank and to suggest that is not showing sufficient intellectual rigor and insight and understanding or something worse than that.

I want to ask Professor Barr a series of yes or no questions, if I could, pretty simple questions.

Is it a good thing that large banks have more capital and less leverage?

Mr. BARR. Yes.

Senator BROWN. Is it a good thing for large banks to have more liquidity than they did before the crisis?

Mr. BARR. Yes.

Senator BROWN. Comptroller of the Currency Tom Curry has made it his mission, in part, to install a more enhanced prestige and stature with higher compensation for a risk officer at medium-sized and large banking institutions. Is that a good idea?

Mr. BARR. Yes.

Senator BROWN. And, I assume that means large banks should have a whole strong risk management structure to them?

Mr. BARR. Yes.

Senator BROWN. Professor DeYoung mentioned resolvability. This question, again, is for you, Professor Barr. Should large banks be able to detail how they can fail safely?

Mr. BARR. Yes.

Senator BROWN. Is it appropriate for large banks to conduct regular stress tests?

Mr. BARR. Yes.

Senator BROWN. Dodd-Frank contains all these provisions, so it sounds like Dodd-Frank, in your mind, has made the financial system stronger?

Mr. BARR. Yes.

Senator BROWN. Thank you.

One more yes or no question, and I want to ask you a little bit more detail to test your reasoning ability, which you have not yet—you have showed in your testimony, but not yet in the questions and answers.

Factors like capital structure and riskiness and complexity and financial activity size, other risk-related factors, are they appropriate criteria for use as a basis for crafting prudential standards?

Mr. BARR. I think they are. I think the important thing is we do not need them in the particular provision that has been subject to controversy in this hearing thus far because, as I said, bank holding companies are already subject to supervision. You do not need them to bring them into the system of supervision. They are useful tools to then decide, once firms are supervised, what is the appropriate level of capital, how stringent should the regulation be, what is the supervisory expectation with respect to risk management of the firm, how do you deal with resolvability. All those are really important factors.

I agree that they are and should be graduated and that the very largest firms that are the most complex firms, that are firms that are the most interconnected, should have the highest capital requirements, for sure. That is what is already in the Dodd-Frank Act. It is what is already in Fed regulation. And, I think, you know, one of the problems sometimes is that Dodd-Frank is too big to read.

Senator BROWN. You were looking forward to using that line today.

Mr. BARR. I was.

Senator BROWN. That was very well done.

[Laughter.]

Senator BROWN. Let me explore what you just said about the way that Dodd-Frank authorizes the Fed to tailor its standards. A Fed official said in 2012, quote, "Dodd-Frank was spot on in requiring the Fed to make sure that we do not apply a one-size-fits-all approach to every bank holding company above $50 billion." Discuss, if you would in the last couple minutes, how well you think has the Fed tailored its rule sufficiently and fairly and precisely enough for bank holding companies over $50 billion in assets, or could they do more. Give me thoughts and suggestions.

Mr. BARR. Well, I think, overall, I have been impressed with the Fed's ability to tailor and provide a graduated approach under the rule. As I said, for the eight largest bank holding companies, quite stringent regulation, capital requirements, liquidity rules, and stress testing. Slightly less stringent but still quite tough rules over 250. And a more graduated approach between 250 and 50. I think that is appropriate. There may be some additional measures, simplifying stress tests for firms between 50 and the 250 range that could be done within the existing framework.

And then, I think, really, the area where I would like to see the most work done is for small banks. I think that small banks face regulatory burden that could be addressed both by the Fed and the other regulators in a productive way under current law, and it is the small banks that, I think, are facing, really, the kind of burden

we ought to be worried about and they need clearer rules, more safe harbors, and a lighter touch.

Senator BROWN. Yesterday, the U.S. Senate in a vote has declared that community banks are now one billion instead of the 10 billion that I thought we mostly agreed on here. When you say small banks, are you saying a billion or are you saying ten billion? The ten billion is legislation that we have worked on here, but the Senate yesterday spoke fairly resoundingly that it is now one billion. Your thoughts?

Mr. BARR. Well, I think, generally speaking, there is some variation, but people think of ten billion as the marking point below which firms are thought of as community banks. And then there is some gradation within that. I mean, a firm—a bank that is a $900 million bank needs a lot lighter touch than a firm that is close to a $10 billion bank. So, I think there needs to be graduation, even within the community bank standard, but ten billion and below is generally thought of as in the category of community bank.

Senator BROWN. Thank you.

Chairman SHELBY. Senator Toomey.

Senator TOOMEY. Thank you, Mr. Chairman.

My friend from Ohio, the Ranking Member, began with a celebration of the anniversary of Dodd-Frank, so I thought I would just share my observations on this occasion, as well, which is that after a crisis which was caused by the Federal Government, monetary policy and lending regulations and mandates that created a housing bubble, we discovered that, in the crisis, that we did not have an adequate resolution mechanism for the failure of a large complex institution. I mean, that was pretty clear.

Rather than addressing that problem, which I think should have been done through reforms of the bankruptcy code, we created Dodd-Frank, and what we have to show for that now is big banks are now essentially public utilities, completely controlled by regulators who operate with enormous subjectivity, stifling innovation, reducing liquidity in all kinds of important markets.

Medium banks, medium-sized banks have been saddled with all kinds of costs, which means they are—and regulations—which means they are necessarily lending less than they otherwise would be lending.

And, we have managed to completely eliminate—we have completely destroyed the entire de novo banking industry of America. While we used to routinely launch 100, 200 new community banks every year all across America, the last 5 years since Dodd-Frank, through this morning, we have had one de novo community bank in America, which I think can only be attributed to some combination of the outrageous monetary policy and the unbelievable level of regulation. That is, I think, a pretty disturbing outcome.

But, I want to get to the questions addressed at this hearing specifically. I wonder if anybody on the panel could name a single $50 billion bank in America—just name one—the failure of which would result in a measurable impact on American GDP. Is there one bank that comes to mind, a $50 billion bank?

Mr. BARR. I think, Senator, if I might say, if you get a series of smaller banks that fail at the same time——

Senator TOOMEY. OK. OK.

Mr. BARR. ——they can have an impact in the economy——

Senator TOOMEY. So——

Mr. BARR. ——and that is true for the largest institutions, too.

Senator TOOMEY. Got you. OK. So, nobody has named a single bank. I think you are implicitly suggesting that probably the answer to my question is there is not a single bank, but if many banks all failed simultaneously.

So, now, let us ask a different question. What is the chance—Professor Macey, maybe you could address this—do you think there is any chance at all that the regulation of these banks that do not individually pose any systemic risk creates a risk correlation that might actually enhance the risk of a wave of failures? What I am getting at is, certainly, the regulators can identify some risks and they will surely force these banks to go at great lengths to avoid those risks. Is there any risk that regulators, being human, might not see a risk that is out there, but will have driven all these individually unrisky banks to a very similar profile and have actually increased the risk that multiple failures could occur for some reason that they are not anticipating? Is there any risk of that at all?

Mr. MACEY. I think there is a huge risk. I think it is even larger than the problem associated with the inevitable fact that regulators are not perfect, that once a regulation is promulgated, rational financial institutions will respond by looking for the most profitable unregulated niches. This reaction, in turn, creates a kind of lemmings problem which is really the quintessential kind of essence of systemic risk, because what is dangerous is if you have a whole bunch of banks entering into the same line of business at the same time, if that line of business, like the residential mortgage-backed securities or CDOs, turns sour, then you have a—by definition, then you have a systemic risk problem of major proportions.

Senator TOOMEY. So, I just want to underscore this point that you are making, which is that when we add this additional layer of regulation on institutions that are not individually systemicly risky, we actually increase the risk that we will have a widespread problem.

Mr. MACEY. Unless we can invent a world in which regulated entities do not respond to regulation in ways that are——

Senator TOOMEY. Which is, of course, inconceivable. All right. Let me ask a specific——

Mr. MACEY. Did not even have it in the Soviet Union.

Senator TOOMEY. Right. Let me ask a question of Professor DeYoung. I am going to run out of time here. You mentioned PNC. PNC is roughly $350 billion. If you look at their activity, they look at lot like a community bank. They have almost no international activity. They have a very small derivatives portfolio. What they do is they take deposits and they make loans to consumers and small- and medium-sized businesses, and yet they are currently going to be subject to the liquidity coverage rules that was meant by Basel to apply to much larger, multinational, international, and complex institutions. Is it not the case that the liquidity coverage ratio, when applied to someone who does not pose this risk, necessarily means less lending will occur?

Mr. DEYOUNG. Well, I share your observation that PNC is a very large but very traditional bank, right, we say a very traditional community—or maybe a very large community bank, and they are not systemically important in the ways we think of other banks of similar size. You mentioned liquidity. The liquidity risk at banks like this is low because they do not fund themselves—they are not funded with market—market instruments that will fail to refinance when there is financial market distress. They are funded with deposit customers who have multiple reasons for staying with the bank.

So, on the issue of liquidity, this is one of those potentially inappropriate regulatory answers. I share your concern that liquidity coverage ratios and net stable funding ratios, when applied to banks whose main business is lending, will reduce their lending capacity. I think this is, obviously, a true thing, either by reducing the amount of loans they can hold or by increasing their cost of funding, one way or the other.

I will also point out that there is no academic study yet—I know there are some studies underway, one of which I have just begun—that takes a look at the effect of liquidity minimums on banks that are also constrained with capital minimums. We have not imposed binding liquidity minimums on banks in the past. We have always—supervisors have always and bankers have always known this is important and they have informally made sure liquidity was good. But, once you have binding liquidity requirements, along with binding capital requirements, now you have two constraints on a bank's balance sheet, and, frankly, we do not know how that is going to play out because we have not observed it before.

