THE BROOKINGS INSTITUTION

ASSET MANAGEMENT, FINANCIAL STABILITY, AND ECONOMIC GROWTH

Washington, D.C.
Friday, January 9, 2015

Introduction:

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Presentation: The Structure of the Asset Management Industry:

BRIAN REID
Chief Economist
Investment Company Institute

Panel One: Asset Management, Growth, and Stability:

Moderator:

MARTIN NEIL BAILY
Senior Fellow and Bernard L. Schwartz Chair in Economic Policy Development
The Brookings Institution

Panelists:

PETER R. FISHER
Senior Lecturer and Senior Fellow, Center for Global Business and Government, Tuck School of Business
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GASTON GELOS
Division Chief, Global Financial Stability Analysis Division
Monetary and Capital Markets Department
International Monetary Fund

MARY MILLER
Former Under Secretary for Domestic Finance
U.S. Treasury Department

MATTHEW RICHARDSON
Charles Simon Professor of Applied Financial Economics

Stern School of Business, New York University

Panel Two: The View from Washington:

Moderator:

JOSHUA GOTBAUM
Guest Scholar, Economic Studies
The Brookings Institution

Panelists:

NELLIE LIANG
Director, Program Direction Section, Office of Financial Stability Policy and Research, Board of Governors of the Federal Reserve System

PATRICK PINSCHMIDT
Deputy Assistant Secretary, Financial Stability
Oversight Council, U.S. Treasury Department

MARK J. FLANNERY
Director and Chief Economist, Office of the Director
U.S. Securities and Exchange Commission

Panel Three: Regulating Asset Management:

Moderator:

DOUGLAS J. ELLIOTT
Fellow, Economic Studies
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Panelists:

PAUL KUPIEC
Resident Scholar, American Enterprise Institute

BARBARA NOVICK
Vice Chairman, BlackRock

MARCUS STANLEY
Policy Director, Americans for Financial Reform

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P R O C E E D I N G S

MR. ELLIOTT: I'm Doug Elliott from the Economic Studies Program here at Brookings. Thank you for coming in, particularly early on a wintry morning.

Our topic today, as you know, is the Asset Management Industry. Asset managers play a critical role in our financial system, and therefore in our economy, and good investment management is a crucial factor in ensuring that our financial system promotes economic growth. At the same time, there are certainly some analysts who believe that asset managers may contribute to risks in our financial system that would possibly help lead to a future financial crisis.

So the goal today is to understand asset management better, and to examine how to regulate the industry so as to best promote economic growth while dealing appropriately with systemic risks if they exist. We have a superb group of Panelists today to help us wrestle with these issues.

We'll start with a background presentation by Brian Reid; he's the Chief Economist of the Investment Company Institute. I've asked him to take 20 minutes or so to explain the key aspects of the industry with numbers, and in exchange for doing the hard work I promised him a few minutes at the end to talk a little bit about appropriate regulation as the ICI views it for the industry. I figured I had to bribe him somehow.

We'll then move onto three Panels. The first will be moderated by my colleague, Martin Baily, who most of you know. He runs our initiative on business and public policy here, and is a Former Chair of President's Council of Economic Advisors. That Panel will discuss the key underlying issues about asset management's role in promoting efficient markets and economic growth, and the extent to which it may generate systemic risk.

The second Panel will be moderated by Josh Gotbaum, who was

another colleague of mine. He has recently joined us as a Guest Scholar in Economic Studies, after leaving his role, for quite a number of years as Director of the Pension Benefit Guaranty Corporation. Hopefully he won't create the same kind of deficits here that he had to deal with at the PBGC, not that it was his fault. A portion of his prior career was as an Asset Manager, so we are particularly glad to have him participating today.

His Panel will focus on the same broad issues as that first Panel, but we'll bring the perspective of three Panelists from the official sector. Then I will moderate the final Panel which focuses on policy recommendations, so looking forward. Policy recommendations on regulation of the industry, and we have three distinguished experts for that.

So, let me just mention a few logistics. Each of the moderators will introduce their Panels in more detail, so I won't explain who the people are here. In each of the Panels we'll have initial remarks by the Panelists, followed by a discussion moderated by the Moderator, and then we'll take questions from the audience. There's going to be a short break between Martin's Panel and Josh's Panel, given the length of the event this morning.

Today's event is being webcast, and we are going to memorialize it as well in a video archive, so we would appreciate if all of the participants, including the audience, would speak particularly clearly, so that this will be -- this will be intelligible to those not here in the room. And for audience members, in case I forget to say, please do, wait for the microphone so that when you ask your questions, they'll be available for those who look at it virtually.

And I also want to thank as well, first of all, the Moderators and each of the Panelists, especially those who have come from a long distance. We have a great group of people and we couldn't of course have done if they hadn't agreed to do this.

I also want to thank Sarah Holmes who has just done a fantastic job for

us, in coordinating and putting this all together. So, thank you, again, for joining us. And I'll turn the podium over to Brian Reid.

MR. REID: Okay. I should put my reading glasses on to see the -- yeah, if you can flip the -- there we go. There, I can't see it there. All right, thank you. It's tough getting to be over 50 years old.

All right, well, thank you very much, Doug, and to Brookings Institution for inviting me here to speak today. Doug had asked me to speak and provide an overview of the structure of the asset management industry, so in my remarks today I'm going to really focus on four major areas. The first is to do that overview. That is, what is asset management and how does it work; who are the investors, what are the products, what are those strategies and the process by which it operates?

I'll give a little bit of an overview. I'm an Economist, I'm not going to get deeply into regulations, but how does that regulatory structure provide a framework for that? And how is this an alternative, and distinct from other types of financial intermediation including banking? Then looking at the largest portion of the asset management industry that's available to the general public; that is publicly-offered funds, what is the role in supplying capital? Are we helping to reduce the overall capital for the economy and also stimulating economic growth?

In those publicly-offered funds those asset managers, as part of their day-in and day-out process, are dealing with money coming in and coming out, liquidity management, for lack of a better term. And this is part and parcel of being an asset manager, and so I will talk a little bit about what is our experience, what do we observe. What do we observe in terms of like historical experience and then there is the thesis of first-mover advantage, what are some ways in which asset managers can mitigate that, and talking about that aspect of it. And then some final thought about regulations generally.

So, who are the investors? I think of them, and I basically put them into four buckets, although they are really not necessarily distinct. One of the biggest groups, obviously, are individual investors; these can be retail investors, high net worth households. For instance, there are 93 million Americans who invest in mutual funds and ETFs, closed-end funds, holding $16 trillion of their savings, of their retirement, education savings in these products. Globally this is more like the total amount in these types of funds is about 33 trillion.

Another group; are endowments and foundations. Often they'll go to an asset manager to ask them to manage, advise or slice their portfolio. Pension funds, which, in the United States there's $24 trillion of retirement assets, a lot of this is being managed by the asset management industry, either in a mutual fund, a collective investment fund, or separate accounts that are like, it could be a defined benefit plan, the traditional pension or in a 401(k). And clearly here in the 401(k) individual investors who are participating in that, are part of that overall individual investor base.

Then finally, corporations, state and local governments, other types of large entities, sovereign wealth funds; for instance corporations hold about 20 percent of the cash in money market funds, sovereign wealth funds are about 5 trillion. What they'll do often is go to asset managers to have them manage a portion of their portfolio.

So how do they deliver the services? Well, think about as two basic means of doing that. First of all you can do it through a pooled vehicle or in short end of fund. That fund is -- buy a mutual fund share, I invest in a hedge fund, and I have a pro rata interest, a proportional interest relative to my proportion of that overall fund, and I get the returns and the losses of that fund on a pro-rata basis.

I also share in the overall cost of that on a pro-rata basis, so the trading cost, the management fees; they are all bundled together, and delivered to the investor. The investors actually don't own the assets, the funds own those assets, and those

assets are custody, not with the asset manager but with a custodial bank. These are outside of the asset management industry, and held at custodial banks, by and large.

The other way in which asset management services are delivered are through separate accounts, here in this case, the investor will actually own the securities. Again, those securities are held, not with the asset manager, but they will be held with a custodial bank, and the asset manager is providing the overlay, sort of the advice of which security is to buy and to sell, and how to structure that portfolio; often with the constraints or the mandate that's being provided by the investors themselves.

So what are those types of mandates, how is the asset management structured? Well, for the first of these, and I'm going to back up here a moment. The first -- it's a little hard to see, I think, back there -- The core of the asset management industry really is a long-only business, consisting of holding and investing in tradable stocks, bonds and money market instruments. Now, increasingly there are funds who are long-only, and they'll have potentially an overlay of derivatives on them.

So, if you invest in some of the largest S&P 500 Index funds, they will hold a portion of their portfolio in cash, they don't want to lag behind the index, so what they'll do is, they'll use some type of a derivative to get the exposure. It's not that they are trying to increase relative -- the returns relative to the index, but they are trying to make sure that the entire portfolio is fully invested. It's a way of using derivatives then to gain access to a particular sort of sector of the market.

Another way is to hold portfolio of Treasury securities, and rather than holding outright corporate bonds, but use the total return swap to overlay on top of that to get the exposure to that market without having to hold thousands of individual bonds, for instance; but still, fundamentally a long-only process.

The third is, again, long-only, but in non-tradable instruments. So the clearest example are private equity funds, in which they are investing in businesses and

non-tradable equities, and there are limitations on what publicly-offered, that is mutual funds and ETFs can in any sort of illiquid security.

And then finally there are the alternative strategies, now these may include short, or long-short commodities, real estate, as part of the various types of investment strategies that are out there. Alright, so if we put this all together, what is the process? Well, we have the investors on the left that I've described, and they provide an investment mandate to the asset manager.

Now you say; well, if I go to a mutual fund that’s offered by an asset manager, I'm not telling that mutual fund how to manage their product. Sure you are, because what you are doing is you are selecting a fund, that fund has in its prospectus language a particular investment objective. They are obligated by law to adhere to that in that language, and as a result that language directs how that fund is going to operate.

How it's going to invest, the types restrictions on it, and the like. So this is -- basically this fund is providing the investment management overlay. If I have a separate account, I'm going to be directing the asset manager how I want my portfolio, my securities that I own, how are they going to be held? How are they going to be invested? What are the restrictions on them? So an endowment may go to an asset manager and say; I want small cap domestic equity, but I want these constraints on in terms of size and the likely asset manager will manage towards that.

So that management then, of those products, either a publicly-offered fund, or a privately-offered fund, a separate account, that mandate is coming to the asset manager from the investor, sometimes, as I said, with the overlay of the fund itself with its own investment objective, but what's really key here, is the capital from the investors to the investment goes directly. The asset manager is not holding these assets, these are in custody, and as I've said, there's a fund, the fund is holding -- actually owns the assets in a custodial bank, and all of the risk and reward go back to the investors. So this is a

very clear distinction from other types of financial intermediation within the economy.

Now there is a regulatory structure that's in place, asset managers, investment advisors have a set of rules that they must adhere to, and then if you go to offer a fund publicly such a mutual fund or an ETF, there are four major securities -- bodies of securities law that you must adhere to. Largely what these laws are designed to do is provide investor protection, but they also have an additional sort of impact of reducing systemic risk by the very nature of those.

So, for instance, mutual funds are highly restricted in the amount of leverage that they can use, and this reduces then the leverage within the funds, and the potential sort of amplification that a fund's inflows or outflow may have on the market. Mutual funds and ETFs have to have a very simple capital structure. You can't have a senior security basically have the owners of the capital of the fund. There aren't any layers of the subordinated ownership that goes on within a mutual fund or an ETF.

Then finally, there are requirements for liquidity, you have to mark-to-market daily using fair valuation techniques, and there are diversification and other requirements that may or may not, for tax reasons or what not, be in place as well. All these are designed to assure the funds are managed in an orderly and fair manner.

So what are the implications of all these various rules? So, as I've indicated, because the asset manager is receiving its direction from the investors, and it's then directing how it's implementing them, it's acting as an agent. It doesn't, as I said, hold the asset itself, is simply as following the direction of these other investors.

They do not take on investment risks generally on their own balance sheet, so the risk remains with the clients as I've indicated, and they do not guarantee or promise a rate of return. Asset managers also aren't -- they have no access to any sort of government safety net. Now publicly-offered funds such as mutual funds and ETFs also are constrained to have little or no leverage, and so these are the defining

characteristics of asset management, and really is quite -- just makes them distinct from, and separate from banks and other types of financial institutions that are out there.

So let's focus a few minutes on just the size of the publicly-offered funds. So publicly-offered funds are those pooled products that are sold to the general public. Globally there's about $33 trillion of them, in the United States the publicly-offered funds are the largest component. The data aren't as current for some of the other types of non-publicly-offer that the SEC is now collecting information on private funds, collective investment trusts come from -- or funds come from the Department of Labor. But there's, you know, the publicly-offered is largest piece of this.

Globally then, how much do mutual funds and ETFs or their equivalent outside the United States own in the capital markets? So focusing on equity for a moment, in 2005 when the equity markets were quite a bit smaller than they are right now, mutual funds and ETFs globally held about a quarter of the outstanding equity. The bulk of the rest of that is being held in separate accounts by other types of individual investors and the like, and as the capital markets or the equity markets have grown, we've seen a roughly proportional increase in the amount that's being held in equity funds, rising to about 27 percent during that period of time.

What's really critical here though, is that the funds themselves, while they are large, there is still a lot that's outside the fund industry. And so as a first step in kind of the first order of some regulatory overview, that market structure, how these markets were, how they operated, making sure that they are -- the market themselves can withstand periods of stress, is really critical in making -- ensuring that these markets are operating well.

On the debt side, if we look at the public debt, regulated funds currently hold just under 10 percent of all debt globally. Most of the rest of that is central banks, commercial banks, individual investors, sovereign wealth funds and the like, that has

risen from about 7.5 percent. So even though mutual funds and ETFs in the United States have taken in a little over $2 trillion dollars since 2005, in large part because baby boomers are now approaching retirement and they slowly reallocate the rebalance towards more fixed income in their portfolios, nevertheless even with those large inflows we still see only about 10 percent.

And what's striking here is that as central banks globally eventually fall back on the types quantitative easing that they've been engaging in, the general public is going to have to -- or investors, generally outside the banking system, are going to have to hold more. So it's going to fall more and more on the asset management industry to hold the securities that are currently being intermediated by central banks.

Now, with the money that's come in, it's interesting to look at, roughly, where that money has gone. So in the United States, for instance, with about -- a little over $2 trillion coming in, the two areas that have actually gained the most in terms of the share are investment grade bond funds and the international funds.