Senator TOOMEY. Thank you. Thank you, Mr. Chairman.

Chairman SHELBY. Senator Warren.

Senator WARREN. Thank you, Mr. Chairman, and thank you all for being here today.

You know, there is a lot of talk about Section 165 of Dodd-Frank, which requires the Fed to impose some tougher rules on banks with more than $50 billion in assets. The main question seems to be whether a bank with more than $50 billion in assets poses more risk than a smaller bank. It is an interesting theoretical question, but we are not engaged in a theoretical exercise here. We are dealing with the very practical issue of trying to keep the financial system from melting down, because when it did in 2008, it cost this economy an estimated $14 trillion. That is a lot on the cost side.

In theory, the Fed could tailor its rules to fit each one of the 7,000 banks in the country, but we do not live in theory. We live in the world. We know that is impossible and that Congress is going to have to give the Fed some basic guidance on where they should direct their attention. We have to draw some lines. The question is, how do we draw lines to ensure the safety of the system?

So, I want to follow up on Senator Toomey's question. In recent weeks, I have asked both Professor Simon Johnson of MIT and Chair Yellen of the Fed whether or not the failure of two or three banks of $50 billion in assets could pose a systemic risk and both said yes. So, Professor Barr, you have been doing yes/no questions. Do you agree——

[Laughter.]

Senator WARREN. ——with Chair Yellen and with Simon Johnson on this?

Mr. BARR. Yes, I do. I think that if there are multiple institutions of that size that are failing at the same time, it is usually an indication that there is broader weakness in the financial system, and that is why it is important for the Federal Reserve to be regulating for resiliency across the financial system and not just at the very largest firms.

Senator WARREN. OK. So, you talk about—it sounds to me like we have consensus that two or three $50 billion banks could pose a systemic risk. Let us as the auto-correlation question that Senator Toomey asked. First, I want to ask it the other way around. Did we see correlated risk before Dodd-Frank, Professor Barr?

Mr. BARR. I think there was undoubtedly correlated risk in the financial system leading up to the financial crisis of 2008. We had widespread use of mortgage assets, for example, throughout the financial system as collateral for repo transactions, securities financing transactions, and other items, and underlining special purpose vehicles used in derivatives transactions. So, there was a significant degree of auto-correlation in the lead-up to the crisis. And, of course, during the crisis, most asset classes became correlated and that crushed the system.

Senator WARREN. That is right. Indeed, if we had not had correlation, we would not have had the collapse, would we. Is the Fed aware of the problem of correlation?

Mr. BARR. I think they are quite aware of it.

Senator WARREN. You think they are quite aware of the problem and try to cope with it. This is part of what they look for in their regulations, right?

Mr. BARR. Correct.

Senator WARREN. OK. So, thank you. On the other hand, I want to look at the other half of this. The $50 billion banks generally pose less risk than a $1 trillion bank or a $2 trillion bank. It would make no sense for the Fed to require the same rules and impose the same rules on a $50 billion bank as it does on a $2 trillion bank.

So, Professor Barr, you helped write Dodd-Frank, so let me ask. Does the Fed currently have all the legal authority it needs to tailor the rules so that a $2 trillion bank is subject to much tougher regulation than a $50 billion bank?

Mr. BARR. Yes, they have all the authority they need, and, in fact, they have exercised that authority to impose massively tougher rules on the largest institutions than on smaller ones.

Senator WARREN. OK. And, then, one more practical question on this. Let us say Congress raises the threshold to $250 billion or $500 billion, as has been suggested, but gives the Fed discretion to impose tougher standards on banks below the threshold. That is, you move the threshold and then say you can impose tougher standards.

Professor Barr, do you think it is likely that the Fed would actually use that discretion to apply tougher standards to banks below the threshold?

Mr. BARR. I worry about whether they would, in fact, do that. I mean, I think Congress decided in the Dodd-Frank Act in a number of instances that the Federal Reserve had too much discretion in the past, and in this instance and in a number of other instances reined in Fed discretion, and I think that was a wise choice.

Senator WARREN. All right. Well, you worry about it, and I have to remember what hangs in the balance is the entire economy, not just of the United States, but the world. You know, Congress chose a very practical approach in Section 165. Any bank that hits $50 billion in assets, a bank that is one of the 40 or so largest banks in this country, will generally be subject to some tougher rules. But that bank can go to the Fed and make the case for tailoring the rules to fit its specific risks.

If the Fed is not doing a good job of using its existing authority to tailor the rules appropriately, then Congress should demand that the Fed do a better job. I am willing to hold the Fed's feet to the fire to do what the statute says. But simply raising the $50 billion threshold and cutting a whole bunch of big banks loose is a dangerous overreaction, and if it goes badly, it is the American people who will end up paying.

Thank you, Mr. Chairman.

Senator CRAPO. [Presiding.] Senator Cotton.

Senator COTTON. Thank you.

Professor Macey, I want to touch on a couple points in your testimony in which you say that the Shelby bill would reduce from 36 to 6 the number of financial institutions subject to the automatic cutoff and that you support it for a few different reasons. One of those reasons, and I quote from your testimony, is for people like you who believe the administrative State should be subject to the rule of law, Dodd-Frank poses significant challenges. Never has so much rulemaking authority and regulatory discretion been granted so broadly. As I—you—previously argued, laws classically provide people with rules. Dodd-Frank is not directed at people. It is an outline directed at bureaucrats and it instructs them to make still more regulations and to create more bureaucracies. Could you please elaborate on this analysis.

Mr. MACEY. Yes. Thank you for giving me the opportunity. This hearing has been something of an epiphany for me because people universally have been talking about what I call the spoke regulation, which is regulation directed at a particular firm, as being a good thing. The idea of having a one-size-fits-all approach is bad. What was called tailored regulation is good.

I understand that Dodd-Frank makes it very difficult to have any other kind of regulatory approach, but generally speaking, it is not really consistent with the rule of law or what I think is kind of the American way, that you have regulation that is directed at particular firms. The idea is, you know, firms in the economy should be treated the same way.

You know, you look at the designation of General Electric Capital Corporation as a SIFI. Putting aside the merits of that, what then ensued was a bunch of corporate governance rules for General Electric Capital that defined things like, you know, independent director for that entity different than the way an independent director would be defined at JPMorgan Chase or some other firm.

You know, I think it is a healthy thing, I think it is important to say to the extent that Dodd-Frank compels us to do this, it is an unfortunate cost or consequence of the regulation. So, I think that the ultimate goal that we need to think about is to think about ways in which we can reduce the number of institutions that are systemically important and thereby subject to this kind of particular bespoke regulation rather than embrace this idea of bespoke regulation as the new normal. Thank you.

Senator COTTON. Professor Macey, when you describe bespoke regulation, I have to say, I do not hear the term regulation, or I do not hear anything like the rule of law, which is to prescribe standards of conduct that will apply prospectively with general application to all actors. When I hear you say bespoke regulation, I hear arbitrary discretion in the hands of regulators and bureaucrats.

Mr. MACEY. Right. Well, I think that that is a tremendous danger, that, you know, I am kind of with the Federalist 10 idea that enlightened statesmen will not always be at the helm——

Senator COTTON. Shocking, I know.

Mr. MACEY. ——and that seems to be true of bank regulatory agencies as well as other places. So, I share your view entirely.

Senator COTTON. Do you think our political and financial elites over the last, say, eight or 10 years, have demonstrated the ability to conduct such a bespoke regulation in an effective manner in forums like the FSB and the FSOC, the IMF, the Federal Reserve, and so forth?

Mr. MACEY. You know, you kind of—I think one should hope for the best, expect the worst. The reality is that the people who are promulgating these regulatory reactions are moving back and forth to the banking sector and they are not moving back and forth randomly to financial institutions. They are moving back and forth to the largest ones. And, I think that as the CEO of JPMorgan Chase recently said to his shareholders, this being all things to all people and the biggest possible firm is good for us, and he is right.

Senator COTTON. Mm-hmm. Well, I do not mean to question anyone's integrity or motives, just to say that in the incredibly complex international financial markets, it is hard for me to imagine any one person or any small group of people have all of the wisdom and especially all of the knowledge necessary to engage in such kind of one-off case-by-case decisions in a prudent manner as opposed to laying out clear criteria well in advance that is well known to all market players.

Mr. MACEY. I agree, and I do think that markets have a certain element of wisdom that bureaucracies and individual people cannot manage to reflect, and I think it would be nice if regulation reflected that notion a little bit more, in my opinion.

Senator COTTON. Thank you.

Senator CRAPO. Senator Heitkamp.

Senator HEITKAMP. Thank you, Mr. Chairman.

It has been interesting, because there has been a lot of rewriting of history, I think, today, and a lot of concern for the sense that this, almost for some of the panel members, that what happened in 2008 did not happen, and it did not happen because people made bad decisions, people who were acting in a regulatory environment,

but also had an obligation, in many cases a fiduciary obligation, to actually be honest about what their products were. And, so, I am a little perplexed by this, although I tend to share an attitude that we have an obligation to constantly look back on a regulatory scheme and say, is this working? Is this right?

But, to not go down the rabbit hole too much, Professor Macey, is it possible for Congress to legislate broadly, the end result of which would be only one entity would fall within a constitutional classification?

Mr. MACEY. Sure. I think——

Senator HEITKAMP. That is——

Mr. MACEY. Oh, sure.

Senator HEITKAMP. ——the only point I wanted to make, that we best not get so embroiled in the consequences and look instead at the regulation.

And, so, this hearing is about 165 and, obviously, a critical component, and I am curious—and I am going to open this up to anyone—when we look at the tailored application of 165, and I think the intent probably was that we cannot simply just always put a monetary value and assume that we are going to achieve the intended result. Congress does this very often, maybe perhaps too often, turfing a lot of responsibility to the regulators, and then sits in panels like this and complains because the regulators have done what we gave them the authority to do.

And, so, if—you know, we will let you play Fed for the day and talk about the current exercise of 165 policy, I guess, Professor Lucas, and say, where do you think the Fed is getting it right and where are they getting it wrong, and if we were going to not look at a broad sweeping change of 165 and the categories of 165, where should we be looking that makes the most amount of sense?

Ms. LUCAS. OK. So, I am sympathetic to much of what you said and I think that the reason that I came down where I did, which was that it would be reasonable to raise the threshold, is that there are some things that the Fed is doing where, although if I did believe that it would significantly reduce systemic risk, it would not bother me, but I believe that when you do something like ask a very simple but fairly large bank to undergo stress tests, that is a fairly significant regulatory burden that will not result in any reduction at all of systemic risk.

And, I think that just for general respect for the regulatory system, you want to set up the rules so that you do not annoy or impose costs on institutions——

Senator HEITKAMP. With no benefits.

Ms. LUCAS. ——where it is certainly not necessary. So, I think it is the stress testing and just the heightened examination.

So, again, I think that it comes down to the transparency that is already there for those banks, or as Dr. DeYoung put it, the resolvability. It is not clear to me that the Fed does not already know everything it needs to know about those banks to deal with the systemic risk, whether they fail individually or collectively, because the—you know, if you think about what these regulations are doing, it is actually extremely small.

So, we are talking about it like it makes a big difference, but, in fact, it is a very small difference, because even the ones that are

subject to higher capital requirements, it is a very small increment to their capital requirements. So, it is not going to make much difference to the total amount of failures and——

Senator HEITKAMP. Mr. Barr, do you have input there, too?

Mr. BARR. I think that, overall, the graduated tailored approach the Fed has taken makes a lot of sense, and it has particularly been effective at the very largest institutions——

Senator HEITKAMP. Could you give your response to Professor Lucas's point about, you know, a lot of this is "make work" and it does not add to the quality of the regulation in terms of preventing systemic risk.

Mr. BARR. You know, my experience with stress testing is that it makes a big difference inside the firm in terms of improvements in risk management, attention to appropriate capital planning, organizational structure, and data integrity. So, I think it actually makes quite a big difference to risk management at the firm and I think it would be a mistake to not apply that stress testing approach more broadly in the economy.

Senator HEITKAMP. I am out of time, but I think what you can see here is obviously a difference of opinion. There is not anyone on this panel—I hope there is not anyone on this panel who wants to impose burdens that do not have a public good, instead are just "make work," and that is the balance we are at. We have litmus tests that set a target to provide certainty. I am sympathetic to the argument that we are not really—that is not always necessarily the right indicator of what we need to do, but it does provide a bright line.

With that said, the response to that when we are looking at systemic risk may be to give the regulators more authority, which I have a sense here some of the folks would not be particularly supportive of. It is objective versus the subjective and it is a tough balance. But, I was not here when Dodd-Frank was written, but I am certainly interested in hearing how we can make it better and how we can streamline it, especially for the small community banks.

So, thank you. It has been a really engaging panel.

Senator CRAPO. Thank you.

I will take my turn at the questions now, and I want to follow up on this same line of questioning, and to do so go back to last week when we had Chair Yellen, Janet Yellen, here in front of us. I reminded her that I asked this same question to Governor Tarullo, I believe it was last year now. It has been a while back. And, the question basically was, is there some flexibility that we can have that would actually help to reduce burdens on the regulatory system that we are imposing in this context but still maintain the necessary prudential standards and protection.

Governor Tarullo and Chair Yellen, in my opinion, gave the same answer. I am going to quote what Chair Yellen said in the hearing last week, where I asked her the question of whether some kind of an adjustment of the $50 billion threshold would be livable or appropriate, even. Her answer was yes, that she would be open to a, what she called a modest increase in the threshold, and she wanted to make it very clear that in her concept, the banks that were below the threshold would still be subject to a significant amount of regulatory authority.

I am going to use her own words here. She said, "I guess the reason I would be open to it is that, as he indicated, Governor Tarullo, and as you just stated, we do have some smaller institutions that under Section 165 are required to do, for example, supervisory stress testing and resolution planning, and for some of those institutions, it does look from our experience like the costs exceed the benefits."

As I hear that, when I hear that the costs of a rule or a system exceed the benefits, I can extrapolate that into a lot of things, but one of the things that it extrapolates into in this context is that the consumers are going to be paying a higher price for their services in this industry if we require this.

She went on to talk—I am skipping down a little bit. She said, "At present, every firm over $50 billion has to do things like supervisory stress testing, and I think that what we have found is, in some cases, the burden associated with that for many of those firms really exceeds the benefit to systemic stability."

Now, she—to be careful here, I want to make it clear that she said that she thought the Fed ought to have the authority to look carefully at the risk profiles of all the banks that they are regulating, and for some of those banks that may fall below whatever threshold Congress might set, there may be a risk profile for that particular bank or a set of banks that should have heightened scrutiny and perhaps even be required to do stress testing, or whatever it may be, but that not every single solitary bank under any standard, just an arbitrary dollar number, should be subject to the same, what I will call, rigid rule.

I would just like to have each of you comment on that. We will start on the left with you, Mr. DeYoung. I have already used up three of my 5 minutes, so if you guys could each be relatively brief, I would appreciate it.

Mr. DEYOUNG. OK. I will attempt to be brief. I think banks should do stress tests without being asked to do them. I think a poorly run bank will not do a stress test and it will not be forewarned or guarded and will not be able to prepare against stress. So, I do not think stress tests are a bad thing or make work or a waste of time. For many firms that are not systemically important, though, there should be—I have stated before, there should be no—the Federal Reserve, I think, would have no interest in applying that to firms for which there is a zero, a zero marginal benefit in terms of its systemic importance.

In terms—I just want to mention an offer that was made in the American Banker by Tom Hoenig a couple of weeks ago in an op-ed, that for small banks that have traditional balance sheets and do not have a lot of off-balance sheet activities and do not have over-the-counter derivatives, Vice Chairman Hoenig said we should roll back even the Basel III increments on higher capital. So, I think there is an example there of graduated supervision and applying these things appropriately. Of course, Mr. Hoenig is not in a position to deliver on this promise, of course, but I think——

Senator CRAPO. Understood.

Mr. DEYOUNG. ——up and down the size of banks, there is room for a graduated authority and regulation.

Senator CRAPO. Thank you.

Professor Lucas.

Ms. LUCAS. OK. I will be very brief. I basically agree with you, but I do think it is important to really leave open the possibility for the Fed to use discretion. Particularly, they have to be able to do that quickly when events are unfolding that might create systemic risk at a very short time scale. But, with that proviso, I think it is quite safe to raise the limits for the reasons you said.

Senator CRAPO. Thank you.

Professor Macey.

Mr. MACEY. Yes. I think one can divide all these regulations up into basically two categories. One are regulations that presume—that in order to be effective require the regulator to be smarter than the bankers and to figure out when the bankers are engaging in risky behavior that they are kind of trying to hide.

And then the second category of regulation, which is the category that I like, are regulations which incentivize the regulated entities to do the right thing, that is to say, to the extent that shareholders of financial institutions have to internalize or bear the cost of a bank failure, then I would believe those firms are going to do what Professor DeYoung was talking about and have incentives to do these stress tests themselves or take other steps to be meaningfully prudential. And, we have seen—so that good regulations have that characteristic.

And, we have seen—if we take, for example, risk-based capital requirements or that this is a private sector invention that was a terrific idea, but once it got internalized in a regulation it became kind of ossified, I am not opposed to them. I think they are better than nothing, but they never really got up to the, I think, to the promise that the technology initially promised. I think the same is exactly true for so-called value at risk, VAR, models.

So, I think we just need to regulate with incentives rather than regulate from a central planning point of view.

Senator CRAPO. Thank you.

Mr. Barr.

Mr. BARR. Senator Crapo, I think we need to focus the attention on the regulatory relief that the smallest banks need. I think the banks under a billion, banks under ten billion, often face regulatory burdens that are quite difficult for them to handle with very small compliance staff. So, I think if we can focus attention on the need to get longer exam cycles for strong compliant institutions at that level, clear safe harbors from rules where appropriate, much shorter plain language versions or regulations so they do not have to hire an army of consultants to comply with them, I think that is really the area that ought to be the focus, and I think we are doing OK on the larger institutions, I really do.

Senator CRAPO. All right. My time has more than expired.

Did you have any more questions?

Senator BROWN. [Shakes head side to side.]

Senator CRAPO. All right. That concludes the questions. I want to thank this panel. Chairman Shelby had to leave for another committee which he chairs, and so he wants to also give you his thanks for being an excellent panel. He told me when I came in to relieve him that we had an outstanding panel of experts here that

we could well learn from. We appreciate you bringing your expertise to us today. Thank you.

This hearing is adjourned.

[Whereupon, at 10:48 a.m., the hearing was adjourned.]

[Prepared statements and responses to written questions supplied for the record follow:]

PREPARED STATEMENT OF ROBERT DEYOUNG

CAPITAL FEDERAL PROFESSOR IN FINANCIAL MARKETS AND INSTITUTIONS,
UNIVERSITY OF KANSAS SCHOOL OF BUSINESS

JULY 23, 2015

Thank you for the opportunity to address the Committee. The Chairman has asked me to share my perspective on which factors are important for determining the systemic risk of bank holding companies. I am pleased to do so.

Bank size is the most immediate consideration. Larger banking companies tend to have more volatile earnings, tend to be less liquid, tend to be more interconnected, and tend to be more difficult to value. The raw data shows that bank failure during and after the financial crisis was clearly correlated with bank asset size.