The other areas that have a loss share are the government, both that have invested in Federal Government and the agency securities, and the muni space, high yield has gained a little bit, but has risen at roughly proportionately with the overall rise in the balance sheets of households in terms of fixed income; so while the aggregate amount in high yield has grown, it's roughly about the same proportion that it was in 2005, and in fact it's actually even lower than it was in 2000.

So I want to take a few minutes and look at two of the theses that are being put forth on sort of investors and how they behave. Now, the first is, it's that stock fund investors themselves herd; or stock and bond fund investors, now you can look at the historical data which I'll show in a moment, and you can see that there's very little evidence unless you view sort of a 1 percent movement in any given month as share of assets in totality as herding. And if that's the definition of herding then there's seems to

be a fairly low bar in my perspective, but we can have that discussion.

The reason that you tend to have a great deal of stability, is that, first of all, these retail investors are long-term investors that often come into retirement, and so as a result that money is staying there. What this chart shows is sort of a range of the outcome -- of flows that we are seeing on a monthly basis as a percentage of assets.

The black line is the net impact in the industry, and this is for all bond funds in the United States, going back to 1990, and it flows -- net flows as a percentage of assets, and as you can see, it's hovering around zero. Sort of, on any given month you are sort of slightly below zero, slightly above zero in terms of flows as a percentage of assets.

Now, certainly individual funds can help large outflows in any given month, and this line here, the red line shows the 10th percentile funds in any given month. For instance, in October of 2008, 10 percent of the funds had outflows of 8 percent or more, but 10 percent of the funds had inflows of 4 percent or more, and effectively then, the net of those inflows and outflows was about 1.5 percent.

That is, it's a relatively closed system that money coming out of one fund is often immediately reinvested or very soon reinvested in another fund, the investors are wanting to maintain their market exposure, they are wanting to stay in their investment profile that they've set up. They are usually doing this through a 401(k) or with the help of an advisor. This money is not sort (inaudible), sort of, by trillions of dollars and large percentages into cash, or something like that. It doesn't happen in that stock and bond fund space.

And the reason is because so much of this is for retail, focused on the long term, and market timing as financial advisors and academics have argued for years, it's just not a very effective way to invest for the long term. We tend to see that for the most part, investors tend to adhere to that.

So, the second thesis is, perhaps there is something fundamentally different about funds, invest in a fund rather than investing directly in securities. And therefore, there may be a first-mover advantage. Now, as I said, in a mutual fund all the costs are shared. So, if I sell my shares in the fund, I am paying a pro rata share of the cost that the funding incurs, but other investors in that fund, if there is trading costs involved in selling those securities, will also be paying a portion of that.

And so there's some concern that potentially that could build up, or perhaps as the fund sells assets in a falling market, the price given today if the fund has to sell an asset in three or four days could, potentially, have an impact. Just, kind of as a compass here, if this were, sort of a fundamental feature and something that funds could not sort of counter, then we would see significant market lags on index funds. Index funds would have often then, not track their indexes very well.

So fund managers can actually use a number of tools such as the pricing, redemption fees, offsetting redemption with the new sales, managing market exposure through derivatives, redemptions in kind which is a standard for ETFs, but also can be used for mutual funds as well.

And then finally, as I've indicated, selling by the investor is not risk free. They flood the market and their market exposure goes away, and they could actually by sort of anticipating and trying to save a-half-percent on trading costs, or future trading costs, they'd actually be out of the market and be out even more. And that long-term impact is important.

So, one final thought. And this is, I think, less than the five minutes that you gave me, Doug. I think one of the cautions that I would have is that not only we need to look at the economic costs and the risks when looking at the financial intermediation through asset managers. But what is the cost to the economy, since clearly as the economies have become more market focused, globally for the last 20 years we've had

asset management grow relative to other types of financial intermediation, but the key feature to asset management is that millions of investors and thousands of asset managers are making independent financial decisions on a daily basis.

Where the caution is, is that as we move forward and in terms of regulatory ideas or proposals from policymakers, is that we don't end up causing more herding going on by becoming highly prescriptive in the ways in which we indicate how funds must be managed. That is having specific liquidity requirements and mandating how those liquidity requirements must look. That will cause these portfolios, across thousands of portfolios to become much more correlated and move in much greater lockstep with one another and particularly during periods of financial stress.

And I think that should be kind of a guide post, and a compass, and a warning for how we move forward in terms of financial regulations, going forward. Thank you very much. (Applause)

MR. BAILY: Thank you. It's a pleasure to be here, and it's impressive at what a great turnout we have for this event, not surprising given the great Panelists we have. So I'm going to introduce the Panelists in alphabetical order, I think you have their short bios, but let me just do that quickly. I'm going to go in alphabetical order.

Gaston Gelos is the Chief of the Global Financial Stability Analysis Division at the International Monetary Fund, where he is, among other things, in charge of the Analytical Chapters of the IMF's Global Financial Stability Report. He held a variety of previous positions at the IMF, and he's worked there since 1998.

Our second speaker will be Peter Fisher. He is Senior Fellow at the Center for Global Business and Government, at the Tuck School of Business at Dartmouth; he is also a Senior Lecturer there. He serves as a Senior Director of BlackRock Investment Institute; he is on the Board of Directors of AIG, the Peterson Institute, our competitor across the street, and the John F. Kennedy Library Foundation.

He has, as many of you know, served as the Under Secretary of the U.S. Treasury for Domestic Finance from 2001 to 2003; and the held the position of Executive Vice President and Manager at the Federal Reserve Open Market Account.

Out third speaker is Mary Miller, she served as the U.S. Department of the Treasury's Under Secretary for Domestic Finance from April 2012 to September 2014. In that position she was responsible for developing and coordinating Treasury's policies and guidance in the areas of financial institutions. Prior to joining the Treasury -- she also has a previous position at the Treasury -- but prior to joining the Treasury, Mary spent 26 years working for T. Rowe Price, so she knows a little bit about asset management.

And our fourth speaker is Matthew Richardson. He is the Charles E. Simon Professor of Applied Financial Economics at the Stern School of Business at New York University, and currently holds the position of the Sidney Homer Director of the Solomon Center for the Study of Financial Institutions. He's got a very distinguished list of publications, as indeed, some of our other Panelists.

So what we are going to do is to go in order. Each speaker is going to speak for about 10 minutes. It's a little cumbersome going up and back, but we'll do that in case people want to do slides, and then we are going to sit up in front and have a discussion and get questions from the audience. So I'm going to start with Gaston, if he could come up first.

SPEAKER: F comes before G.

MR. GELOS: F comes before G. You know, as you get older these things happen. F comes before G. Peter?

MR. FISHER: Thank you very much. A great treat to be here. Thank you for having me. Let me try to jump right into my remarks. And thank Brian for his terrific presentation. I think Brian asked and answered the most important question,

which is; what are the facts?

Let me try to pose the second-most important question which, I think, that too often economists and policymakers jump over the second question which was most-eloquently posed in 1969 by Eddie Harris and Les McCann in their hit jazz single, *Compared to What*. To be precise, it looks like we always end up in a rut, trying to make it real, compared to what.

And I want to challenge myself, and us all today, to be clear when we are talking asset management that we think about, compared to what. When we are making statements, normative statements, we think about what's the thing we are contrasting it to. And I'm just going to make three quick points with my time.

One is, we have agency problems, compared to what; other agency problems. We are not living in a world where we have a choice between this set of agency problems and every investor or principal for their own account. That's not the world we are thinking of. And I think it's important when we start from first principles to think very clearly about that. And secondly, about the macroeconomic significance of asset managers, it's really important here to be clear on, compared to what.

You can think they're really significant, or I think you can think they are not very significant in macroeconomic terms. There might be very important to microeconomic competitive ramification structure, or industry ramifications. And my third point is, liquidity illusion, again, compared to what. I teach my students liquidity illusion is always with us. It's a feature of my finance capitalism; it's not about any one sector of our financial system.

So first, asset managers compared to what. The more I thought about this as we prepared for the Panel, and I think Brian's talk brought it out. When we are talking about asset managers we think we are jumping in even if we are not very clear about it, to agents of limited discretion plus pooled vehicles, and that's actually a subset

of the asset management industry as Brian explained, and I don't want to dwell on that.

But I think that's actually we are comparing it to, where we are thinking about it, but everything else is agents too. In fact, our legal structure in the United States requires people to trade stocks and bonds through registered agents. I can't just go sell my own stocks and bonds if I wanted to. I've got to go use a broker dealer if I want to execute a trade. And so I think it's really important we think clearly about agency problems, they are ubiquitous, they are always with us.

I spoke on a panel like this, and Jack Bogle was with me, and I made this comment that agency problems are ubiquitous in the financial services industry. And Jack said, congratulations, it took you 25 years to figure that out. And so I think it's really important we think clearly about that.

A point of certain departure for me; I spent a decade being the Public Sector's Asset Manager, as Martin said, as the Manger of the System Open Market Account. I spent about a decade at BlackRock helping manage the assets there. When I was -- the Feds, Manager of the System Open Market Account, I had a written delegation of authority from the Open Market Committee to manage assets. That could have been a contract, and asset management contract, and I could have been outsourced and had my own little a balance sheet.

Now for privacy concerns, I think the Open Market Committee would probably not have liked that, they would rather have an in-house asset manager. But who would have thought you would have cared about -- imagine that I was this independent asset management company just managing the FMC's assets, imagine anyone caring about my balance sheet rather than the balance sheet of the 12 reserve banks whose assets I was managing.

Now I sat here at a podium a few months ago in a room across the way, and the Former Vice Chairman of the Fed said, well, you know, BlackRock could buy a

whole lot of bombs. And it was a little embarrassing moment, where I had to point out that actually, as Brian did, the delegation was quite limited. You can't just swing all the money from equities to bonds; it all comes in the flavor, just as the FOMC has prescribed the delegation to the Manager of the System Open Market Account.

So I think the first point, compared to what, asset managers are a subset of agents, and the agents are ubiquitous, and we all are managing assets different ways. And I think that that's why it's so important what the FSOC did to switch over and focus on activities and behaviors rather than legal entities. I think that was a really important step forward so that we start to think clearly about this.

Secondly, the macroeconomic significance of asset managers, compared to what? Now, compared to a world in which we don't have the pool of savings they are managing, yes, that macroeconomic world would be very different, but that's not really the world we get to compare to. We have a daisy chain of delegations going on, and these create those agency problems, but the macroeconomic significance in terms of credit origination, I'm skeptical about. Again, compared to what?

Fifty years ago, if an issue were of securities, whether debt or equity in the United States, wanted to figure out what they should be issuing, they would have called up a very small group of entities called broker dealers that were rather trivial in size, but they probably also would have placed a few calls to big insurance companies' CIOs. And they would have listened to everybody, and then they would have decided where they were going to issue, and then those broker dealers would have underwritten those bonds.

Today, there have been some changes in the microeconomic structure of the industry, and those same issuers will call up the insurance company and pension fund CIOs, they'll call up the broker dealers, and they'll call up some of the big asset managers, and they'll get opinions about it. And then they'll decided what they are issue

stock bonds, the 10-year point preferred shares that's going to be driven by their capital structure.

So the asset manager has an influence over what is issued, what credit has originated in this economy, but it's just is one of a series of a series of agents that are consulted by the issuers, who are going to decide for their own purposes, and the asset manager is, again, it's the sum of all those investment management guidelines the asset manager has.

But clearly there are competitive issues that are changing in the industry inside that, but I don't think those are macroeconomic issues. The macroeconomic is, we have a lot of credit that gets originated in this economy, and some of it seems to be going straight to asset managers now but, again, it's going to those balance sheets that stand behind the asset managers. And I've been worried since the financial crisis when people look to the asset management industry as a source of credit.

Boy, is that a problem, because we don't have -- asset management industry doesn't have the same leverage, and the same discretion that a bank balance sheet has. If we are looking to asset managers to fill the credit hole in America, that's a big problem because there isn't the same flexibility that the bank credit originator has, the bank underwriter of credit, where they really have much more latitude of what they park on the asset side of their balance sheet than the asset manager has. Much less leverage, much less discretion.

Now, my third point I want to dwell on -- well, I'm around out of time, aren't I? But liquidity illusion is always with us; it is ubiquitous, it is pervasive in our system. We cannot all take our money out of the bank today; we cannot all sell our stocks today. We cannot all sell our bonds today. Modern finance capitalism relies on a certain presumed velocity, and that's true every day. We noticed it in 2008, but every day there is this pervasive liquidity illusion, and it's the system works on.

It's why, frankly, I think capitalism -- finance capitalism has given us a lot of advantages over our predecessors 500 years ago. And we have to accept the social consequence of that, and then figure out how to manage it. And whether pooled vehicles create more or less, I think is an important debate for us to be having. And I ask my students at Dartmouth; how much cash should a '40 Act mutual fund hold; given the fiduciary duty both to those investors who want to stay in the fund for the long term, and those who want to cash out tomorrow.

And what I love about the question is, there is no right answer and it's really hard to come up with a definitive answer to that question. Now I think what that involves is, as working harder than we have at the question of gating pooled vehicles, and we've all been on all sides of this issue. Some of us think gating is a good thing, some of us think gating is a bad thing. I think we've got to parse it out through the role of expectations, and be really clear that gating is -- or isn't the problem, if it's fighting expectations in some way; the expectations of the underlying investors. And again, it's compared to what is gating a problem, to expectations.

So, thank you, for the chance to chat. I've tried to be provocative as I usually do, and I'm going to end by repeating my challenge for the rest of the speakers today; compared to what. Thank you very much. (Applause)

MR. GELOS: Thank you, for the opportunity to be here, and I think what I'm going to say is very much complementing the previous interventions. I would like to focus on how to think about systemic risks related to what you may call, plain vanilla segments of the asset management industry. Risks from some part of the industry, for example, hedge funds, money market funds are now well recognized and reforms are already underway in many jurisdictions.

Hedge can incur substantial leverage, and engage in complex risky strategies. Many money market mutual funds on the other hand, are not leveraged, but

some of them have been offering redemptions at a constant dollar per share. This makes the liabilities deposit-like and vulnerable to runs, as shown during the crisis. The systemic risks related to these issues, and to leverage are generally well understood and to some extent they are being addressed.

However, as was said before, the majority of product offered by the asset management industry does not suffer from the same vulnerabilities. Most investment vehicles such as typical mutual funds incur little balance sheet leverage and invest in publicly-traded bonds and equities. The issue equity shares and fund shareholders bear all the returns and losses from the investment.

Therefore, solvency is usually not a concern. Moreover, the promise of redeeming at par does not exist outside of MMFs. Other sources of risks, however, are still potentially relevant in the segment, and here any systemic effects are likely to occur through a disruptive impact on some asset prices, and knock-on effects rather than through the solvency of asset management.