But by itself, a bank's size is neither a necessary nor a sufficient indicator of its systemic risk. Regulators currently treat all banking companies with more than $50 billion of assets as systemically important. But this single-factor, bright line approach will is far too simple. A good example is Washington Mutual, which held over $300 billion in assets at the time of its failure in 2008. The FDIC was able to resolve WAMU without systemic consequences and without Government financial support. So resolvability is another important factor, in addition to bank size, for determining whether or not a banking company poses a systemic threat.

The Shelby bill would redraw the bright line at $500 billion in assets, and rely on the Federal Reserve and the Financial Stability Oversight Council to evaluate the systemic importance of banking companies below this asset size threshold. This approach would automatically define the six largest bank holding companies in the U.S. as systemically important—not coincidentally, on Monday of this week the Federal Reserve announced systemic risk capital surcharges for these same six firms. For smaller firms, the Fed and FSOC would be free to consider multiple indicators of systemic risk other than asset size, such as off-balance sheet positions, earnings volatility, interconnectedness, and cross-country exposures. Both sets of banks would be subject to enhanced regulatory and supervisory treatment.

A good example of this type of multifactor approach can be found in a recent policy brief from the Office of Financial Research (OFR 15-01, February 12, 2015). While I am not in a position to endorse the exact formulations within the OFR method, I strongly endorse its general approach. It uses predefined weights to translate each bank's size, business activities, financial complexity, and interconnectedness into a quantitative score that represents each bank's relative systemic importance. This approach applies the same risk filters to every banking company, so human "discretion" plays no role in determining the relative outcomes. And while the calculations may appear complicated, both the results and the reasoning are transparent.

The natural concern is that one or more banks that pose systemic threats could be mistakenly left off the list, and to avoid this we should err on the side of caution and maintain the $50 billion threshold. I think this concern is unwarranted; and in any case, mistakenly putting nonsystemic banks on the list imposes costs as well. The size of a banking company is just one potential indicator of systemic risk, it is an incomplete and sometimes misleading indicator.

For example, consider four U.S. bank holding companies, each with assets in the neighborhood of $300 to $400 billion: U.S. Bancorp, PNC, Bank of New York Mellon, and State Street. In the OFR's scoring exercise, U.S. Bancorp and PNC get relatively low systemic risk scores because they practice traditional banking: they hold diversified portfolios of loans, fully funded by stable deposits, have very little off-balance sheet exposures, and their clientele is almost completely domestic. In contrast, Bank of New York Mellon and State Street get relatively high systemic risk scores, because they hold very few loans, rely on relatively unstable deposit funding, have large cross-border exposures, and provide infrastructure and logistics that are essential for the smooth operations of securities markets.

Of course, the Fed and FSOC would still need to determine where to draw the line between SIFI and non-SIFI. I strongly suspect that these agencies will err on the side of caution when drawing this line. The designation of MetLife as a SIFI provides a case study.

In closing, I want to reemphasize the importance of resolvability in determining a bank's systemic importance. If a bank holding company can be resolved without causing disruptions in financial markets or contagion to other banks—either through regular bankruptcy or via orderly liquidation authority—then such a bank should not be considered systemically important. It is not the job of bank regulators to prevent insolvencies at poorly run banking companies. I think we can all agree

that poorly run banks should exit the market and stop wasting society's scarce resources. Our goal should be safe resolutions for these banks—not additional regulatory and supervisory safeguards that, by keeping poorly run banks out of trouble, keeps them operating and in business.

Thank you for your time this morning. I hope that my remarks have been useful. I look forward to your questions.

PREPARED STATEMENT OF DEBORAH LUCAS

SLOAN DISTINGUISHED PROFESSOR OF FINANCE, AND DIRECTOR, MIT CENTER OF FINANCE AND POLICY, SLOAN SCHOOL OF MANAGEMENT

JULY 23, 2015

Chairman Shelby, Ranking Member Brown, distinguished Members of the Committee, thank you for inviting me speak with you about the appropriate criteria for determining whether a financial institution poses a systemic risk to the financial system.[1]

My main focus today is on that issue as it applies to bank holding companies (BHCs). My basic conclusions are that: (1) the threshold for automatic SIFI designation for BHCs could be raised substantially from its current level of $50 billion in assets without measurably increasing systemic risk; and (2) it would be advisable for regulators to use several criteria in addition to asset size to more accurately identify SIFIs. In fact, regulators have been exploring multifactor approaches for SIFI designation, and those methods appear to be able to more accurately identify the institutions most likely to cause contagion than a crude size cutoff. However, best practices in this area are still evolving. Any formulaic approach that regulators adopt may need to be revised as new data become available and as market practices change.

I also would like to use this opportunity to briefly discuss what I see as the most serious deficiency in systemic risk oversight as it is currently conducted. That is the exemption of major Government-run financial institutions from SIFI designation, and hence from any formal oversight by systemic risk regulators. Those Government institutions—such as Fannie Mae, Freddie Mac, FHA, the Federal student loan programs, and perhaps State and local pension funds—are collectively much larger than the BHCs currently classified as SIFIs. They also satisfy most of the other criteria suggested for SIFI designation such as a high degree of interconnectedness.[2] Federal mortgage guarantors were at ground zero of the financial crisis. Those considerations support the idea that such institutions represent an important source of systemic risk and hence should fall under FSOC's mandate.

The Dodd-Frank Wall Street Reform and Consumer Protection Act was passed in the wake of the most severe financial crisis and subsequent economic downturn since the Great Depression. Those events revealed the vulnerability of the global financial system and the real economy to cascading failures of complex, highly interconnected financial institutions, and were the impetus for the enhanced regulatory framework established. At this 5-year anniversary of the Act, and with the benefit of experience and new data, it makes sense to consider ways to improve its implementation so as to more effectively reduce systemic risk while minimizing the associated regulatory burden.

SIFI Designation for Bank Holding Companies

BHCs deemed to be SIFIs are subject to a higher level of oversight and additional restrictions, such as increased capital requirements and stress testing. Those provisions reduce the likelihood of spillovers of financial distress to the broader market, but entail costs for the affected institutions. The cost-benefit tradeoffs are difficult to quantify. Major systemic risk events are rare but the potential private and social costs are enormous. There is little data to assess probabilities or likely costs, and history may be a poor guide to the future. There also is considerable disagreement about magnitude of the costs imposed by SIFI status.

Despite the measurement challenges, recent analyses of newly collected data suggest that the current criteria used for SIFI designation could be improved upon in several ways.

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[1] The views expressed are my own and do not represent those of the MIT Center for Finance and Policy.

[2] Other examples of governmental activities that could pose systemic risk include the student loan programs of the U.S. Department of Education and the many pension-related activities of State and local governments.

Asset Size Threshold

A growing body of evidence suggests that the asset size threshold of $50 billion for BHCs to be automatically deemed as SIFIs is much lower than is necessary to protect financial stability. That conclusion rests on the findings of several studies that employ a variety of approaches to identifying SIFIs. It is also supported by the commonsense observation that however one measures it, the very largest BHCs are enormously more complex and interconnected than their midsized peers.

The OFR recently released a policy brief showing that a multidimensional measure of systemic risk only identifies the very largest U.S. banks as SIFI candidates.[3] That analysis identifies the eight BHCs listed in Table 1 as standing out for their systemic importance. The smallest of those, State Street, had assets of $279 billion as of March 2015.

Table 1: U.S. Banks with Highest Systemic Risk Scores	
Name	Assets in 2015 ($ billions)
JP Morgan Chase	2,577
Bank of America	2,145
Citigroup	1,832
Wells Fargo	1,738
Goldman Sachs	865
Morgan Stanley	829
Bank of New York Mellon	399
State Street	279

A very different approach to identifying systemically important banks has been proposed and implemented by Professor Robert Engle of NYU and his colleagues.[4] Their method relies on statistical analysis of stock price dynamics and bank leverage. It currently identifies five of the eight institutions listed in Table 1 as being in the top 10 of systemically risky U.S. financial institutions. I mention this study primarily because it demonstrates that very different methodologies seem to come to similar conclusions on which BHCs are most systemically important.

Just last week, the Federal Reserve issued a White Paper that discusses replacing the $50 billion asset size threshold with one of three alternatives that effectively would increase the cutoff to at least $250 billion.[5] They consider two related formulas, one developed by the Bank for International Settlements (based on size, interconnectedness, complexity, cross-jurisdictional activity, and substitutability). The second replaces substitutability with reliance on short-term wholesale funding. Both formulas identify the group of banks shown in Table 1 as having the highest systemic risk. The White Paper also suggests the possibility of setting a threshold for the determining globally systemically important BHCs based on relative sys-

[3] "Systemic Importance Indicators for 33 U.S. Bank Holding Companies: An Overview of Recent Data", by Meraj Allahrakha, Paul Glasserman, and H. Peyton Young, Office of Financial Research Brief, February 12, 2015.

[4] Those statistics and a description of the methodology are available at: *http://vlab.stern.nyu.edu/*.

[5] "Calibrating the GSIB Surcharge", Board of Governors of the Federal Reserve System, July 20, 2015.

temic risk scores rather than setting a dollar size cutoff. Such an approach has the advantage of automatically adjusting over time, and certainly deserves further consideration.

Criteria for SIFI Designation

There is general agreement that size alone is not the best proxy for an institution's contribution to systemic risk. Financial regulators in the U.S. and abroad have identified five broad categories of factors to consider. Those include size, interconnectedness, substitutability, complexity, and cross-jurisdictional activity. The OFR and Federal Reserve analyses described above incorporate those criteria into the risk scores used to identify the most systemically risky BHCs.

Incorporating those multiple criteria involve two sets of challenges: (1) creating well-defined metrics for each criterion; and (2) laying out a weighting scheme that determines the relative importance of each in an overall risk score. Broad considerations in making those choices include data availability, stability of outcomes, avoiding excessive complexity, and preserving transparency.