In thinking about this risk, I agree, it's important to ask the compared to what question. It's important to distinguish, conceptually, between the type of risk that result from the present of intermediaries, and those that are merely a reflection of the behavior of ultimate investors as they would occur in the absence of these intermediaries; the one that was made by Doug Elliott in his piece on asset management very nicely, I thought.

First, so let me highlight two main issues in this context, first the delegation of investment decisions introduces incentive problems, between end investors and fund managers, as was mentioned before; which can, in principle, yield destabilizing behavior and amplify shocks. Investors cannot directly observe managers abilities and the effort, and therefore provide incentives to the management -- to the manager to act in the interest.

The common way of doing this is to evaluate funds relative to peers and compared to benchmarks. This, in turn, in principle can lead to a variety of dynamics with potentially systemic implications. For example, the relative evaluation of fund managers can induce herding, which can destabilize prices and lead to the buildup of bubbles and subsequent busts. Such effects on asset prices can have broader, macro-financial consequences through balance sheet and collateral channels, among others.

In emerging markets, for example, there is evidence that benchmark-related incentives can explain some of the patterns of contagion across countries that we have seen around crises. We also have evidence for hurting both for the U.S. and for emerging markets, although, granted the reported magnitudes and effects on prices differ across studies.

Second, the presence of easy redemption options can create run risks and augment the likelihood of fire sales. If redemptions are easy and assets held by the fund are not all very liquid, a first-mover advantage for investors may exist even in the absence of guaranteed returns or the promise to redeem at par. This is the case if funds can be presumed to first sell the more liquid assets in response to the large redemptions; then if I, as an investor, see other withdrawing, I don't want to be the last in the queue.

Alternatively, if the cost of redemptions are partly borne by remaining investors, as is often the case in the U.S., but necessarily elsewhere, due to different mechanisms, this accentuates incentives to withdraw early. Depending on market conditions and the structure of the market, large-scale redemption could, through fire sales, potentially have contagion effects to the rest of the financial system.

Again, there is some sort -- some evidence for the sort of run risk, both for advanced economies and for emerging markets. However, we still need to understand better the empirical importance of the different channels I just mentioned. One complication that empirical research faces though, is that the type of dynamics one

would really worry about, have so far not -- or only partially occurred in mature economies. We therefore need to make inferences from the behavior of investors, and fund managers during relatively quiet times, or during the few episodes of larger volatility.

The additional complication stems from significant structural changes in financial markets, which limits the degree to which we can rely on older studies. I would argue however, that we can also draw on the experience of emerging markets, but some of these issues have been explored in response to recurrent crisis and volatility.

For example, we have seen that the impact of a portfolio relocation that is relatively minor from the point of view of one large fund or a group of funds, can have profound and disruptive effects in a small market, this is a big elephant in the small pond effect.

Why are we now in the context of advanced economies, why is there more reason to worry about these things, about these conception issues than in the past? Well, I think there are at least three reasons, three structural reasons at least, and there may be more. One, the asset management industry has grown substantially. Second, banks have retrenched from money market making activities, contributing to a reduction in liquidity. And third, the role of fixed income funds has expanded considerably, and price disruptions in fixed income markets have potentially much larger consequences, than price movements in equity markets.

More specifically, as pointed out in our October Global Financial Stability Report, in recent years liquidity risks have risen in some fund segments in the U.S. and in Europe. In both regions fixed income funds tend to be exposed to liquidity and maturity risks much more than some years ago; many credit funds or the liquid credit instruments that trade frequently in the markets.

The problem is that these fund inflows have created an illusion of liquidity in fixed income markets. The liquidity promised to investors in good times is likely to

exceed the available liquidity provided by markets in times of stress. We do not know exactly how our disruption would be like if markets really got nervous. We do, however, know that some of the structural market liquidity measures have deteriorated. This is reflected in lower trading volumes, smaller trading sizes, smaller share of large trade, and less frequent trading of many securities. This deterioration in underlying structural liquidity may only become apparent when inflow liquidity disappears in times of stress.

As mentioned earlier, I believe that we need to further research to get a more update assessment in order to understand better the actually importance of these risks -- the importance of these risks. And this is not an easy task, and we are currently working on this for our April Global Financial Stability Report, where we hope to make a meaningful analytical contribution to the debate. Thank you. (Applause)

MS. MILLER: Good morning. And thank you for the opportunity to be here with you today. As someone who spent over 25 years in the asset management industry, the past five years provided a very unique opportunity to look at this industry through the eyes of regulators. And as you know, and as Brian has showed us, the asset management industry looms quite large in the financial landscape today with enormous scale and specialization.

This is not the industry that launched the Investment Company Act and the Investment Advisors Act of 1940. To be clear, I want to say up front that I see many benefits from professional asset management and those included the risk management benefits of diversification as well as independent research, the economies of scale of that reduce costs and improve pricing especially for small investors. And the countercyclical benefits of rebalancing and asset allocation work, and products like Target Day Retirement Funds, for example.

Historically the regulatory focus has largely been on investor protections and orderly markets. The financial crisis and the ensuing recession that we all

experienced introduced a new concern, financial stability. From a broad perspective I believe the U.S. capital markets offer many features that fuel growth and disburse risks. Investment products that link borrowers and investors should contribute to financial stability, but as we have learned, there are risks.

Long-term capital management, the 2008 Money Market Fund Guarantee, and the flash crash of 2010, all implicated asset managers to some degree. While we can catalogue many failures of asset management firms that occurred without any systemic harm, let me make a few points about today's landscape.

First, we have a surprisingly uneven regulatory framework, we know a lot about mutual funds and exchange-traded funds, and a lot less about separate accounts and private funds. The excellent presentation that Brian gave us today, largely focused on the public funds. I would like to see the same level of understanding about private funds.

The Dodd-Frank Legislation required reporting for hedge funds and private equity funds, and trade reporting to new trade repositories. These are very good steps but they are still in their infancy and nowhere near full transparency. Some specific risks that I see include the redemption provisions we've talked about that can promise instant liquidity on, today, less liquid pools of assets.

I think it's time to take another look at that and refresh whether this broad spectrum of products can all meet the same test of liquidity. I think there are information lags; there is not enough real-time information on degrees of leverage, exposures on liquidity, particularly in this private fund world. I understand that manager, for proprietary reasons, do not want to share their real-time exposures and positions in markets. But I also understand that it's important for regulators in the financial system to know if there is a buildup of exposure that should be understood.

There are disincentives to hold cash when measured against fully-

invested market benchmarks. And this was the point, I think, Peter as making, how much cash should a mutual fund hold? It's hard to do that if you benchmark is a benchmark that doesn't have any cash in it. I see pricing and valuation gaps during periods of market stress, and we don't have good protocols for how to handle that. I think that's another area that would welcome some attention.

And finally, some operational reliance on shared services by money managers that we should understand; after looking at this from numerous perspectives, I came to the view that it is the collective practices and activities of asset managers that needed a review for systemic risks. Risks that cross many firms are not solved by the heightened supervision of a single firm. In fact, that could create some perverse incentives, perhaps conveying a seal of approval, or the opposite driving investors away.

I applaud the work that the FSOC and has done and their request for comments on the Federal Register on this topic, I think they are asking the right questions, and I hope everyone in this room will consider commenting and adding to that discussion. Likewise, the SEC's recent public statements on work to improve the data collected and analyzed from asset managers, as well as heightened fund level controls and transition plans, are very important areas to focus on.

As we talk about these things today, I would pose some additional questions that we need to think about. How do we distinguish between asset managers that maybe suffering temporary liquidity impairment, versus credit or solvency issues? Should there be a lender of last resort plan for solvent but illiquid asset managers? Would that contribute to financial stability, or would it create the wrong incentives in the financial system?

I don't have the answers, but I would rather have that debate now, than wait for a financial crisis. I think this is a great forum here today, and think there is a real opportunity to get ahead of the curve, to not wait for the next financial accident to

legislate and regulate, after the fact. These are not insurmountable problems, and I think a healthy dialogue, and a healthy bit of work on this will solve many of these issues.

We learned in the financial crisis that we had an outdated financial regulatory system, we've made a lot of progress, but there's more scope here to be proactive. Thank you very much. (Applause)

MR. RICHARDSON: I'd first like to thank Doug and the Brookings Institution. If I have a pained look in my face it's not because of the topic of asset management, I had an altercation with a ski mountain in Utah last week, and it didn't turn out too good. So, anyway, my remarks today, they are going to be based a little bit on a consultant report that I did for a large mutual fund, so I'm going to kind of -- the topic I'm going to speak to is a little narrow. I'm going to speak about whether mutual funds should be designated as systemically important financial institutions as SIFIs, but I think the point I'm going to make kind of holds more broadly for the kind of asset management industry.

And the arguments that I'm going to make are very much related to work that I've done at NYU with colleagues, and I'm motivated by all kind of theoretical and empirical work, that measures systemic risk as the firm's contribution to the aggregate capital of shortfall of the financial system. So I'm always going to be going back to that in discussing the issue.

And I want to -- like Peter -- I want to make three points. I think the first point is one that's not made enough, but I think it's important, and that is that at any given point in time, there was a positive supply of the risk of real assets in the economy. You know, real business, planned property equipment, labor markets, et cetera. And there are financial claims written in those assets; loans, bonds, equity, maybe they are broken down to asset-backed securities, maybe they are tranched out.

Someone has to, or some entity has to hold those financial claims. My

11-year-old son, in a New York private school, just recently learned about the Law of Conservation of Mass. So, you know, you can move matter around, you can change it, you can separate mixtures, you can decompose substances, et cetera, but at the end, the mass remains constant. It's the same for risk. You can slice it, dice it, move it around through hedging, tranche it, do a risk transfer, but at the end of the day the same amount of real asset risk is out there. You can't change that, at least not at a given point in time.

So from an economic wealth point of view, if you wanted to focus on minimizing systemic risk, and again, in my world that's minimizing the expected aggregate capital shortfall in a crisis, who were the natural holders of those, of those financial claims? Is it a highly levered financial firms with government back stops? You know, if you think of Dodd-Frank and the Volcker Rule; isn't that what it's about? It's about sort of trained to get some of the risks at those institutions, out to the unlevered part of the financial system. So from that perspective, I kind of view asset management more as a solution than as a problem; and that gets back to Pete's comment about, in comparison to what?

Secondly -- the second point; and this has kind of somewhat already been made by Brian, but if you compare banks and non-banks like insurance companies, to the mutual fund industry, obviously they are very different. Mutual funds are a collective investment vehicle. They pull money from investors, act on their behalf by investing in a bunch of different securities.

The asset management business maybe risky because it depends on the quantity and risk of the assets under management, but the managers themselves don't bear the investment risk; the gains and losses are passed through to fund shareholders, so it's an important point to think of, what's the difference between me holding Vanguard S&P 500 Index Fund, or and ETF on the S&P 500, or the underlying securities, or whatever. Economically, they are quite similar.

Secondly, it's also been pointed out that mutual funds tend to help with the leverage, so from our perspective in terms of this kind of aggregate capital shortfall, mutual funds don't contribute directly to that capital shortfall, if they are going to contributed it's going to come indirectly, which I'll discuss in a second.

Third, is when a mutual fund, you know, they close down all the time, you know, frankly this information doesn't -- doesn't result like you get with the bank. You know, the assets just transfer to another fund, and we kind of move on our way. So it really begs the question; if a mutual fund manager invests in an emerging market bond, how does that change systemic risk relative to the situation which another investor invests in that same bond. You know, maybe myself invest in that bond. So I think that's something to, kind of, think about when we are thinking of systemic risks.

Now the third point, the final point, you know, the theoretically plausible possibility of how systemic risk can get transmitted from mutual funds to the financial system, I think is potentially fire sales through access redemptions. But I think there are two points we need to make here, the first is, that's an indirect -- and I'll get to that in a second -- that's an indirect mechanism not a direct one. And then the second point is, if that's the argument then there's a number of hurdles some significant to actually, you know, justify fire sales as that source. So I want to go through those hurdles.

The first, this has already been pointed out, is that you need to show that the structure of mutual funds somehow lead to redemptions in excess to what investors would do on their own account. So as I see it, this only occurs if you think the mutual fund is going to give you a better price, than you could have on your own. If I sell the fund that invests in emerging markets I get a better price than if I sold the ETF based on emerging market bonds, or if I sold the bond in my own account.

So that's, you know, do you get a better price? If that's the case, then it's a question of the pricing mechanism that mutual funds use. Clearly in the past there

have been issues, a decade ago I did research on market timing of mutual funds, that was an example where assets were mispriced at the NAV level and, you know, one could argue the money market fund has already been brought up, because of the stable NAV, is another issue.

So I think that's the first hurdle. You have to actually show that you get different prices that would encourage you to redeem more likely mutual funds and some other example. But even if you get excess redemptions, you know, the (inaudible) stacked in the literature really is that performance and fund flows, but right, fund flows is performance. And especially relative performance, and this also came up, and I think Brian showed a picture of sort of the cross-sectional variation during the crisis of fund flows.

You know, if I underperform I lose flows, but if the person that's outperforming gains those flows, so it's a wash. It's not clear to that that's going to lead to fire sales when you have that going on. So I think redemptions -- the redemption argument can only go through absolute performance, and then you have to make the argument that those redemptions are large enough, on an absolute level, to lead to fire sales, and then those fire sales are large enough to generate aggregate capital shortfalls elsewhere at (inaudible) financial institutions elsewhere in the financial system.

So that's a lot of ifs to get that. Let's suppose you get that. Let's suppose you have the excess redemptions, let's suppose they lead to fire sales, and let's suppose those fire sales are significant enough to impact the balance sheets of the leveraged firms that we worry about. Even if this is the case, it's not clear why those redemptions are more severe for a large mutual fund, than for a collection of smaller funds.

Imagine the (inaudible) Ford experiment, you could take a large mutual fund, or you could take a portfolio of smaller mutual funds, you have the same number of

assets in both. Why is it that the large funds have much higher redemptions? If they don’t, then why is the regulatory focus on fund size, which, it is all these documents that you read, why is it on fund size, and why isn't it on the sort of the redemption policy in general.

Now, finally, even if you get the excess redemptions, even if you have the fire sales, even if you believe that you can show empirically that it's actually large mutual funds that are the main contributor to this, so the increased likelihood of aggregate capital shortfalls comes through the redemption policies of large mutual funds. There's a bit of a philosophical question here, and this gets back to the direct versus indirect concept of systemic risk.

Is the problem -- is the systemic problem with the large mutual fund, or with the levered financial institutions that are suffering these shortfalls? So, in other words, if the levered financial institutions were less levered, or less exposed to emerging market debt with those risks, then systemic risk wouldn’t have emerged in the first place. So I think there's an argument, who knows which way it goes, which path of the systemic regulations is best? Is it to focus on the mutual funds or focus on the levered institutions, or some combination of the two? So I'll leave those questions, and I guess we will be at the Panel, yeah. Thank you. (Applause)

MR. BAILY: (Inaudible), this is a very demanding Panel. So when you speak press the button that says speak, and when you stop speaking un-press it or press the mute button so that we don’t have everybody's mics on at once. I'm not sure whether people are hearing at the back. Are the mics -- They're not; okay. Can we check whether these mics are (inaudible) on or not? Thank you.

SPEAKER: Closer.

MR. BAILY: I need to get closer?

SPEAKER: Closer, closer.

MR. BAILY: Thank you. This Panel which has been really, I think terrific, and the overall title on this Panel is Stability and Growth. I think a lot of the discussion may be most or all the discussion was around stability, so I want to start a little bit, talking about growth. So what are we looking for in an asset management industry, or in terms of its role as an intermediary in promoting economic growth?

Well, I think first of all, is money being allocated in like way? And I think all the Panelists sort of said; well, that’s not up to the asset management industry, it's up to the investors. But I'd like to raise a question with them about that, since asset managers usually give a lot of advice to their clients about what to invest in, or how to allocate their portfolios. So, let me raise that question. Do we think that -- what's the role of asset managers in actually allocating capital, and the influence that they may have on their clients?

And the second part of that is on the structure of the -- there's obviously a lot of debate about whether you should have actively managed funds, or passively managed funds, and certainly I think the economics view on this is that passively-managed funds like the sort of Vanguards of this world, are the way to go, because people can't overcome the sort of random walk aspects of financial markets. But it is equally true that there are asset managers who have been able to beat average returns, some of the endowments, some of the academic endowments and certain classes of assets.

So the second question then is, are we -- is the asset management industry efficient in terms of the way it operates? Keeping in mind and, again, a lot of said; well this is up to our clients, but a lot of clients actually don’t -- they aren’t very sophisticated, they may be very sophisticated in what they do in their jobs, and maybe they work in specific things, but often they may not know what the right strategies are.

So let me just throw it out and get some responses. Do we think that this

industry is serving the role of promoting growth by what it does in allocation of capital or if it does anything on that, and is it offering an efficient channel to intermediation. Yeah, let's first start --

MR. FISHER: It's a challenge. Okay. Let me start form the three comments in response to that. First, like Matt posed a really important question that gets us into that, which is, who is the optimal holder of the risk? So the efficiency that I think you should be going for is; are the assets getting in the hands of the right holders? And I think it's important to be clear as (inaudible) others have tried; the asset manager isn't a single liability. The asset manager is managing the hundreds of different liabilities of the different clients.

And to turn the question around, I'm aware of the regulatory effort on the part of those that care about these things, to make clear they don't want to see any arbitrage in who is holding these assets between banks and non-banks. And I think that's exactly wrong. That is, the idea we are going to move to a world of capital rules that says; insurance companies and pension funds, and banks, all should have the same capital rule, so they all have to hold the same assets, will I mean we don't get to optimal risk takers. We won't get the assets in the hands of those who most efficiently are going to hold those assets.

So I think the efficiency question for the economy is; do the assets end up in the hands of those who can take that slice of risk most efficiently? And the asset manager is the switching station in that. You have some clients who have very longer rated investment horizons, and others that have very short, and some that have very high volatility willing to take, and others very low, and you are trying to allocated among them.

And so, whether they are sophisticated or not, they tend to be very prescriptive. I mean, a not very sophisticated state pension fund is going to be very prescriptive as to what slice of the asset universe they want to hold.

I'd like to also tease out -- then I'll stop here -- the active-passive debate I think is really, we need to work harder at making this intelligent. To be blunt, there's two ways to make money in asset management; asset allocation and security selection. And in the security selection universe, whether you can buy the security more efficiently than the other guy, whether it's a little mispriced.

That's at most 20 percent of the available return that's out there in the universe, and 80 percent of the returns you can try to capture are from allocating across sectors or asset types; bonds and equities, different slices of emerging market. And there, the passive revolution of ETFs and Vanguard, and all of that, is all about giving the people the choice of which sector they want to hold, so that the asset buyer, in that case you buy this passive fund or that passive fund, you are now making active choices about which sector to hold.

And that's actually where most of the returns live, because most of the returns are relative to your own objective and your own liability. There isn't a single one, right, true liability; one true, right set of objectives for investors. It all depends on what their horizon is, and what their volatility constraint is. And so I think that the passive revolution we see taking place is giving people many more investors, sophisticated and unsophisticated ones; people then choose that and make their own asset allocation, which is a very active choice. Those are my two interventions.

MR. BAILY: They contribute to (inaudible), how efficient are asset that are allocated and (inaudible) --

MS. MILLER: Maybe I'll state two different -- Closer, thank you.

MR. BAILY: Hold it closer to you.

MS. MILLER: Does that work? Okay.

MR. BAILY: Again, a little more amplification, so I think then (inaudible) stepped up.

MS. MILLER: I mean, one thing that I constantly observe looking at things from my work in the government was how beneficial it is in the United States to have the capital markets that we have, because we take a lot of risks off of the banking system. So I think that, you know, in one sense I see that as a great strength of our financial system.

The one point I was going to add, and I agree with the points Peter made about asset allocation and security selection, passive versus active, I don't think I can add to that, but I do think that in the presentation of the asset manager as purely an agent and the client in completely directing activity, that's somewhat disingenuous.

I think if you think about the role that asset managers play in product design and innovation and bringing things to market. So I think we want to be careful in thinking about where does the asset managers -- where do you draw the line between what the clients are demanding, and what the asset manager is designing. So I would throw that out.

MR. BAILY: Okay. I was going to come to a little bit about that risk; do you have a comment on the subject there?

MR. GELOS: Yeah, just very briefly to add again, an emerging market dimension to this. We've seen in many emerging markets, that asset management industry, pensions funds, and others, can have a very beneficial effect on helping that capital goes to a more -- gets to a more efficient allocation, development capital markets more generally. So, you know, I do think that there are many instances where we can see in less developed capital markets how the growth of asset management has had a positive contribution.

Also in terms of stability we look at that in our -- in the Global Financial Stability Report, that's April, where we saw that the financial systems with the largest share of asset managers were more able to withstand the shocks that come from abroad.

MR. RICHARDSON: If I could just -- sorry. You mentioned the academic view, so I thought I would just throw in two points. The first is, I think that to a first order, when we think of asset management and its efficiency, it's really one about lower transaction costs allowing, you know, individual investors to more broadly get access to capital markets at large. And so the efficiency would come through that angle.

The second point about active versus passive, I think there has been a little bit of a migration in the academic view of the role of active investing, so I think that the view that passive outperformed the active, and why does active exist, you know, it's probably maybe 10, 15, 20 years ago. There's this work by Jonathan Berk and Richard Green, and has got a lot of play over the last decade or so. That sort of user world and kind of a general equilibrium context, and that the fees that go to active investing and the size of those funds, kind of, all work in a kind of general equilibrium context where there is a role for active and passive investing along those lines.

MR. FISHER: Okay now, my comment. My good friend, Mary, has accused me of being disingenuine, and I take it a bit hard. I am really going to push back and product innovation takes place in a very big dialogue of investment bankers and pension funds, and broker dealers, and commercial bankers, and mortgage originators, and this is a very complex ecosystem in which the asset manager is one of the players. But to use the asset manager definition again, narrowly, as if it's we are just talking about those who call themselves asset managers. Or are we using the term to mean those who have their hands on assets.

And if you want to use the latter definition, of course they have a big say, but then we are talking about the pension funds, and the insurance companies, and everyone who represents a pool of savings. Those are the people who direct the people who are the narrow asset managers, and it's everyone in the conversation. But I don’t think I was being disingenuous.

MS. MILLER: I wasn't -- I actually wasn't saying that about you, Peter. So don't take it personally.

MR. BAILY: Okay. Let me turn now to the risk side of this, the stability side of this and, Gaston, I think you were the person that most specifically was concerned about runs on assets. Matt, you talked about that, but I think you came out on saying it's not; that asset managers are not at risk. But you are concerned particularly in fixed income funds, that maybe there are these risks that you also bring in a global perspective from your perspective from your position at the IMF.

So just tell us a bit more about that. I had thought that really the main risk was the one that happened in the crisis which is that money market mutual funds that had pledged a constant price, got into trouble, and the SEC has proposed some rules on that. So tell me, is it fixed income more broadly, or is it just the fixed NAV? And if it's the fixed NAV have changes in the rules dealt with the risk issues there, or are they still systemic risks in that industry?

MR. GELOS: Thank you. Yes. I don't think it's only the fixed NAV, as I tried to highlight that. There are also incentives -- there are also first-mover advantages if you don't have fixed NAV or guaranteed returns, and they come from two sources.

They come from, first, the notion that if a fund faces large redemptions that fund is -- you know, has some kind of Peking order, in selling assets. They will, maybe, start selling the most liquid assets first to meet initial redemptions and gradually move onto sell less liquid assets. If that's the case then, you know, there is an incentive for the investor to move quickly, if he or she observes that others are moving. Okay. So that's number one.

Number two is the pricing issue, whether the cost of redemptions, the transaction cost and so forth, were they are passed on to the remaining investors of the fund or not? That's also an important issue. There are differences in how that's being

done. So these are two sources that create, in principle, a first-mover advantage. And that's important to understand in the sense that that makes a difference from the situation where, you know, investors hold securities directly, and so that's the point. Now, as I said before we need -- you know, we need to still understand how important is that, and what consequences that may have, but it can have -- Sorry?

MR. BAILY: Sorry. I was just restraining Peter to my right. But please, finish your comments.

MR. GELOS: And can have -- you know, conceptually it can have very important consequences if they are (inaudible) to the start; through these price externalities, through fire sales, and induced effects on other parts of the financial system.

MR. BAILY: Okay. Let me ask you, Matt, to comment on that, then I'll come to the (inaudible).

MR. RICHARDSON: I mean, I had laid out, you know, kind of like four hurdles that I think you have to jump, and so, you know, I kind of stand by that. But I think, you know, Gaston is making the point that the funds don't price the portfolio appropriately. Meaning that if you in a liquidity crisis and I want to redeem from that fund, the price at which I can get out of those securities is kind of a market price and a fundamental price.

If they are using the market price, I think it was commented, 50) percent use the bid, then I don't see the issue. It's irrelevant whether they are selling liquid or liquid stuff, it depends how they are pricing the liquid stuff on their books. If they are overpricing it, then I agree, you are more likely to run, but if it's priced correctly, meaning it's priced the same as what you'd see in the marketplace, then I don't an incentive.

MR. BAILY: Peter?

MR. FISHER: I was really echoing Matt's earlier point, compared to --

compared to what. In a world of all principles there's still a first-mover advantage, and if we are going to make the comparison between asset managers as delegees versus banks who hold it on their own balance sheet, I don't think it's very controversial to suggest which one is more likely to have an accurate mark-to-market, and which is not.

MR. BAILY: Mary can go (inaudible).

MS. MILLER: I was just going to tell one story. I think it was a year ago a corporate bond portfolio manger approached me and said; I do not have sufficient liquidity in the Street today to meet redemptions in my portfolio, and aren't you worried about that? And I said; I absolutely am worried about that, you know, Wall Street is carrying less inventory for a whole host of reasons, but I think you should be worried about it as well. This is your portfolio, you are offering liquidity on something that you are worried about, and I think we both need to be concerned about this.

You need to think about it from a structural standpoint in your portfolio, and we need to make sure that we are paying attention to the market outcomes of changes and regulation, but this is a very dynamic problem and I think it's something that is shared, by both the asset manager, and also by the regulatory community.

MR. BAILY: Bob Pozen who couldn't be here today has said, if I'm repeating him accurately – I hope I am – that that shouldn't be a worry if it really came to this liquidity issue, you would allocated the assets on a pro rata basis to the clients of the fund. So he didn't see it, that that was a liquidity problem, if you had to -- if you had to redeem it would just be on a pro rata basis, you would get a share of the individual assets.

MS. MILLER: I never met any clients who wanted to get their liquidity in terms of actual shares of the securities. They usually wanted to cash. So I agree that is a good strategy and a fair strategy but I think it's probably a deeply unpopular strategy in terms of meeting client demands.

MR. BAILY: Okay. I'm probably not accurately reflecting the full story of what he had in mind, but let's (inaudible) comment, and I'd like to then throw the questions open to the audience. So please think up some questions.

MR. GELOS: And I just wanted to say that, yes, there is also a first-move advantage in the aggregate if investors hold securities directly, but it is essential if you have collective investment vehicles that have these features that I just described. And, you know, the accurate pricing of illiquid assets at any moment time, there's also a dynamic effect, right. If you start selling you know there's not an impact on the markets, so I don't -- I think I still disagree with the assessment.

MR. BAILY: Some questions from the audience. Okay. Let's start here. Please wait for the mic, please identify yourself, and a short question please.

MS. YOUNG: My name is Lee Young. Thanks for our presentation. I think this should be a very important subject, I just wanted to bring a (inaudible), and recently we have all those financial crisis and this will be part of a sector of the financial business. So I think -- do your own study or you can address the issues about the financial loss or investment loss, or individuals of business, and this -- individual business, and where does the money come from for economic growth. If you are talking about financial stability, or economic growth, this is really the issue. So could you address the issues of financial loss, of financial crisis on this topic? You know, how much money in individual loss, they didn't get the money on asset manager, or perhaps you didn't give the money back to the individual. They lost all their pension benefit and things like that.

MR. BAILY: Okay. I think you are asking a much broader question than we are covering here. I don't know if any of the Panelists want to tackle it. Clearly there were a lot of financial losses in the crisis. We are looking at policy and behavior around the asset management industry. So I think that may be the best I can do, if one of the

Panelists, wants to go further. Okay. Another question; you pick one. I don’t know.

MR. TOPOLESKI: John Topoleski from the Congressional Research Service. And my question is sort of presumably both investors and to use as a capital are best served if the asset manager industry is competitive. So how competitive and industry is it? You know, I don’t -- you know, in sort of that classic economic sense.

MR. BAILY: Okay. Question how competitive is this industry? Do you want to answer that, Mary?

MS. MILLER: I think parts of the industry are highly competitive. You know, I think performance is measured daily, it's very transparent, there's a lot of ability to understand differences in the asset manager performance. I think other parts of the industry, again, the less public parts, are far harder to measure, and far harder to appreciate the differences in performance. I would say it's an uneven landscape would be my response.