To illustrate the complexity of constructing a risk score based on multiple characteristics, it is telling that even the definition of size is not straightforward to determine. For example, the OFR and other regulators measure size in the risk scores they report by including total assets plus the net value of certain securities financing transactions plus credit derivatives and commitments as well as counterparty risk exposures.

Choosing a weighting scheme is especially difficult. There isn't a precise definition or complete agreement about what makes a financial institution systemically risky, and there is little evidence about the relative importance of the different criteria or their predictive accuracy.

It is promising that the various approaches now under consideration point to a consistent set of BHCs as SIFIs, and that size is highly correlated with all of the leading measures. However, the metrics that regulators are beginning to adopt are still new and evolving. Hence it seems prudent to allow some latitude for revising the methodology used as new data become available and as market practices and perceived risks change over time.

SIFI Designation for Nonbank Financial Institutions

It is beyond the scope of this testimony to discuss in detail the criteria for SIFI designation of nonbank financial institutions. However, similar issues regarding size cutoffs and what other criteria to include will certainly arise. In making those rules, a caution is that the relevance and relative importance of various criteria will differ considerably across different types of institutions. For example, major exchanges such as the CBOT are likely to be deemed systemic because of their centrality in certain derivatives markets, but the overall size of their balance sheets is largely irrelevant to their contribution to systemic risk. Therefore it will be important to think carefully about the specific mechanisms that generate systemic risk in each instance, and to avoid using a one-size-fits-all approach.

Government Financial Institutions as SIFIs

Several factors support the contention that the Government is a significant source of systemic risk. The most obvious is its sheer size in its role as a financial institution (or more accurately, a collection of loosely affiliated financial institutions). My calculations show that just through its traditional credit programs, the Government comprised a $3 trillion financial institution in 2013, and that figure increases to over $18 trillion when Fannie Mae, Freddie Mac, the Federal Home Loan Banks, deposit insurance, and the Pension Benefit Guarantee Corporation are included.[6] Figure 1 illustrates the size of those Government institutions relative to the largest BHCs.

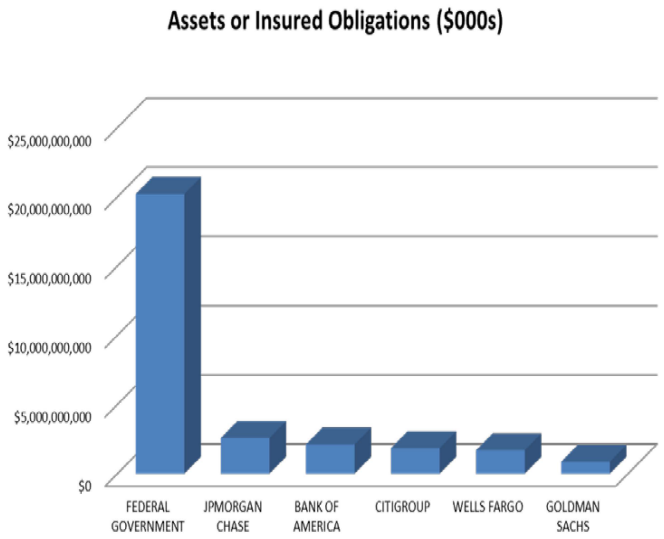
Many of the other criteria identified as important for BHCs, including interconnectedness, substitutability, and complexity, also apply to these Government financial institutions. Lack of transparency and light supervision also contribute to the likelihood that they are a source of systemic risk.

However, probably more important for systemic risk than the Government's direct effect on the allocation and riskiness of credit is its influence on the incentives facing private individuals and institutions through its regulatory, tax and other policies. The Government's policies reflect a variety of sometimes competing political objectives, and there is no "invisible hand" guiding the Government toward adopting policies that foster efficiency and avoid the buildup of systemic risks. In fact, sys-

[6] "Evaluating the Government as a Source of Systemic Risk", Deborah Lucas, *Journal of Financial Perspectives*, November, 2014.

temic risks arising from Government actions may be relatively hard for policymakers and the public to identify because of the lack of transparency surrounding Government activities.

Figure 1: Comparison of Size of Government Financial Institutions and Large Banks



For those reasons, bringing large Government financial institutions under the oversight of FSOC would have important benefits for the stability of the financial system. Actions that FSOC could consider include initiating a regulatory audit, whereby the OFR would be directed to undertake a systematic evaluation of Federal financial regulations across agencies to identify unintended consequences that could give rise to systemic risk. It could also require the improvement and standardization of certain financial disclosures by those institutions.

Thank you for the opportunity to share these ideas. I look forward to your questions.

PREPARED STATEMENT OF JONATHAN R. MACEY

SAM HARRIS PROFESSOR OF CORPORATE LAW, CORPORATE FINANCE, AND SECURITIES LAW, YALE LAW SCHOOL

JULY 23, 2015

Chairman Shelby, Ranking Member Brown, Members of the Committee, and panel colleagues, I am grateful for the opportunity to talk to you today. My name is Jon Macey, and I am a professor of law at Yale Law School. I am here only in that capacity. I represent no firm, industry, organization, or party. It is a pleasure to be here. Thank you giving me the opportunity to address your Committee on the important topic of measuring systemic risk in U.S. Bank Holding Companies.

The central question for today is whether it makes sense to continue to assume that all banking companies with more than $50 billion of assets are systemically important and therefore subject to a heightened level of prudential regulation. Currently under consideration is Senator Shelby's proposal to reduce the central reliance on a bright line test by moving the automatic threshold to $500 billion in assets, and authorize the Federal Reserve and the Financial Stability Oversight Council to evaluate the systemic importance of banking companies below this asset size threshold.

The Shelby bill would reduce from 36 to 6 the number of financial institutions subject to the automatic cutoff. I support this new approach for five reasons.

First, the bill will reduce the distortive effect of the current regulatory regime, which provides incentives for midsize banks to stop growing to avoid the SIFI designation, provides incentives for institutions above the threshold to grow at least until they approach the size of the so called "big six" financial institutions in order to be able to amortize the additional costs of regulation placed on institutions designated as systemically important.

Second, the proposal in the bill under consideration would inject a degree of intellectual rigor into the SIFI designation process that is currently lacking. Regulators would have to pay more attention to factors besides asset size. The role played by other factors, such as operational complexity, balance between the liquidity characteristics and maturity dates of assets and liabilities, off-balance sheet positions, earnings volatility, interconnectedness, and cross-country exposures would receive attention. While supporters of Dodd-Frank initially marketed the legislation as eliminating the long-standing practice of treating certain financial institutions as "too big to fail," nobody seriously asserts that financial institutions designated as SIFIS would be allowed to disappear. In my view the flawed process by which MetLife was designated as a SIFI illustrates the need to impose more intellectual rigor on the SIFI designation process. The MetLife designation process ignored basic principles of risk regulation, failed to distinguish plausible risks from implausible risks, and failed to appreciate the differences between MetLife's business and balance sheet and the business and balance sheets of bank holding companies. Requiring regulators to rely less on the $50 billion Maginot Line would incentivize regulators to be more analytically rigorous in the designation process.

A third reason to support this bill is that the new approach to SIFI designation reflected in the statute would make the regulatory system more fair by reducing reliance on an arbitrary line of demarcation that nobody has been able to support or defend either empirically or theoretically.

Fourth the change would reduce some of the current pathologies in bank regulation that Dodd-Frank created. The financial system is more concentrated, more interconnected and more opaque than it was before the financial crisis. Almost all of this increase occurred during the crisis as regulators encouraged big distressed financial firms to acquire other even more distressed financial firms. Bank of America acquired Countrywide and Merrill Lynch, JPMorgan acquired Washington Mutual and Bear Stearns, and Wells Fargo acquired Wachovia. Now the six largest financial institutions hold over 60 percent of all of the assets in the financial system and hold a near-100 percent market share of shadow banking sector activities.

For people who, like me, believe that the administrative State should be subject to the rule of law, Dodd-Frank poses significant challenges. Never has so much rulemaking authority and regulatory discretion been granted so broadly. As I previously observed in the Economist Magazine, "Laws classically provide people with rules. Dodd-Frank is not directed at people. It is an outline directed at bureaucrats and it instructs them to make still more regulations and to create more bureaucracies."

The key term "systemically important financial institution" is not defined, other than with reference to the fact that financial firms that are designated as systemically important are systemically important. Since systemic failure is, by definition, catastrophic, regulators feel justified in acting aggressively to reduce the likelihood that such failure will occur.

The efforts of regulators to have money market funds and mutual funds designated as SIFIs is a prime example of the regulatory over-reaching that is not merely enabled but encouraged by Dodd-Frank. Simply by recognizing the primordial fact that the assets in these funds belongs to the investors and not to the funds themselves, so that losses in the value of the assets held by these funds is not a loss for the entity, but rather for the investors who hold shares in the entity.

Recently we have seen bespoke regulations imposed on General Electrical Capital Corporation (GECC), as well as with the recent imposition of customized capital requirements on JPMorgan Chase, Citigroup, Bank of America, and the five other largest U.S. banks that are tailored to the perceived riskiness of each of these financial institutions. My point is not that such firm-by-firm regulation is bad. My point is that such regulation is inevitable, and that it inevitably creates an uneven competitive playing field among institutions. It is only modestly comforting that these financial institutions are so complex that it is not possible to tell, a priori which institutions advantaged and which are disadvantaged by the Federal Reserve's new rules. We are clearly not living in a first or even second best regulatory environment as we pass the fifth anniversary of Dodd-Frank. From a policy perspective, as regulations increasingly are tailored to reflect regulators' views of banks' riskiness as measured by the formulas they themselves develop, exposure to the risk of favoritism, capture and other symptoms of a runaway regulatory State multiply exponentially.