MR. BAILY: So, I'll ask Peter's question, competitive compared to what? And I think there are a lot of asset managers, right? But do you see that as being competitive, or do you think there are certain, you know, tacit agreements around fees and things like that?

MR. FISHER: I think the number of actors, it's very competitive. If you -- based on market share and number of actors, this is as competitive a sector as there is in financial services. I think that inertia and habit are in all sectors of the market and those create problems on pricing, but that’s true across the industry as well.

And I think that in competing for assets, if you turn your efficiency competitive around in terms of competing for assets rather than clients it's highly competitive -- I mean, it's as competitive as anything I can imagine on the planet. But the competitiveness for investors is lots of choice and some inertia in pricing, is my simple answer.

MR. BAILY: Well, I think if I'm correct in saying David Swenson spoke, he was the -- or is the Asset Manager at Yale. And I think in his book, if I'm remembering correctly, he sort of said, well, if you have a lot of money, you have access to a certain kind of investments that the small investor doesn't have, then you are able to make much higher returns, is that a problem competition, or is that just part of life, so to speak?

MR. FISHER: Well it's hard to make (inaudible) good returns. That's hard work. I think the asset management industry and financial services in general, is a little like New York City, my friend Steve Chiketi at (Inaudible) likes to say, New York City is the only place in the planet you can pay whatever you want for something. If you want to pay a lot for it, you can pay a lot for it. If you want to pay a little for it, you can pay a little for it. If you want to go looking around the asset management industry, I think you can find price competition. And if you don't go looking for it, you won't find it.

MR. BAILY: I usually hold on to my wallet when I go to New York City but -- Okay. Can you bring that mic up? Please identify yourself and -- yeah.

MR. NELSON: John Nelson with Wall Street without Walls. Looking at the growth issue, if you were to have something in the impact investment space with a guarantee or some other kind of credit enhancements with this, what would be the effect, in your view, on asset managers to make what might be perceived as a risky investment in a growth area of the economic development for example?

MR. FISHER: Just to kind of clarify. Are you thinking the asset manager makes a guaranteed return?

MR. NELSON: Sure. It you were -- if you were looking at (inaudible).

MR. BAILY: (Inaudible) struggling on that question. Good question, but not one we've been able to answer. There's a question up here.

MS. JACKLIN: Nancy Jacklin; Johns Hopkins SAIS. I have two quick ones; Just topics that are related to what was discussed. One on stability, obviously the

message of this Panel is the issue of liquidity essentially in fixed income markets. And is there anything that can be done in terms of public policy, or otherwise, to help stimulate industry developments for there to be more platforms for direct trading of fixed income instruments, so that there is more liquidity in the market?

The second question relates to the question of economic growth and whether anyone has a view on the role of index funds, and benchmarks that are essentially indices that shifts investments into what's in the index as opposed to what may be the right investments in terms of what the economy needs and wants in terms of resources? In other words, are resources being allocated efficiently when investments are going into indexes? And certainly we've seen those kinds of issues. I used to be the U.S. Director at the IMF, and what was going into emerging markets; Argentina wasn't doing well, they were in an index that got a lot of money.

MR. BAILY: Okay. Good question. It goes back to what I think we discussed earlier. So there's a lot of money going into index funds, somehow other productive growth-enhancing investments being short-changed because of that. Anybody wants to comment on that?

MR. FISHER: Nancy, I think that -- I'll take your second question first. My point about the ETF and passive revolution, it's moving on to so many choices now, that the providers of these products are trying to create very intriguing slices of the world that they think will grow. And I think it is not so much the case anymore, where there are indexes that are big and diverse. The growth area of the industry has been the small, targeted indexes that are trying to get at certain growth opportunities or income opportunities, or whatever it is. So there's a whole of choice out there, and it's -- I think it's, we have less of the problem you are describing from years ago, than more of it today. And now maybe we've got too many such funds, rather than two few. So I don't think we have that kind of growth problem you are referring to. Now the second question.

MR. BAILY: Well, let me give a --

MR. FISHER: Or less of it today than 20 years ago.

MR. BAILY: I think those kind of investments, normally we have thought of was coming either from bank lending to small and medium-sized enterprises, to venture capital, to angel investors. I think that segment of the economy, there's some signs that it's weaker, and it has not recovered in the way in the way that other parts of the economy have; whether it's because of lack of access to capital, or for other reasons this is debated, but I think lack of capital in that segment.

But I'm not sure the asset management industry is the one that’s going to fix that. I mean, you really need to have a personal involvement at least of a bank, or of a venture capital person in that part of the economy, if I'm understanding you correctly. Okay; another question, over here?

MR. HURLEY: Good morning. Thank you for your presentations. Con Hurley; Boston University. I guess a question to Ms. Miller, and then to the Panel as well. You opened up the topic of lender of last resort for this industry, which I find particularly frightening, and I wonder if you might elaborate on that. But I would ask the rest of the Panel, with the lender of last resort benefit, goes a subsidy, and I wonder if the rest of the Panel has any indication that the industry, as it exists now, is receiving any subsidy in the form of the assumption that the government will bail it out.

MS. MILLER: Yeah. I raised that in a rather provocative way, and if you recall I said, I don’t know the answer to this, but it would be better to have that debate today than to have it in a moment of a storm or a crisis. And I think the thing that I observed during the financial crisis when I was managing fixed income assets was, there were parts of the market that were tremendously liquidity-impaired but not credit-impaired.

There were parts of the market that were insolvent and credit-impaired,

and they were going to fail. And so the question is, do we want to have any public policy plan for liquidity in a liquidity-impaired environment? Would that send the wrong signals to asset managers and create poor incentives? These are the tough questions that I think need to be thought about.

As you probably understand, Dodd-Frank has taken away that ability. There is no ability to rescue a single institution or fund, or something like that. There are some authorities to provide broadly available support, to solvent institutions, but I think, in this context, we can keep talking about liquidity, and we can try to think about ways to provide more of it to the market. What is the market going to respond in terms of providing more liquidity?

I was going to make a point and answer to Nancy that, to me it would be very interesting to think about from the context of performance measurement of fixed income managers, could you measure them on their investment performance outside of their cash or liquidity. Would that -- I mean, there are multiple problems with that, but it seems to me, it would at least take away one of the reasons why many managers don't carry much liquidity.

But I was simply raising it as something that is kicking around in the discussion that I think it would be healthier to bring it out, and talk about it, and resolve that. Should there be any liquidity support in stress markets, or no? And if it were built, what incentives would it bring, or what should they be concerned about there from a financial stability standpoint?

MR. RICHARDSON: I mean, I think in the current system, I don't think there's a role for lender of last resort. So I'm with you a little bit on this. But if, for example, future regulation was going to impose like gates --

SPEAKER: You are actually a little bit too close to (inaudible).

MR. RICHARDSON: Okay. Sorry about that. If financial regulation is

going to impose like gates on -- at the fund level, where investors could no longer access, you know, their liquidity, their capital, then for a fee, maybe the government could provide, you know, some hair cut, and provide some liquidity there, but I think that would only be in the context of, you know, whether you close the system down.

MR. BAILY: Okay. We've reached the end of our time. I really think it's been a wonderful Panel. And I appreciate everybody on it, but we have a 15 minute break now. Please get some coffee, or whatever, and come back in 15 minutes. Thanks to the audience, also, for some great questions. (Applause)

MR. GOTBAUM: All right. Doug Elliott is so confident of his inability to get Peter Fisher to stop talking in the back, that he has assigned the task to me. So if the coffee drinkers can either -- that works. It’s -- one never knows for sure what fraction of noise is done by any single voluble person.

I’m Josh Gotbaum. As Doug mentioned, I’ve -- I have -- I’m new to Brookings, having just spent four years running the Pension Benefit Guarantee Corporation, and I think the reason I was asked to moderate -- other than the fact that I was a warm body -- is I’ve been both a regulator and a deregulator and I’ve been both an asset manager and a managed asset.

When Doug asked me to do this and laid out the structure of the event, he said we’re going to have a discussion of the broad economics and then we’re going to have a discussion of the government activities and then we’re going to have a discussion about policy-making and regulatory. My initial reaction was why are you having the government talk first before you actually talk about the regulatory requirements. And I realized, looking at the subject matter, that that was precisely the right approach. And the reason for that is that the position of the folks who are going to speak to us this morning from the government is not yet one of policy prescription and policy making -- that where the government -- the various government agencies that care about this are is

in an assessment and an analytic role. And I thought it was worth -- it would be worthwhile pointing out that that is a necessary -- and as a person who has been in and out of government and been both the perpetrator and the victim of regulation -- that the task of the government is not the same as the task of the previous panel.

The previous panel had to express opinions that were plausible, grounded-in-facts, et cetera, and they did not have to worry about the institutional implications of those opinions. And so the -- the brilliance of Doug's ordering is that it gives the folks from the government, whose job it is now to assess and do analysis, a chance to talk about the assessment process, to talk about the analysis and that is what our panel is here for. It is inevitable after you have had a historic financial collapse, due in important part to the lack of understanding both of the nature of some financial products and the interrelationships between the institutions, that there would be a series of reactions. Dodd-Frank was one response. And it also -- and what the government is doing is carrying out its obligation to go beyond the bank depository institutions and look at the systemic implications of other institutions. It is also important that they not peremptorily exempt a class of institutions, which is why asset management makes sense.

So with that, I'm going to bring up the panel. You should -- we're going to start with Nellie Liang. Nellie runs the Financial Stability -- the Office of Financial Stability Policy and Research. She has had a history of career hopping. She joined the Fed in 1986 and never left. She'll be followed by Patrick Pinschmidt. Patrick is the Deputy Assistant Secretary for -- who is in charge of coordinating the FSOC. His history beforehand includes working for the Congressional Oversight Panel on the TARP, chaired by one Elizabeth Warren -- not then yet a senator. Before that, for a long time, he was an analyst covering financial institutions. And at the end, we will have Mark Flannery, the Chief Economist of the Securities and Exchange Commission, where he

has been for all of four months. As Mark puts it, this is his first stint in the nonacademic world. And so, without further ado, Nellie.

MS. LIANG: Okay. So thank you very much for inviting me, Doug and Josh, and I'm glad to be here to speak on asset management and financial stability. I'm -- these comments -- so, I'll -- because we're government, this will start the government panel off correctly -- just give my standard disclaimer that the comments are mine and not of the Board or its staff.

So I'm going to -- obviously we've just had a panel where we had a broad review of the asset management industry. I'm going to focus financial stability risks. In my five minutes or so, I'm actually only going to make a few points about open-end, long-term mutual funds and hopefully just a way to get some discussion going. So my points, first, I would note that mutual funds in their current form have been around for a long time -- 75 years now. And they've weathered all kinds of adverse market conditions without noticeably contributing to systemic risk. Indeed, they may provide a diversity of sources of funds for borrowers and may have had stabilizing influences on aggregate credit.

What I want to show is that these funds have grown relative to the economy and to the rest of the financial sector. I will argue that while mutual funds are still largely simple intermediation function between borrowers and savers, that intermediation has gotten somewhat more complex and I'll use two simple examples to make this point. One is their move into more illiquid assets and one example of use of leverage. And that case is derivatives to gain exposure. The growth of funds and their greater linkages with other financial intermediaries does raise the potential that their actions under stress could have effects on the broader financial system.

One example is that risk management and individual funds may not be sufficient for systemic risk if, for example, risk management ignores some sources of

systemic risk, such as correlation risk. That's just an example.

Before I get into just -- I'm going to just have like a couple slides with some pictures before I get into that. I do want to emphasize the issue for financial stability is not about market risk or the volatility of asset prices that are just part of the normal functioning of capital markets and capital allocation. Neither micro or macro prudential policies are aimed at regulating asset prices. That is not the intent.

The case for policy here is if the structure of the intermediation were some ways would amplify shocks and beyond the value of the fundamental value of the security. So really is am amplification mechanism. Is there something about the structure of funds.

So my first slide -- many of these issues I'm going to discuss were already talked about this morning. I guess I'm going to bring some pictures to some of that and maybe that will cement some ideas. This is a chart designed to help us put long-term mutual funds in perspective. And it's measured by holdings of credit market debt outstanding in the financial sector. So, first of all, the time series is from roughly 1957 to current. It's credit market debt outstanding. So think of this -- this is -- these are bonds. It does not include equities. Currently, it's about $40 trillion, relative to nominal GDP, which is what it is scaled to. It's about a little under, you know, 250 percent of GDP.

A couple things to point out. This blue on the bottom is the banking sector. It's the banks and the bank holding companies and I believe maybe credit unions are there. And it starts in the early '60s or late '50s at 50 percent of nominal GDP. It's now maybe 70 percent. So the point is the banking sector share of credit market debt outstanding is not -- is not rising that quickly. And, as you can see, it's becoming a much smaller share of total financial intermediation.

The late -- the mid '80s was a breaking point where financial sector credit

market debt outstanding started to increase a lot. Some of the increases that are very notable is this dark blue. That is the GSEs. I would highlight this red area. That's private ABS, not mortgage-backed securities. The yellow is the long-term, open-end mutual funds and ETFs. So, it's not a huge share. It is clearly a growing share. And since the crisis, it is the fastest growing share. So as assets came out of other types of financial intermediaries, they are moving to -- these again are the open-end, long-term mutual funds and ETFs that hold bonds, not equities.

Currently, our flow of funds estimates have that at, I think, 4.7 trillion. So there's -- my only point is this open-end, long-term mutual fund sector is increasing and the questions are is this -- are they becoming more connected to the rest of the financial sector or are there ways even within that sector, as they get bigger, are they more connected to each other.

Okay. Again, so I'm going to do two simple examples, just to give a concept of liquidity and leverage. Okay. So, liquidity risk. As the mutual funds have become more specialized, have grown, become more specialized, we have seen this move into less liquid markets. I'm going to show one example here. This is the high-yield bond market. Matt and others mentioned emerging markets. There's other assets that are less liquid.

This chart to the right shows the high-yield bond market itself. The red line has been growing pretty quickly. This is -- (inaudible) doubled since 2008. This capital markets as we move away from bank debt. The blue line below is the high-yield bonds and ETFs -- mutual funds and ETFs. That's grown, also, probably a little bit more than doubling and this is the shares -- just annual data that's since, you know, the crisis, it's risen. It's up a little bit -- 35 -- 30 to 35 percent. So this clearly puts more funds in a position of being expected to provide investors liquidity against assets that have become less liquid.

So, as mentioned earlier this morning, investors in this fund -- in these funds face a first mover problem. Albeit, it is one much less severe than you would think of bank deposits in a classic diamond (inaudible) framework. But the first investors to redeem are more likely to get paid out with cash or the proceeds of liquid securities rather than the proceeds of forced sales of less liquid securities. This puts liquidity risk management for these funds front and center as at a critical point. For financial stability, the issue would be to what extent do fund managers anticipate that redemptions at their fund will happen exactly at the same time as it's happening for other funds. So, those are -- that's the systemic issue.

Now there is a little bit of research on the effective illiquid stocks and subsequent returns. The literature is not big. And then, more recently, like if you have common holdings and illiquid stocks, do you have lower subsequent returns? And I think the answer from that literature -- again, it's not very big -- is yes. Is the effect big? We don't know. You know, in stocks probably not very big. In these bonds or emerging markets, I think the answer at this point is we really don't know. We can say though that things have changed and it's bigger than it used to be. But I think that's an area for quite a bit of research and I would make a point that it's very difficult for researchers to collect the kind of bond data at the fund level that they need to do this analysis on an aggregate basis. Think you can collect fund by fund. So that's an area that I think is -- will be important for us to focus on.

Okay. Second example. I'm just going to use one example to show that funds may be -- have limits on leverage. They may have -- may be using more leverage. We don't know. And, again, I'll make a point. It's very hard to see. So this is -- we know that funds can use derivatives to gain exposure. It may be a way to manage their inflows. It may be a way to juice returns. We don't know. And there are limits on what they can do and some do it and it's not -- we don't know if it's -- how big it is.

So this is an example of the credit default swap market. The data I'm showing are credit defaults cleared through DTCC that are -- in which either the reference entity or one of the counter parties is a regulated Fed entity. So it's not a complete snapshot. We do have one complete snapshot. This is roughly about 65 percent of the market. I can show you the complete one if you want.

In 2013, the aggregate notional amount in this market was about 13 trillion -- 15 trillion. Dealers are by far the biggest actors in this market. So the total is say 15 trillion. Dealers are about 12 or 13 trillion. No question they are the biggest.

Other actors though are bank, non-dealers, hedge funds and asset managers. And so you can see they buy and sell and they're active. This varies over time. You know, so in this case, it shows hedge funds are net buyers, asset managers are pretty much flat but on net a buyer. But, over time, this varies and sometimes they're net sellers and we see that.

CDS exposures clearly create some imbedded leverage -- links them to other leveraged financial institutions. This makes these funds part of a bigger -- part of the broader network. If they face redemptions at a time they have to pay off on a default, you know, are those -- is that part of liquidity risk management. I think that's really the issue. We have a very incomplete picture of what's going on here. With the outflows from PIMCO over the last summer, people were all pointing to their public reports. They reported 38 billion in notional net sold, but you can't create any kinds of linkages. So, this is an area that we want to do a little bit more.

Let me just -- let me just conclude. I guess there's -- let me just conclude just to make my points. Long-term mutual funds are an established time-tested part of the financial system -- American financial system. They are using derivatives to obtain exposure -- growing -- growing presence in less liquid markets. More generally relate them -- link them to the rest of the financial sector and it is possible potential risk for

financial stability may be changing. The responsibility of the regulators is to do that evaluation. And it is clearly the case that even if there are rules and regulations and good risk management on the parts of individual fund managers, there could be financial stability risks because of neglected risks. Okay. Thank you.

MR. PINSCHMIDT: Sorry, I'm a little slow on this (inaudible). Okay. Thank you very much. And Doug and Josh, thanks again for having me here today. Basically, I want to cover two key points this morning. One is provide some framing around the Council's ongoing work on asset management and, number two, hit on some of the high points and details of the Council's recent Federal Register notice requesting comment on asset management products and activities.

Before doing that, I think it might be useful to provide some grounding on the role of the Council and the mandate of the Council. As we saw back in the financial crisis, you know, one of the lessons, of course, from the crisis was that risks aren't always neatly packaged in tidy verticals relating to specific institutions, specific markets, asset classes, or, for that matter, regulatory jurisdictions. So one of the aims of Dodd-Frank and specifically relating to the Council was to provide a mechanism for regulators to come together to have collective responsibility to identify and respond to risks to financial stability.

To the extent that the Council identifies risks, there are certainly a menu of options available to the Council on that front. One option is highlighting a risk in the Council's annual report. That can go far as making a recommendation or it could be as simple as just sort of noting something, putting it in a text box, or talking about it.

Another option available to the Council is to work with primary regulators in the industry to improve data, improve availability of data or improve transparency generally to market participants. Another option still is to make a recommendation to the primary regulator calling for a certain action or making a recommendation regarding a

certain action. And certainly in the case of company specific or individual firm risks, there is, of course, also the option of designation.

So now turning to the Council's work on asset management. I think, you know, the first thing I want to point out, and I think Josh hit on this, too, it's certainly very premature right now to even talk about any sort of course of action for the Council. I mean the Council is firmly and squarely in the risk identification phase of its work and that's been going on for over a year now -- trying to get an understanding of potential risks and doing some analytical work. You know, this has been informed -- back in May, the Council hosted a public conference, bringing together various stakeholders -- many of whom are actually here again this morning -- to talk about risks in the asset management industry. And then following that conference, at the end of July, the Council directed a member agency staff of the FSOC to prioritize a review on asset management activities and products.

So that brings us to where we are today -- kind of building on these and other efforts. Towards the end of December, the Council unanimously approved and issued for public comment, a Federal Register notice seeking comment on asset management activities and products. Now, let me talk about that notice briefly.

The Federal Register notice, at its heart, provides a vehicle to engage -- for the Council to engage with the public in a very targeted manner. There are four primary risk buckets that make up the meat of that Register notice. The first one is liquidity and redemption risk. The second one is leverage. The third one is operational risk. And the fourth one is risks relating to resolution.

Within each of those sections, the notice is organized in such a way where at the beginning of the section, there is a discussion of the potential risks. The middle part of the section attempts to talk about industry practices and regulatory practices that could potentially serve as mitigants and could potentially curb the risk. And

then, finally, each section concludes with a series of, you know, targeted questions trying to get more information and trying to kind of get a better appreciation for the risk.

So now I can actually turn to my first slide. So, before kind of getting into the -- that the key risk buckets highlighted in the Federal Register notice, I think it's important to provide four important points of context here. The Council is not seeking to undo the normal risk-reward dynamic in the marketplace. Investment risk is clearly a fundamental part of the marketplace and it represents a normal part of market functioning. Rather, what the Council is going after and looking at is trying to understand whether there are certain parts of the structure or mechanics of asset management activities that could create, amplify or transmit risk more broadly than would otherwise occur.

Second key point is the Council's threshold for action is threats to U.S. financial stability. That's a lot different than the role of the primary regulator where there's prudential regulation and investor protection. And I would note that -- and Mark will sure talk about this -- Chair White recently noted that the SEC is considering several initiatives in this area. And Chair White also went on to note that, in terms of the purview of the role of the FSOC, she views it as complementary to what the SEC is doing.

Third key point is regulators industry and stakeholders have been engaging in a debate for many years now. There are a lot of questions out there. There's ongoing back and forth and to a large extent, the Federal Register notice that the Council is putting out -- or put out -- reflects that debate and kind of reflects some of the ideas in a more targeted fashion.

And finally, fourth point is, you know, high quality data and information is absolutely essential to what the Council is doing. The Council plans to assess whether, you know, as part of this notice, whether there is sufficient data out there, whether more data would be needed, either to improve transparency or to improve information in the

marketplace for counterparties.

So, with that, I'll turn very quickly to the substance of the notice. I'll highlight on kind of the key areas and talk about the key points within each as well as the type of information that the Council is looking for. The first area is liquidity in redemption risk. And this section focuses on whether there are certain structural features of pooled investment vehicles as well as their management of liquidity in redemptions could potentially influence investor behavior in a way that could affect U.S. financial stability.

More specifically here, the Council is exploring the implications of potentially greater redemption incentives for investors and pooled investment vehicles based on the fact that the costs associated with redemptions are shared and as a result partially borne by remaining investors in the vehicle. So the punch line here is is there a first mover advantage and could this dynamic be magnified for investment vehicles focused on less liquid assets.

Turning to leverage, the leverage section focuses on two key risks. The first is the degree to which the use of leverage by investment vehicles may increase the potential for forced asset sales. And the second point is the potential for leverage investment vehicles to expose counterparties to unanticipated market risks. For example, due to declines in marketplace, asset prices lead to collateral or margin calls. That creates sort of a vicious cycle and can risks materialize via the counterparty exposures creating distress of a leveraged investor and transmitting that to the broader financial system.

The third section is operational risk and there are two kind of key areas to this section. The first part is the transfer -- the ability to efficiently transfer client assets in accounts from one asset manager to another, particularly in a time of stress. The second point is trying to look at the industry in terms of is there an overreliance on certain parts of the industry, on third-party vendors or service providers that could potentially

pose risks if one of those were to encounter some problems.

With respect to the transfer of client assets and accounts, the Council is seeking to understand the resiliency of market structures to handle a scenario involving a sizable fight of clients during a time of market stress and are there perhaps scenarios that could potentially exacerbate that market stress.

With respect to service providers, the Council really is trying to understand who are the players in this market? What are their market shares? What are their reliance within the industry? Are there substitutes? Are there a variety of service providers that are used by the industry?

Finally, turning to the resolution section, this section focuses on whether there are any broader financial market interconnections that could pose risks to an asset manager investment vehicle or fund if there was a failure. To be clear, the notice also acknowledges that, you know, there's certainly a long history of funds or asset managers failing and not causing any problems to financial stability. But, to the extent that they're questions there, the questions are targeted trying to understand what are the interconnections between a fund and an asset manager both internally as well as more broadly across the financial system and are there areas or potential areas where if there was a situation that could potentially pose some risks.

So, finally, as I wrap up here, I think it's worth echoing what Secretary Lew said in December. You know, there is no predetermined outcome here and no decisions have been made in terms of next steps or the identification of any risk. Indeed, at its heart, the Federal Register notice is a recognition that more information is needed, more engagement is needed, more discussion, more analysis is needed. And, you know, once that engagement and discussion and the comments start to come in and the Council does additional analysis, the Council will be in a much better position to understand to the extent there -- are there risks there. And to the extent that there are

risks, do those risks rise to such a level that there are implications for U.S. financial stability.

And with that, you know, I thank you very much for your time and the Council looks forward to engaging in the coming months.

MR. FLANNERY: Good morning. Am I going to -- does this happen automatically? Okay. There's Patrick. I could talk about those again. I am going to spend a few minutes this morning talking about two things. One is the conceptual issue of how one separates the two kinds of risk -- thank you -- that people have spoken about. That is, investment risks versus systemic risks. And the other, if there's time at the end, I'll say a few things about operational risks at large asset managers. But before I start, I need to make it clear, this is a new thing for me. I have to say that these opinions are entirely my own and they have very little if anything to do with the Commission or the staffs opinions on related issues.

So let me start by explaining, to be clear, how the SEC views investment risks. Basically there is considered to be a variety of investment alternatives. There are a variety of investors with different risk preferences and beliefs and the capital markets, including asset managers allow the instruments and the investors to get linked up in a way that the investors understand the risks they are undertaking. So, disclosure is a really big deal at the Commission. Disclosure, to the extent that we can do it -- because sometimes it's very complicated -- disclosure is aimed at making sure that the investors know what risks they're getting into. And later on they might be unhappy about the outcome, but they won't be shocked or surprised at what happened.

Now, the ability of the financial sector this way -- the market sector -- to absorb risks, is pretty impressive. Yesterday, markets closed at prices which made the U.S. equity market worth about $21 trillion -- about 120 percent of GDP. One percent of that is $200 billion. And so I looked over the last 5 years at the number of days when

there was a 1 percent loss in the U.S. equity markets. And the answer is that about 11 percent of the days over the last 5 years has seen a $200 billion loss in the equity markets. About 3-1/2 percent of the days in the last 5 years has seen a $400 billion loss in the equity markets.

Now compare that to the banking systems equity capital which stands at roughly 1-1/2 trillion in book value terms -- which I don't like, but that's what the FSOC believes in. So what that means is that every 45 days -- every 45 calendar days, the equity markets absorb a loss that's equal to more than 25 percent of all the capital in the banking system. So the notion is that this is a source of risk, an ability to absorb risk -- without untoward onward implications that is really, really very substantial. So the difference between the claims in the equity markets and the claims in the levered banking markets are qualitatively different. It's important to recognize that. The key difference is based on leverage. And that's why the SEC views disclosure as so important.

Now, the Chair in December gave a talk where she was talking about some of her goals for the coming year and several of those goals were prominently associated with identifying risks in the asset manager space and informing investors about those risks. So they have to do with fund liquidity standards. They have to do with the disclosure of those standards. They have to do with possible revised rules about leverage and the use of derivatives in mutual funds. And, of course, the SEC will have a lot to do with the stress test that are mandated for mutual funds and asset managers. So, in the disclosure dimension, we're aware of some of the shortcomings and we're very interested in making sure that people understand what they're getting into so that a $400 billion drop does not cause all hell to break loose.

Now, the interesting -- and the reason we're here -- the interesting issues though are where are the externalities? Nellie mentioned the possibility that the fund manager's optimal liquidity position is different from what a social planner would choose

because the possibility of runs and social externalities. Simple disclosure here is not sufficient. But the challenge is distinguishing between losses that everybody knows are possible and these external effects. And the thinking here has not always been terribly clear. So let me give you an example.

This comes from a 1 year old -- almost exactly 1 year old -- FSB document where they are looking for methodologies for identifying nonbank, noninsurance global SIFIs. Page 17 there says if an entity has a significant amount of outstanding commercial paper, this could mean that it's failure would have a negative repercussion for the CP market, which in turn could have an impact on other financial institutions that issue commercial paper. That's what I sometimes refer to as a thought-free statement. It says sure there could be big losses and look at all the horrible things that might happen under some unspecified circumstance. I think we have to be very careful about that because it does a disservice to the notion that there are or there might be genuine systemic considerations. We've also got some coulds -- could, could, could -- could impact other institutions.

A couple of pages later, they say -- they're talking about this liquidity issue and they say, for example, the failure of a market intermediary could seriously disrupt certain funding. Now every time I see disrupt in this context, I'm tempted to say what does that mean? What do you have in mind? What does disrupt mean and how does it follow from, in this case, the failure of a market intermediary? Not saying that there isn't anything here. I'm saying that the language is very challenging.