Fifth, for those who, like me, believe that the best way to avoid having financial institutions that are too big to fail is to reduce to zero the number of institutions that are too big to fail, the proposed legislation provides positive incentives for banks to be smaller and negative incentives on banks to become larger. Like the Fed's new capital requirements for the eight largest financial institutions, the proposed statute imposes some costs on the very biggest financial institutions.

On the bright side, it is worth noting that the proposed statute would require the FSOC to provide any BHC under review for possible designation as a SIFI with (1) a "detailed explanation" for any proposed or final designation as a SIFI, (2) opportunities to meet with FSOC members and staff, and (3) the opportunity to submit a "remedial plan" prior to final designation to avoid a SIFI designation. Further, the FSOC must reevaluate existing BHC SIFIs with assets of less than $500 billion at the request of the Federal Reserve and at least every 5 years. These aspects of the legislation seem modest and uncontroversial, but in my view they are an important first step in restoring a measure of the regulatory accountability that was lost with the passage of Dodd-Frank.

Regulators have incentives to increase the list of systemically important financial institutions and to regulate those institutions expansively. These incentives are unfortunate. Regulators should be given incentives to reduce, not to expand the list of SIFIs. Unless our regulators have truly lost their way, it must be the case that reducing and indeed eliminating the number of financial institutions designated as SIFIs is a key goal of our public servants. The probability of failure of every firm in the private sector except for those that are too big to fail is above zero. For financial institutions the probability of failure can change dramatically in a very short period of time. The more systemically risky firms there are in the economy, the more risky the economy will be. If the concept of systemic risk has any meaning whatsoever it must be the true that reducing systemic risk by reducing the number of firms that pose such risk is an important goal of any regulator worth her salt.

PREPARED STATEMENT OF MICHAEL S. BARR

ROY F. AND JEAN HUMPHREY PROFFITT PROFESSOR OF LAW, UNIVERSITY OF MICHIGAN LAW SCHOOL

JULY 23, 2015

Chairman Shelby, Ranking Member Brown, distinguished Members of the Committee, it is my pleasure to appear before you today, 5 years after enactment of the Dodd-Frank Wall Street Reform and Consumer Protection Act.

That Act was passed in response to the worst financial crisis since the Great Depression. In 2008, the United States plunged into a severe financial crisis that shuttered American businesses, and cost millions of households their jobs, their homes and their livelihoods. The crisis was rooted in years of unconstrained excesses and prolonged complacency in major financial capitals around the globe. The crisis demanded a strong regulatory response in the U.S. and globally as well as fundamental changes in financial institution management and oversight worldwide. The U.S. has led these reforms, both domestically and internationally.

In the U.S., the Dodd-Frank Act created the authority to regulate Wall Street firms that pose a threat to financial stability, without regard to their corporate form, and to bring shadow banking into the daylight; to wind down major firms in the event of a crisis, without feeding a panic or putting taxpayers on the hook; to attack regulatory arbitrage, restrict risky activities through the Volcker Rule and other measures, regulate repo and other short-term funding markets, and beef up banking supervision and increase capital; to require central clearing and exchange trading of standardized derivatives, and capital, margin and transparency throughout the derivatives market; to regulate payments, settlement, clearance, and other systemic activities; to improve investor protections; and to establish a new Consumer Financial Protection Bureau to look out for the interests of American households.

I want to focus today on aspects of the system of prudential oversight established in the Act.

Supervision of Bank Holding Companies

The Federal Reserve has supervisory authority, as it has long had, over bank holding companies. The Fed is directed under section 165 of the Act to provide for a graduated system of regulation, with increasing stringency, depending on the risk that the firm poses to financial stability, based on its nature, scope, size, scale, concentration, interconnectedness, or other factors. The Fed may tailor these more

stringent prudential standards for individual firms or categories of firms, based on a similar set of factors regarding risk.

These enhanced prudential measures include risk-based capital requirements and leverage limits, liquidity requirements, risk management, resolution planning, credit exposure reporting, concentration limits, and annual stress tests.

The Fed is not required under this provision to apply these more stringent standards to bank holding companies with assets under $50 billion. Annual firm-led stress tests, however, are required for firms between $10 and $50 billion in size, and the Fed must itself stress tests firms over $50 billion in size, in addition to such firms semi-annual firm-led stress tests. Publicly traded bank holding companies $10 billion in asset size and above must establish risk committees. (I should also note that under the Act, the Federal Reserve may, upon recommendation of the Financial Stability Oversight Council, raise the threshold above $50 billion for certain prudential standards, those involving contingent capital, resolution planning, concentration limits, enhanced public disclosures and short-term debt limits.)

None of these enhanced measures apply to about 95 percent of banks, the category commonly described as community banks, those under $10 billion in assets—more than 6,000 banks in communities all across the country.

Graduated standards are already at work. Fed stress testing applies to the largest firms in the country, the 31 firms with assets of $50 billion and above. Such firms represent a wide variety of risk profiles, business strategies, sizes, specializations, and include both foreign and domestic firms. The largest, most complex financial institutions face the most stringent standards, as provided for under the Act. The Fed, for example, imposes a supplementary leverage ratio, a countercyclical capital buffer, and detailed liquidity coverage rules only on 14 firms with over $250 billion in assets. The very largest U.S. banks on a global basis, currently eight bank holding companies, are subject to even tougher standards, including capital surcharges, more stringent leverage ratios, and long-term debt requirements.

In my view, this graduated approach to supervision and regulation makes sense. Some have argued that the size threshold for heightened prudential standards should be substantially increased, while others have argued that banks should not be subject to any heightened standards unless they are specially designated as systemic. Both approaches, in my judgment, are mistaken.

First, as to size, some have mistakenly said that the Act describes firms with only $50 billion in assets as systemic. But that is simply not the case. Congress set the $50 billion threshold, and another threshold for other measures at $10 billion, to provide a floor under which smaller firms would know that they are not subject to the new sets of rules. But the rules were not meant to only apply to the very few largest firms in the country. They are not intended to apply only to systemically important firms.

They are designed to work in a graduated, tailored way to increase the resiliency of the financial system as a whole. Risks aggregate across the financial system, including from institutions of a variety of sizes and types. It is the very antithesis of macroprudential supervision to focus only on the very largest handful of financial firms and to ignore risks elsewhere in the system. Moreover, smaller financial institutions themselves face risk from larger institutions and from activities across the system as a whole. Understanding those risks is essential if we are to have a safer financial system than the one we had before the financial crisis. We must not intentionally blind regulators to these risks in advance.

Second, as to the idea of designation, others have argued that bank holding companies should have to be designated for heightened supervision by the same process the FSOC uses for nonbank firms. But that runs counter to the purpose of nonbank designation. Bank holding companies should not be required to be designated for heightened supervision. Bank holding companies are already supervised by the Fed, and the Fed already has authority to impose heightened prudential supervision on such firms, on a graduated basis, as they increase in size and complexity.

The reason for the designation process, under section 113 of the Act, for nonbank financial institutions is that such institutions were not subject to meaningful, consolidated supervision by the Fed at all. Firms such as Lehman Brothers and AIG could operate with less oversight, more leverage and riskier practices. Recognizing that policing the boundaries of financial regulation is critical to making the financial system safer, fighting regulatory arbitrage, and providing oversight of shadow banking, the Dodd-Frank Act established a process for bringing such nonbank financial institutions into the system of regulatory oversight.

It makes little sense to require designation of firms that are already supervised by the Fed, and it will dramatically slow down and disrupt the Fed's existing oversight system. It will make the financial system weaker, not stronger.

None of these changes will help truly small, hometown banks. There is undoubtedly much that could be done to reduce regulatory burden on the smallest banks. Small banks could benefit from clear safe harbor rules and short, plain-language versions of regulations that do apply to them. The Fed can continue to improve its tailored and graduated approach to supervision. Strong, compliant small banks should have longer examination cycles and streamlined reporting requirements. Regulators and the industry should come together in a task force to come up with better ways to implement the goals of the Bank Secrecy Act and related rules to make it more likely that we catch terrorists and criminals, with lower regulatory burden. And we need a level playing field for small business lending, so community banks can compete with nonbank providers to provide safe, transparency, consumer-friendly loans to small businesses and entrepreneurs.

Nonbank Designations and the Financial Stability Oversight Council

Critics have also attacked the work of the Financial Stability Oversight Council, or FSOC. FSOC has authority to designate systemically important firms and financial market utilities for heightened prudential oversight by the Federal Reserve; to recommend that member agencies put in place higher prudential standards when warranted; and to look out for and respond to risks across the financial system.

One of the major problems in the lead up to the financial crisis was that there was not a single, uniform system of supervision and capital rules for major financial institutions. The Federal financial regulatory system that existed prior to the Dodd-Frank Act developed in the context of the banking system of the 1930s. Major financial firms were regulated according to their formal labels—as banks, thrifts, investment banks, insurance companies, and the like—rather than according to what they actually did. An entity that called itself a "bank," for example, faced tougher regulation, more stringent capital requirements, and more robust supervision than one that called itself an "investment bank." Risk migrated to the less well-regulated parts of the system, and leverage grew to dangerous levels.

The designation of systemically important nonbank financial institutions is a cornerstone of the Dodd-Frank Act. A key goal of reform was to create a system of supervision that ensured that if an institution posed a risk to the financial system, it would be regulated, supervised, and have capital requirements that reflected its risk, regardless of its corporate form. To do this, the Dodd-Frank Act established a process through which the largest, riskiest, and most interconnected financial firms could be designated as systemically important financial institutions and then supervised regulated by the Federal Reserve. The Council has developed detailed interpretive guidance and a hearing process that goes beyond the procedural requirements of the Act, including extensive engagement with the affected firms, to implement the designation process outlined in Dodd-Frank. The approach provides for a sound deliberative process; protection of confidential and proprietary information; and meaningful and timely participation by affected firms. The Council has already designated a number of firms under this authority.