Now this statement goes on to make a statement about not identifying risks. So the same statement goes on to say the focus of the methodology is identifying risks to the financial systems rather than risks to investors. That's clear. But it then goes on to say at that same time, large client losses could also result in the loss of investor confidence posing risks of the integrity and stability of the financial system. Well that's

not so clear. You know, that's a year old. I think we've come some way since then and the document that Patrick was talking about -- which if you haven't read it, I urge you to read. It's remarkably well laid out. It's really nicely laid out. And in the liquidity issue, in particular, they've got what appears at first and maybe even second glance to be a much better phrased question -- down at the bottom here -- which says the Council is interested in exploring the ways in which investors in pooled-investment vehicles could have greater incentives to redeem than if they were to sell a direct investment in the financial assets comprising the vehicles portfolio. Okay. So are there accelerants associated with holding these things in structured -- in shared investment vehicles?

On third thought, the problem with this statement is that it sort of implicitly assumes that the assets in the world are fixed and we're making a decision about how we package them. But, in fact, the reason people are holding more illiquid bonds or foreign bonds is because there have been technological innovations that make it economical for them to do so. So different people are holding developing market bonds. Different people are holding illiquid bonds. And they're being held in a different form. So there are two changes going on instead of just one. And I think we really have to be careful what the comparison is. I guess that's been said a couple times already. What's the comparison to which we're making -- that we're making when we talk about systemic risk or we talk about the possibility of external risk.

So, language -- you know, you might say, well, he's just picking on odd language. I don't think that's true. I think there's a legitimate confusion about how to think about these risks and how they manifest. And with respect to this one, I'm not sure what the policy response is. Suppose we decide that too many people are exposed to illiquidity risks. The SEC would say well disclose. Make sure that we do the disclosure right and they'll understand. What is the FSOC-level policy that results from that? Do we say no more ETFs based on foreign bonds? I think we ought to think about what we can

do about the risks that we might identify as a process of trying to identify them. So that's really my big message today, which is that it's very hard to find clear thinking and clear statements about what the risks are that are systemic.

The last thing -- very briefly, what I'll say is this issue about oprisk -- operational risk, which is one of the four characteristics of the FSOC document. Chair White also talked about that recently, but I don't have a quote for her -- talked about that recently. And here's a case where the SEC just implemented regulation SCI -- systems compliance and integrity. That applied to trading platforms primarily. And the notion was that there's an external effect -- there's an incentive to ignore reliability in trading systems because what attracts somebody to a trading system -- the ease of execution, the value of the execution, the cost of the execution. And the competitive pressure to say to customers if you're a trading platform, oh, by the way, I hardly ever go down, is further down the list. So we thought that there might be sort of a competitive under-reliance on system compliance and integrity. And so there's some new rules for them. And in that context, I think the same thing is worth exploring and certainly the Chair is talking about exploring this in the context of large mutual funds.

So, for example, Fidelity has something like 17 million accounts. I don't know what would make the management company go down. But if it did, we've got 17 million account holders who want their money to be somewhere else. So the question is whether that is a systemic risk and whether the kind of compliance that we've been requesting of the exchanges would also be applicable or appropriate for the larger -- the larger asset managers. So I think there's some work to be done in terms of the operational risk -- either in new rules of in figuring out what the dangers actually are as opposed to what the dangers might be and the SEC will certainly be working on that. Thank you very much.

(Discussion off the record)

MR. GOTBAUM: Before we open up to the audience questions, what would be useful -- one thing that would be useful is to talk a little bit about two things that you each had hinted at, but is worth -- I want to give you a chance to interact on. One is what kinds of information do you not have that you need to answer questions like whether there is or is not amplification, whether there is or is not redemption risk et cetera? I'll lay some questions out and then you can go from there.

Second, obviously, is the question of how the agencies interact and work together on this effort -- since, as Patrick noted, all of this crosses jurisdictional lines. And my last question is how, if it is knowable now, does this relate to the increased -- to efforts beyond the U.S., to international efforts?

MR. PINSCHMIDT: So, there's a lot there. Let me start with kind of the interaction on the Council and in terms of particularly in putting the Federal Register notice together and I think you were implying kind of the role of the SEC and some of the other regulators. And, certainly, given where the SEC sits, you know, we rely on them tremendously and, you know, their role was -- you know, they were kind of front and center in putting the Federal Register notice together. And, you know, that's completely entirely appropriate given where they sit, they're closest to the action, they understand the issues. But at the same time, I think the broader perspective of the Council and the other regulators, you know, informed the sort of the systemic risk aspect of the Council's work and kind of the mandate there. And, you know, I think as the SEC has noted that, you know, that's a compliment to what they're doing.

MR. GOTBAUM: Want to talk about what information you need?

MR. PINSCHMIDT: Yeah. I think the information issue is an important one, because we frequently hear when we're talking about systemic issues someone say, gee, I don't know all about a particular sector. I wish I did. So there's a long list of information that we'd like to have.

I think the thing that I would most like to have might be the thing that is least obtainable. But, I would really like to understand, let's say, irrational contagion. There is a belief -- a widespread and I'm sure with some foundation a belief -- that people behave in non-rational ways in response to certain kinds of surprises in financial markets. And I've always had trouble -- you know, why should there be run on Bank Number 2 if Bank Number 1 fails, for example? Well, maybe it's because Bank Number 1 is known to have the same kinds of exposures as Bank Number 2. Maybe it's because Bank Number 2 is feared to have the same kinds of exposures. But I would like to know more about that. And I would like to know more about the extent to which disclosure can improve that situation and sort of confine or limit the external implications. So I'm not sure that's exactly data, but that's certainly a kind of fact that I would love to understand better.

MS. LIANG: So I'll start with the first one, which is what kind of information do we need. I can start -- I spent a little time in my remarks on that. Two areas for mutual funds with liquidity and leverage -- I think there is really very limited information on that in the sense of being able to aggregate and being able to identify counterparties. You can go to individual funds and read their prospectuses and understand that. It's hard work to do research and the kind of analytical work that's needed to understand this. I think it's not a coincidence that the limited research in this area on liquidity is done in the area of stocks where -- so this is not just the mutual funds. It's also about the underlying securities. It's difficult to get. So that is an area.

I think the derivatives -- the work in derivatives -- and this is not just about mutual funds. Again, derivatives work is -- there are a lot of players. It raises counterparty issues and there is -- every derivatives market involves more than banks and understanding and for the players in the market and for the investors I think is important. So those are two areas I would highlight.

I guess I'll mention one thing on how do the agencies work together. So

obviously we work through FSOC. We also do quite a bit on bilateral -- bilateral work. So the Fed, historically, has worked with the banking agencies and it will continue to work with the banking agencies outside the FSOC. We meet regularly with the SEC staff on asset management issues. The Fed actually has an interest in asset management issues. Some of the bank holding companies are some of the biggest asset managers.

Also, in addition, as we continue to change capital requirements and liquidity requirements at banks, it without doubt will have effects on the broader financial system. So that's an area that we're spending time on. So this is not all through -- you know, I'm just -- regulatory agencies have to work together and they do.

MR. PINSCHMIDT: If I could just make one point on the data and I tried to get at this in my remarks, but, you know, I think there are two aspects to the data. There's the data to help inform the Council's risk analysis and kind of the next steps if there are any. But there's also the aspect of data -- what data would be good for market participants? What data would help transparency? What data would help market participants manage their risks? And, of course, the two kind of inform each other, but, I mean, I think that's an important piece of context.

MR. FLANNERY: Apropos that. Let me just add one thing. The -- you can imagine there are times where privately it's optimal to be opaque. Because if it's opaque, in an emergency, you can turn to the government or some other deep pocket, and say, gosh, nobody stands me, but I'm really solvent. And so one of the things that bringing more market pressure to bear on people will do, I think, is reduce the value of being opaque and increase the value of being transparent. And that goes exactly to Patrick's point.

MR. GOTBAUM: To what extent, if any, can you talk about -- you've been very clear at the process as we analyze the nature of risks and then we think about whether a response makes sense -- keeping in mind Peter's point about compared to

what, et cetera. To what extent, if any, can you comment on a sense of timing or duration? And -- but -- it's obviously something which you probably think about in your own lives, but I'm not sure whether there's any use --

MR. PINSCHMIDT: So -- I can try that first. I don't have an answer for you on that. I think, you know, we're not on the clock here, per se. I think, you know, clearly there is a lot of time invested in putting together a notice that seeks to ask the right questions and to create a framework for folks to engage with the Council and the different member agencies. And I think it's important to let that play out and if you, you know, look at the four buckets that are outlined in the notice, I mean, you know, these are fairly distinct buckets. I mean, there are some overlapping issues, but, you know, they're not necessarily going to start and end at the same time. And I think it's important to be flexible.

MR. GOTBAUM: Are there other -- since you cover the broadest mandate of the Council, are there other information areas that you want to highlight -- since part of the reason for doing this panel, obviously, is to elaborate on the notice in the hopes that you all will comment and provide the information that these folks need to do their job -- so.

MR. PINSCHMIDT: So I guess I would say, I mean, sure there are several dozen questions in the notice that -- you know, asking for specific data and information and input. But, you know, it's worth stressing that in each section of the notice, you know, there is an avenue for commenters to submit other information or other data that isn't specifically raised, so we don't feel like we should be limited in the types of information that people want to share or comment on.

MR. GOTBAUM: Okay. Can we have questions from the audience?

MR. STANLEY: Thank you.

MR. GOTBAUM: Wait for the mic.

MR. STANLEY: So, this is to Mark.

MR. GOTBAUM: Please identify yourself.

MR. STANLEY: Oh, I'm sorry.

MR. GOTBAUM: Actually, what I would like to do is get a couple of questions since our time is condensed. If I can get three or four folks to ask questions, then I'll let the panel. I'll get to you next, Matthew. So ask your question and then we'll --

MR. STANLEY: Yeah. I'm Marcus Stanley from Americans for Financial Reform. This is to Mark, and Nellie may also have some views on it. Mark, you talked about losses in equity markets and how the market could absorb that. I was wondering if you've thought about the difference between something like equities and sort of money-like assets -- assets that are thought of as safe assets and are money-like. No one is relying on their equity wealth to meet their payroll this week or to act as collateral for their regular flow of funding and there are different kind of dangers when those kinds of money-like assets and transactions accounts are hit versus equity. So, where do we -- what parts of the market are money-like in that way? How are asset managers connected to that? And what risks does it raise?

MR. GOTBAUM: Okay. Matthew?

MR. RICHARDSON: This is Matt Richardson who was on the earlier panel. So this is to -- I guess to Nellie, Patrick, and I guess, also guess, Don in the previous panel.

MR. GOTBAUM: From cyberspace. Right.

MR. RICHARDSON: In discussing first mover advantage and the data issue, it seems like you can't get at that question to the extent that if you had the mutual funds price of each of their securities that aggregates to the NAV, then you have transaction prices, you could look at lead lag relations to see, in fact, whether or not the liquidity shock is being priced into the underlying asset. And for high yield bonds,

because of trace, insurance company, NAIC and if you can get the data from the mutual funds, I think there's probably enough data there that you could get some idea at least for that sector. So you might want to think about that.

MR. GOTBAUM: We've got a couple more and then --

MS. SIECE: This one's probably for Nellie.

MR. GOTBAUM: Identify yourself. Sorry.

MS. SIECE: Nancy Jacqueline Siece. You had a chart up on credit derivatives and the degree to which that market is dominated by dealers. We now are getting more Basel rules on capital that has to be held against derivatives by those dealers and also margin regulations. So my question is should asset managers now start to prepare for reduced liquidity in those markets, too, as the costs of those businesses go up. And this gets to the ICI presentation at the front end that said, to some extent, asset managers are using derivatives because the markets and the underlying assets, in fact, are illiquid and the derivatives markets were regarded as more liquid. And, so, do we now do have another kind of issue of liquidity for these folks?

MR. GOTBAUM: Okay, why don't we -- since our time is constrained, that's why I figured we'd get a few questions it. Do you want to pick and choose and (inaudible) as you go? Nellie?

MS. LIANG: I'll start. I'll start with the last one first -- the one on credit derivatives and margins. So, I think that is one of the -- I think it is the case that if you raise the cost of some -- if you raise the cost of some kind of intermediation, it will likely reduce liquidity. I mean, and in some sense, regulations, by definition, will raise some costs. The idea though is that the expected benefits exceed those costs. I think the concern generally with the, sort of, everyone mentions liquidity risk when they talk about funds with bonds or derivatives. General concern is do current asset prices reflect what liquidity will look like in the next stress period. And that's unknowable. That's -- we'd

love to know that. That's part of probably this irrational contagion issue, but I don't think it's measurable ex ante. But, I guess that's my comment on that. And just to make the point that it's an open question to the extent that current asset prices reflect what market liquidity will look like in the next stress period given the huge change in regulations we've had since Dodd-Frank.

I appreciate the comment on how to try to get to liquidity risk in bond funds with the NAV looking at a lead lag. It is difficult again in bonds. It's just by nature they don't trade that frequently. There -- there is just, you know, 50,000 different bonds and, you know, equities are just tradable. But that's -- people are working on that. Ambitious Ph.D. students are working on that, but those are hard issues. Go ahead.

MR. FLANNERY: Okay. Well, let me respond to Marcus, in particular. Thank you. Respond to Marcus, in particular. The fact that some people want to hold equities, some people hold money market funds. Some people hold bank demand deposits. That's sort of a -- that's sort of a feature of the financial system and that people with particular risk preferences -- maybe a risk preference over part of their portfolio can select different kinds of investments. I think one of the things that we learned from the crisis is that -- sort of, Modigliani-Miller, which countenances the fact that you can always raise more bond money if you pay a high enough interest rate, doesn't work in certain kinds of short-term markets. Why? Because in those short-term markets, probability of repayment is preeminent. And so the fact that you might get a couple more basis points if you're lucky, isn't really relevant. So I think that those are different parts of the market and they deserve different kinds of management and different kinds of asset holdings. So that's the connection to your question about asset managers. They're going to provide different products for people with different preferences.

The other thing about the asset price is reflecting future stress -- which we would like to know about, but I'm struck by -- I keep coming back to a paper that was

written for the Brookings Papers on economic activity in 2009, where -- I can't remember the authors. They were talking about whether the market fought seriously before the crisis about the probability that junk -- that high-yield mortgages would collapse. And the answer was, yes. Everybody thought about it. And everybody assigned that possibility a very small probability. So they didn't worry about it very much. So it might be very hard if we think that seriously stressful events are unlikely, it might be very hard ever to identify whether those events are impounded in the prices that we see.

MR. GOTBAUM: By the grace of the host, we've been allowed five more minutes. So let me get a few more questions on the table. The gentlemen five rows back.