Critics of designation contend that it fosters "too big to fail," but the opposite is true. Regulating systemically important firms reduces the risk that failure of such a firm could destabilize the financial system and harm the real economy. It provides for robust supervision and capital requirements, to reduce the risks of failure, and it provides for a mechanism to wind down such a firm in the event of crisis, without exposing taxpayers or the real economy to the risks of their failure. The FDIC is developing a "single point of entry" model for resolution that would allow it to wind down a complex financial conglomerate through its holding company with "resolution-ready" debt and equity, while permitting solvent subsidiaries to continue to operate. Similar approaches are being developed globally.

Other critics argue that the FSOC should be more beholden to the regulatory agencies that are its members, but again, the opposite is true: Congress wisely provided for its voting members, all of whom are confirmed by the Senate, to participate based on their individual expertise and their own assessments of risks in the financial system, not based on the position of their individual agencies, however comprised. Members must individually attest to their assessments in the FSOC's annual reports. The FSOC has the duty to call on member agencies to raise their prudential standards when appropriate, and member agencies must respond publicly and report to Congress if they fail to act. This system of checks and balances requires that FSOC members leave their agency's "turf" at the door, and focus on systemwide risks and responses. If anything, the FSOC's powers should be strengthened, so that fragmentation in the financial regulatory system does not expose the United States to enormous risk, as it did in the past.

Some critics contend that certain types of firms in certain industries or over certain sizes should be categorically walled off from heightened prudential supervision,

but such steps will expose the United States to the very risks we faced in the lead up to the last devastating crisis. The failure of firms of diverse types and diverse sizes at many points in even very recent memory—from Lehman and AIG to Long Term Capital Management—suggest that blindspots in the system should at the very least not be intentionally chosen in advance by the Congress. The way to deal with the diversity of sizes and types of institutions that might be subject to supervision by the Federal Reserve is to develop regulation, oversight and capital requirements that are graduated and tailored to the types of risks that such firms might pose to the financial system, as the agencies have been doing. FSOC and member agencies also have other regulatory tools available with respect to risks in the system for firms not designated for Fed supervision, including increased data collection and transparency, collateral and margin rules for transactions, operational and client safeguards, risk management standards, capital requirements, or other measures.

Some critics complain that the FSOC's work is too tied to global reforms by bodies such as the Financial Stability Board (FSB). But global coordination is essential to making the financial system safe for the United States, as well as the global economy. The United States has led the way on global reforms, including robust capital rules, regulation of derivatives, and effective resolution authorities. These global efforts, including designations by the FSB, are not binding on the United States. Rather, the FSOC, and U.S. regulators, make independent regulatory judgments about domestic implementation based on U.S. law. And U.S. regulators follow the normal notice and comment process when developing financial regulations. The FSB itself has become more transparent over time, adopting notice and comment procedures, for example, but it could do more to put in the place the kind of protections that the FSOC has established domestically.[1]

As with designation, global coordination—and independent regulatory judgment—is essential to capital rules. Strong capital rules are one key to a safer system. Before the crisis, the financial system was woefully undercapitalized, and that the system was saved only with a massive infusion of taxpayer-funded capital, and a wide variety of unprecedented guarantees, liquidity provision and other backstops by the FDIC, the Federal Reserve, and Treasury. There's already double the amount of capital in the major U.S. firms than there was in the lead up to the financial crisis. Globally, regulators are developing more stringent risk-based standards and leverage caps for all financial institutions, and tougher rules for the biggest players. In the U.S., regulators have proposed even stronger leverage and capital requirements for the largest U.S. firms, and other countries are putting in place stricter approaches when warranted by their local circumstances.

In my judgment, the local variation based on a strong minimum standard is healthy for the system, taking into account the different relative size of financial sectors and differing local economic circumstances. There's been progress on the quality of capital—focusing on common equity—and on better and more comparable measures of the riskiness of assets, but more could be done to improve transparency of capital requirements across different countries and to make them stronger buffers against both asset implosions and liquidity runs. We need to continue to insist that European capital standards and derivatives regulations are strong—and enforced even-handedly across the board.

The United States has taken a strong lead in pursuing global reforms, galvanizing the G20, pushing for the creation of the global Financial Stability Board, and pursuing strong global reforms on capital, derivatives, resolution, and other matters.

The G20 has been driving financial reforms at a global level; the Financial Stability Board pursues agreement among regulators; and technical teams at the Basel Committee on Banking Supervision, the International Organization of Securities Commission, and the International Association of Insurance Supervisors hash out industry-relevant reforms. While the process of reaching global agreement has at times been quite messy, divisive, and incomplete, the last thing we need is to hamstring global cooperation or U.S. regulation. These mechanisms should be strengthened and improved, not ignored or weakened.

Strong U.S. financial rules are good for the U.S. economy, American households and businesses, and we also need a stronger, harder push to reach global agreement on core reforms. In fact, such an approach is essential in order to reduce the chances of another devastating global financial crisis that crushes the U.S. economy.

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[1] See Michael S. Barr, "Who's in Charge of Global Finance?", *Georgetown Journal of International Law* 45, no. 4 (2014): 971–1027.

Measuring Risk

The 2007–2009 financial crisis revealed the pressing need to develop better methods to understand and manage risk in the financial system. Since the crisis, financial regulators, scholars, and the financial industry have turned their attention to these issues, and made progress, but our ability to identify, monitor, and mitigate risk in the financial system remains far behind where we need to be. This is particularly challenging because many of the risks that are of central concern are low probability events with unacceptably high costs for the real economy.

Stress testing is a central and innovative risk management tool used since the financial crisis by both regulators and practitioners. Stress testing attempts to capture the effects of macro-shocks on the balance sheets and activities of firms. Unlike fixed capital ratios, of either the risk-based or leverage ratio type, stress testing seeks to understand how macro-shocks would deplete capital. Moreover, the stress tests are not as easy as fixed capital rules for firms to game. Despite these advantages, stress testing remains crude and static with respect to systemic effects, and is focused on the risks facing each individual firm. Although the goal of stress testing is to analyze and measure systemic risk, it is in many ways still stuck measuring the static effects of macro-shocks on units of capital at individual firms.

While there have been significant recent advancements, our current stress tests fail to account for the increased interconnectedness and complexity of the financial system. The models do not yet capture the complex network of financial transactions that connect firms and that can spread and magnify risk in the event of a crisis. The models are not dynamic—meaning, they do not account for market participants' responses to stressful events. Such responses themselves may change the nature of the events in question. Moreover, even if these more robust models existed today, regulators do not, at least as of yet, have full access to the financial data needed to use the models to measure systemic risk.

We need to continue to develop new ways of thinking about how to identify, measure, and mitigate systemic risks by drawing on methods from other disciplines and experience from other sectors that face systemic risks. We should explore how methods from other disciplines—such as system analysis, agent-based modeling, machine-based learning, behavioral finance, and data visualization and security—can be used to improve stress testing and financial risk management practices and regulation. We should also examine how risk is measured, monitored, and mitigated in other sectors and contexts, such as in supply chains and electrical grids, and in the context of climate change; how stakeholders in these contexts make tradeoffs between stability, efficiency, and innovation; and how lessons from these contexts should be applied or adapted to understand risks in the financial system.

At the end of the day, no one model will be adequate to understanding and measuring risk in the financial system. We will need to improve stress testing, early warning, macro asset, equity, and credit price models, and other ex ante measures of risk. We will need to do better at crisis monitoring and response, including resolution of failing firms during a crisis. We will also need to develop better ex post analytics to understand the crisis that have occurred.

The Path of Reform

The Dodd-Frank Act laid a firm foundation for a more resilient financial sector, one that works for American families, instead of exposing us all to needless risk and harm. Since enactment, a new Consumer Financial Protection Bureau has been built from scratch. New rules governing derivatives have been implemented to bring trading out of the shadows and reduce risk through central clearing, capital and margin requirements. A resolution authority has been put in place to deal with failing firms so we are no longer faced with the devastating consequences of the failure of a firm like Lehman Brothers or the untenable bailouts of firms like AIG. Regulators have the ability to designate large firms for supervision by the Fed, so the financial sector can no longer avoid stringent regulation just by altering their corporate form. The largest firms have to hold a lot more equity capital as a buffer against losses, and the Volcker Rule, heightened prudential supervision, stress tests, and other measures are reining in risk.

The U.S. financial system is more resilient than it was in 2008. But there's still much work to do.

We need to keep pushing for stronger reforms of the largest, most complex banks and other financial institutions. Stress testing and new capital rules have dramatically increased the levels of capital at the largest firms, but we do not yet know whether these levels are sufficiently robust to withstand a severe financial crisis. A bank liability tax could help further reduce incentives to take on risky short-term debt. And shadow banking activities, repo and securities financing transactions, and other activities need to be made safer with strong margin and collateral rules. We

need to better align manager's incentives with financial stability, by putting banker bonuses at risk when a firm's capital level drops below specified levels or when the firm is hit with fines or sanctions.

More broadly, Fannie Mae and Freddie Mac remain in conservatorship without a decision about long-term housing finance; money market mutual funds remain susceptible to runs; certain high-frequency trading strategies and market structure problems threaten financial stability and undermine the fairness of our markets; and critical investor protection authorities have gone unused.

To be clear: the financial system is safer, consumers and investors better protected, and taxpayers more insulated, than they were in 2008—by a lot. But that is not enough. We need to stay on the path of reform to make the financial system safer, fairer, and better harnessed to the needs of the real economy. We need to keep pushing for a financial system that works for us.

RESPONSES TO WRITTEN QUESTIONS OF CHAIRMAN SHELBY FROM ROBERT DEYOUNG

Thank you for inviting me to appear before the Committee on July 23, 2015, at the hearing on "Measuring the Systemic Importance of U.S. Bank Holding Companies". It is my pleasure to provide written answers to these additional questions.

Please note that I have added one additional question to this list. Question (11) below is a question that was asked at the hearing by Senator Warren, but was not directed to me.

Q.1. Enhanced prudential standards pursuant to Section 165 of Dodd-Frank impose additional costs and burdens on financial institutions and on the broader economy. Please identify what you believe to be the costs attributable to the current regulatory regime for bank holding companies above $50 billion because of the Section 165 requirements. In your opinion, has the Federal Reserve done an adequate analysis to determine how these burdens affect both the banks subject to Section 165 and the economy as a whole?

A.1. All banks with more than $50 billion in assets should regularly perform some type of macroeconomic stress testing, regardless of whether it is mandated by Government regulators. Prudent risk management requires these banks to understand their vulnerabilities to potential changes in macroeconomic conditions.

Stress testing requires increased spending on internal labor and/or external consultants. When these expenses result from a bank's internal risk management practices, they cannot be characterized as "burden." However, any additional expenses beyond these—that is, expenses incurred by the bank to perform additional layers of testing mandated by Government regulators—by definition constitute regulatory burden. The expenses associated with preparing and submitting the Federal Reserve's annual CCAR fall largely into this category.

Banks do not report these expenses publicly. However, in a May 18, 2015, American Banker article ("Banks Keep Mum About Stress-Test Costs, Clouding Reg Debate"), Chris Cumming reports that Wells Fargo allocated 128,000 labor hours to the CCAR task in the fourth quarter of 2014. Assuming a relatively low figure for salaries and benefits of $30 per hour, this amounts to $3.84 million in expenses for one quarter, or just over $15 million on an annual basis. This is a very rough estimate of the CCAR burden. It might be too high (e.g., the fourth quarter may have been peak time for the CCAR exercise) or too low (e.g., it does not include expenditures on external consulting, nor the lost output from diverting these workers from other tasks). In any case, this rough estimate demonstrates that the regulatory burden imposed on banks by the CCAR is nontrivial.

It is important to note that the costs of complying with CCAR cannot simply be scaled up or down based on a bank's size, because much of the CCAR exercise entails fixed costs. For example, if a bank is only one-tenth the size of Wells Fargo ($160 billion in assets, versus $1.6 billion for Wells), the burden associated with CCAR will be substantially more than 10 percent of the burden on Wells Fargo.

Q.2. Is it possible that a very large bank could fail without causing widespread damage to the financial system? Please explain.

A.2. This is surely possible. If the FDIC is allowed to exercise its Orderly Liquidation Authority (OLA), a large insolvent bank will be able to continue its operations. That is, the bank will be able to provide payments services for its depositors, make its insured depositors fully liquid, fulfill all of the credit commitments it has made to its borrowers, honor all of its short-term credit market contracts (e.g., commercial paper, Treasury repos, purchased Fed funds), and honor all of its derivatives counterparty obligations.

Under this scenario, there may be short-run spikes in financial markets, but these will be temporary and will dissipate as market participants observe that the bank is honoring all of its contracts and obligations. There should not be any widespread damage to financial markets. Indeed, as the FDIC establishes its reputation by exercising its OLA authority on multiple occasions, even these temporary disruptions should lessen.

This is not to say that losses will not be taken. The bank's equity holders will take a 100 percent loss. Some or perhaps all of the bank's bondholders will take partial or full losses. And some of the bank's uninsured depositors may take partial losses. It is likely that the FDIC will also take losses in the short run, as it injects the funds necessary to recapitalize the bridge bank, as well as to offset any ongoing operational losses of the bridge bank and its subsidiaries. However, in the long run, the FDIC should be able to recover these losses with increased charges to the banking industry.

Q.3. Is it possible that regulating all banks with $50 billion in assets as systemically important might actually encourage systemic risk rather than reduce it? Please explain.

A.3. This is a novel theory. It is based on the presumption that any bank declared to be systemically important (a SIFI) will change its risk-taking behavior and begin to act like it is too big to fail (TBTF). But this is a false presumption. If a bank will not be bailed out, it cannot be a TBTF bank, and hence it will not take the additional risks typically associated with TBTF banks. Indeed, the FDIC has already established its ability to resolve banks in the general size range of $50 billion (e.g., IndyMac) and beyond (e.g., Washington Mutual). For banking companies that are larger or more complex than these examples, the FDIC can now use its OLA powers of seizure and resolution. So if the FDIC is allowed to exercise its new resolution authority, then SIFI designation by itself will not encourage banks to take or create systemic risks.

Q.4. At the hearing, you did not get an opportunity to respond to certain questions. I would be interested in your response to the following questions:

Is it a good thing that large banks have more capital and less leverage?

A.4. The increased equity capital requirements in Basel III for the most part represent an improvement. The inclusion of a plain vanilla minimum leverage ratio for all banks (which the U.S. has required for many years) was an important step. Even more important is the adoption of procyclical capital minimums—a

macroprudential tool that will help reduce the buildup of excess bank credit during economic expansions, and will help prevent harmful reductions in bank credit during economic recessions.

Q.5. Is it a good thing for large banks to have more liquidity than they did before the crisis?

A.5. We have very little understanding of how mandatory liquidity minimums, such as Basel III's LCR and the NSFR, will influence bank risk taking in general or bank insolvency in specific.

By itself, establishing higher capital minimums should prevent banks experiencing liquidity problems from failing. A clearly solvent bank can always access short run liquidity from the interbank market or from its central bank. This allows the bank to honor its short-term financial obligations, thus eliminating fire sales that drive down asset prices and investor flight from short-term credit markets.

My fear is that the main effect of regulatory liquidity mandates, when placed on top of higher regulatory capital mandates, will be to reduce the creation of bank credit.

Q.6. Comptroller of the Currency Tom Curry has made it his mission, in part, to install more enhanced prestige and stature with higher compensation for Chief Risk Officers at medium-sized and large banking institutions. Is that a good idea?

A.6. It is a great idea, but it is unlikely to be effective. To the extent that Chief Risk Officers at large banking companies have too little prestige and stature, this is because of faulty corporate cultures. Regulators have a poor track record of affecting changes to corporate cultures.

Q.7. Should large banks have strong risk management structures in place?

A.7. Of course they should. For example, see my answer to question (1) above, regarding internal stress testing. But the most effective way to encourage strong risk management at banks is to credibly ensure that failed banks are never bailed out.

Q.8. Should large banks be able to detail how they could fail safely?

A.8. Again, we have very little understanding of how a resolution plan or "living will" will make it easier for either the FDIC or a bankruptcy court to efficiently resolve a failed complex banking company. These efforts may end up being helpful . . . or they may end up being 100 percent burden, imposed partially on bank shareholders and partially on taxpayers (who are paying for this new regulatory effort). All we really have at this point is a hope for the former.

Q.9. Is it appropriate for large banks to conduct regular stress tests?

A.9. Yes. See my answer to question (1) above.

Q.10. Are capital structure, riskiness, complexity, financial activities, size, and other risk-related factors appropriate criteria to use as a basis for crafting prudential standards?

A.10. Prudential standards start with capital structure. Banks should hold enough capital to (i) absorb 100 percent of the losses that a bank expects to incur under a historical worst case scenario and (ii) allow Government supervisors to observe large losses occurring in real time, well before the bank actually becomes insolvent.

Banks' riskiness and banks' financial activities stem from banks' business models. They are of secondary importance for prudential regulation; regulators should set bank-specific capital minimums high enough to reflect these risks. Moreover, regulatory interference with banks' business models has the potential to cause more harm than good.

Complexity for complexity's sake is not desirable and should be discouraged. Complexity that arises naturally from a bank's business model should be allowed. Complexity that arises due to compliance with Government regulation (e.g., the multibank holding company structures necessary to legally operate an interstate bank prior to 1996) calls for a reexamination of that regulation.

Bank size should influence prudential regulation only for banks that are too large to fail. This would also hold for banks that are too complex to fail. In both of these cases, systemic risk is the underlying worry. But given the FDIC's new OLA powers, I believe that neither of these cases will be operative going forward, so long as the FDIC is permitted to seize and resolve large and complex insolvent banking companies.

Q.11. At the hearing, I did not have the opportunity to answer the following question, which Senator Warren directed to just one of the other panel members. I paraphrase: "Could the simultaneous failure of multiple banks, each of which holds assets of $100 billion, cause systemic risk?"

A.11. Again, I point out that the FDIC has already established its ability to resolve banks in this general size range (IndyMac, Washington Mutual) during quite difficult macroeconomic conditions. The FDIC's ability to perform large bank resolutions has only been strengthened by its new OLA powers.

There is nothing about "simultaneous" large bank failures that changes this assessment. If an OLA-based seizure and resolution works as designed, the failed bank will not default on any contracts or obligations with its insured depositors, with its line of credit customers, with its counterparties in credit markets, or with its counterparties in derivatives markets. As it becomes clear that all of these contracts are being honored, any disruptions in credit markets (e.g., commercial paper) and asset markets (e.g., loan-backed securities) will be minimal.

One potentially limiting factor is the length of time that the FDIC needs operate these banks prior to selling their assets (in whole or in parts) back into private hands. If these multiple bank failures occur during a recession, the FDIC will likely need to operate these banks for several years before they are stabilized. In this case, many commentators will argue that "we have nationalized these banks." This is obviously an incorrect statement, as the goal is stabilization, not ownership. But such an argument could create political pressure for the FDIC to sell the insolvent banks too

quickly—or perhaps even create pressure to bail out these banks rather than invoke OLA powers.

Thank you again for soliciting my opinion on these issues of importance to the U.S. banking industry. Please do not hesitate to contact me regarding clarification or additional questions.