SPEAKER: Raise your hand again.

MR. GOTBAUM: Raise your hand. Yes.

MR. CHECCO: Thank you very much. Larry Checco. Nellie said something very interesting about entering another stress period. Do we not think we're on the verge of another stress period given what's going on with global warming, global terrorism, and the -- something nobody predicted -- this dramatic decrease in the oil prices? And does this not call for greater liquidity and capital holdings? It would seem to me -- I just don't want to go through what we went through these seven or eight years. And to -- I think it was Mark's point -- how come these people didn't see it? Mr. Greenspan has 400 accountants or economists in the Fed, and they couldn't see this thing coming? It just surprises me, amazingly. Thank you.

MR. GOTBAUM: A couple more questions.

MS. LIANG: I think you should (inaudible).

MS. YOUNG: My name is Lee Young. (Inaudible) all the presentation, we have a Department of Treasury, we have FRS and we have SEC and we have also the Department of Justice. They would be great if we had to look into the problem of just

financial institution and we have to look into the data (inaudible) the credibility, and even to collect the data what it is (inaudible) the accuracy or manipulated it. And so then that's the thing we had to look into. You have the comment to solicit a public comment. The problem those (inaudible) sent to the investors or the customer clients. So I just want to know if you can really coordinate together even (inaudible) and send to one agency, you can bring all together so you have a -- have it all linkage. And so, now, we want to have a credibility of our agency yourself. Do you have audit to your own agencies? Do you have audit to the financial sectors? Now, we want FRS, we want the Department of Justice, we (inaudible) have a real --

MR. GOTBAUM: Okay. If we're going to have time for answers, we're going to have --

MS. YOUNG: -- okay --

MR. GOTBAUM: -- limit the time for the question.

MS. YOUNG: -- we have (inaudible) credibility so where do you stop the revolving doors and (inaudible) efficient market?

MR. GOTBAUM: Okay. One more and then we're going to -- okay. Want to speculate on the --

MS. LIANG: Yes.

MR. GOTBAUM: -- extent to which --

SPEAKER: Now, remember, you're on television.

MS. LIANG: Okay. So --

MR. GOTBAUM: On the --

MS. LIANG: First, I'll start by repeating my disclaimer that I am speaking for myself. So I think the probability of -- you know, the way -- since the crisis, I think most people focused on financial stability recognize that the likelihood of predicting big shocks accurately is extremely low and that shocks are by definition unexpected. And

the focus of financial stability efforts in the U.S. and globally is to try to increase the resilience of a financial system to any kind of unexpected shock that could come along. So, whether -- so I think it's sort of very -- it's almost -- by definition, we try to take out can you predict the likelihood of a random shock. And, um, but it does not say that you can't try to improve the robustness of a system to whatever may come along. So that's where we're focused.

SPEAKER: Actually, we are going to have --

MR. GOTBAUM: Actually, no (inaudible). Do you have anything you wanted to say or should we --

MR. FLANNERY: Well, let me emphasize -- emphasize the point that Nellie made, which is if people expected a crisis, if people thought that a major sector was falling apart, then they would take steps to protect themselves against it. Okay? There'd be ways. We can't protect ourselves in the aggregate from it, but we can rearrange the claims and so something that is truly a crisis is also going to be truly a surprise. So the notion that we should have seen something like this coming is a very, very high bar and I hope the FSOC is careful never to say that it can predict and head off crises because that's a loser's game.

MR. GOTBAUM: And we will give the last word to the FSOC.

MR. PINSCHMIDT: So, Mark, I wasn't going to say that. But, I think, I would note in terms of Nellie's point and sort of the consequences of shock and the example was oil, but I think more generally, when the FSOC convenes and talks about risk, both at the principal level and the staff level, you know, there are a variety of perspectives on what's going on in the marketplace. And if you're on the banking side, you may have one perspective. If you're on the securities or the commodities side, you may have another perspective. So I think it's crucially important to bring people together to share those perspectives and that's -- you know, looking forward, that's hopefully a

mechanism that would be helpful going forward.

MR. GOTBAUM: Great. Let us thank these folks.

MR. ELLIOTT: Thank you for that. Another excellent panel. Again, I'm Doug Elliott and it's my honor to moderate the final panel. Sorry, if people could settle down a little bit. All right, so, let's try that again. It's my honor to moderate the final panel, which will focus on recommendations for regulation of the industry going forward. Our panelists are Paul Kupiec, who is a resident scholar at the American Enterprise Institute, Barbara Novick, who's Vice Chairman and one of the original founders of BlackRock and Marcus Stanley, who you've heard from briefly, Policy Director at Americans for Financial Reform.

You have their detailed bios in your packets and we're running out time anyway so without further ado, let me turn the podium over to Paul.

MR. KUPIEC: First, I'd like to thank Doug for inviting me and the other organizers. These are always great events and today is certainly another one of them. It's (inaudible) interesting.

So, if you go through all the reports that have happened since the crisis, The Financial Stability Board, the OFR's, asset manager report, couple of BIS presentations, New York Fed papers on the topic and the Christmas Eve release of the questions that we just went through, they're sort of a number one problem. If you have to go through there and you (inaudible) there's A constant drum beat in the background in all these papers about we need more regulation for asset managers but where's the market failure.

And, so, if you have to go through all these things and distill all these things and I did, and, I think the number one problem if you were the old, you know,

Carson pulled the thing out of your hat is it's really asset fire sales. And, if you go through this, this is the number one big overriding problem. There's a lot of micro agency problems but they could lead to asset fire sales if you believe some of these theories and stories. And, so, you can go through and there's a list and I just sort of, you know, investor redemptions could lead to asset fire sales. Margin calls could trigger asset fire sales. The gates could encourage fund investors to run and trigger asset fire sales. Securities landing could boom-a-rang back on you and end up in a fire sale. Pressures on managers to stay fully invested, they're not liquid enough. They could trigger asset fire sales. So, there's asset fire sales all over the place in these papers. And, so, you can think about there'd be two possible solutions to the asset fire sale problem, kind of at a very high level since I only have five minutes.

And, I think the first solution and this is the solution that really -- the FSB and the bank regulators, really, this is the way they think, it's we should really impose bank-like regulation and oversight to reduce the probability of investor runs or the possibility of investor runs. This is sort of the resilience argument. Well, if we could just put enough regulation on these things and what we really need to do is make the regulations more bank-like, more capital, more liquidity requirements. Maybe leverage restrictions, maybe minimum haircuts for repo and for securities lending. And, maybe, we should even think about some activity, sort of having to be done through banks. Maybe that's the right way to think about it.

But, I just want to think here briefly that -- and I missed the slide, sorry. There's another possible solution that, you know, maybe, the government could provide a liquidity backstop. And, this was already brought up before so thanks very much for that earlier, to prevent the fire sales from ever happening and before you go there and cringe and say, this is a terrible idea. This is horrible. How bad. The moral hazard is just incredible. Well, we actually did this beginning in 1913 with the Federal Reserve Act,

where we said, you know what, commercial banks really need a lender of last resort for commercial loans. And, that's what the Federal Reserve -- one of the primary goals of the Federal Reserves in 1913.

And, then, in 1916, Congress did the same thing for institutions that lent to farmers. They said what we really need is a liquidity backstop for these guys. We need a lender of last resort. And, there was the Farm Credit Act that was created back then and the Farm Credit Administration was created by an executive order in 1933. And, in 1932 Congress did this for savings banks, insurers and other firms that held mortgages because banks back then didn't hold mortgages and they weren't members of the Federal Reserve, were not banks, S&L's, savings banks and insurers and Congress, because it was in the middle of the Depression. And, there was all these problems with liquidity and mortgages and people weren't getting mortgages because these institutions couldn't fund them.

They needed a lender of last resort and so they had the Federal Home Loan Bank Act and we still have the Federal Home Loan Banks today. And, in fact, before the financial crisis there's some famous academic papers out there that show that really before the Feds started its special lending operations, the Federal Home Loan Bank was really the lender of first resort. And, it wasn't until late 2008 or 2007 when, I guess, more 2007-ish, when they started some of the special lending programs that the Feds sort of took over the lender of last resort function. But, in the early days it was really the Home Loan Bank.

So, let me talk about this. So, I'm going the wrong way, aren't I? Some people would say, yes, yes, you are. (Laughter). So, which are these solutions is better? So, regulating asset managers, like banks, would limit consumers' investment opportunities. There's really no evidence that I know of that, you know, government regulators can really pick good investments and, yes, this is really kind of the power

they're seeking. They want to restrict, you know, what asset managers can do. They want to direct investment in the economy at some level by putting restrictions on. This is going to have a growth effect. Economic growth is going to suffer if investors can't pick the right -- well, there's two views to this, right.

If you think that people that invest in asset managers really cause bubbles and misallocate resources, then, maybe, the government shutting it down is a fine thing. I, on the other hand, think investors are the ones that actually pick out the good investment projects and limiting their ability to do; that is probably a bad thing.

So, I think economic growth would suffer. How much trade off do you want? So, what's the financial stability? Trade off, is there really this promise of financial stability if you restrict it down. What are the growth effects? Are we really going to get, you know, stability out of this? You know, I kind of wonder. But, that's sort of the deal there. But, anyway, asset manager rates on return are going to be forced to converge really to bank products because they're going to more regulated like banks. They're going to have bank-like regulation. And regulators will be the first to jump up and discourage high-yield products and you kind of already seen charts like this. Isn't it terrible people want yield on their savings and wouldn't they be better off and save things and this could cause risking products and I, for one, like yield and I've been missing it a lot for the last 10 years.

But, anyway, what's the downside of a liquidity backstop? So, if a liquidity backstop is designed incorrectly, you know, it not could, it will cause moral hazard. So, you don't want the asset managers to use the liquidity backstop in place of sound liquidity management. I got that.

So, it's all about the design. It's all about the design. They must charge for the liquidity insurance and it must be too expensive to use regularly. Now, who might provide this? Now, everybody's going to say right away the Federal Reserve and I've

said that before. I think there's ways the Federal Reserve could be required to sell liquidity options that are available to the asset manager industry to backstop things like tri-party repo so if that were to melt down there would be a lender of last resort.

But, I think there's another possible lender of last resort and I think you could expand the Federal Home Loan Bank charter. Home loan banks exist today. They've never lost a dime lending on very risky mortgages. Remember, this is a GSE that has lent to the worst of the worst in the S&L industry. They've never lost a dime. I think it would interesting to think about expanding their charter so that FHL -- so that asset managers, the funds, not the managers, actually, the funds could belong to home loan banks. They would have to have stock in home loan banks and they could either get advances. They could liquefy things if there was really a danger of asset fire sales or the home loan banks could be encouraged to develop the liquidity insurance products.

Now, there's a couple of different features here. If the Federal Reserve sells this, it really, you know, could affect monetary policy. It's back to the government. The Home Loan banks are a mutual system and so losses in the home loan banks would be shared at the home loan bank level. They would recognize the losses and, so, there is a little bit of difference in the way the losses are shared here. And, the home loan banks are a little bit more like a mutual insurance system than would be the Federal Reserve program. So, let me just stop there and turn it over. Thank you. (Applause).

MS. NOVICK: So, first of all, thank you, Doug, for inviting me. I'm not quite sure what provocative thing I can say after that presentation, (laughter), but, I'll try. I'll do my best. Let me go quickly here, given the time constraints.

First thing is, 2015 is not 2008 and as policy makers, I would find it refreshing to both take credit for the work they've already done and take responsibility for the implications of the work they've already done.

So, for example, very quickly here, the banking system is stronger.

That's a good thing. Central clearing makes that market more transparent and stronger; that's a good thing. The SEC and the OCC have updated the rules for cash pools; that's a good thing. Managers of alternatives are registering so you know who to call in a crisis. You have a phone directory and they're reporting reams of data which is now being analyzed. All good things.

So, let's take a moment and celebrate that but then let's also understand that all those things as I'm going to talk about have implications for markets for liquidity, etcetera and let's deal with them, not pretend those actions have no consequences. And, of course, when it comes to things like, let's say, you own a home, there's always a new project, right? Does anybody have a house that doesn't have a project going on?

So, while the heavy lifting is over, of course, there's going to be clean up, various things that still need to be done. Of course, as they wind down, looking at banks there seems to be a need to look at something else. The something else is asset managers. I agree questions should be asked. I think that's a healthy process but recognize that is what's happening right here in this transition. Brian noted this morning asset managers are significantly different than banks.

I'm going to summarize it in two things. Asset managers manage other people's money. It's on their balance sheet, not on the asset managers, and asset managers don't create exposures for tax payers. Boil it all down to those two simple concepts and you'll understand why that agency model is so important and why the FSOC statement in July to focus instead on products and activities rather than on firms is actually instrumental to getting at the heart of risk and regulating it in a way that will actually make markets better and safer for everyone.

So, you need to start by understanding the asset managers, the asset owners themselves. Who owns the assets? Who controls the asset allocation decisions? Who do they work with to advise them what consulting firms? What are their

objectives and very importantly what are their constraints? There is no scenario I can think of where all of our clients would act in the same way on the same day to make the same investment decision. Some have tax constraints. Some need incomes. Some are willing to take longer term horizons. Some have higher risk appetites. There's no commonality so you can't assume everyone's going to stampede in this direction or in that direction at any moment in time.

In addition, Mackenzie estimates 75 percent of these assets that you see here are managed internally by those entities themselves. They don't hire an external manager. So, when we talk about fire sales and we talk about people selling emerging market debt or any particular asset class, we have to go back to who owns those assets, why they might be making those decisions and how that propagates through the system.

Many of the risk hypotheses that have been promulgated to date failed to understand these really very basic tenants. And, the asset owners here are very instrumental, of course, to the real economy. We've talked today about bank finance versus where would the money come from. We like to call this market finance, not shadow banking. That seems to be catching on, by the way, more broadly.

So, we put out a memo and there's lots of things on our website if you want to read lots and lots of papers on all these topics. But, we put out a memo a few months ago where we said, you know, while there's a lot that has been done, here are six categories of issues where there's room for learning more, understanding more, studying it. Maybe more regulations come out of it, maybe not.

I'm happy to say and I'm thrilled to say, actually, the FSOC RFI reflects a number of the areas and issues that we had raised ourselves. Today I only have time to focus on the first two bars. One is market structure. Nancy raised earlier the question of market liquidity.

So, I go back to my first slide. The cumulative impact of regulation of

banks means there is less liquidity in the bond markets. I think the de-leveraging and all the other provisions is what we wanted. I think that was the objective but now let's own the results. Now, let's think about how can we offset that reduced bond market liquidity. What things can we do? Electronic trading platforms. Standardization of corporate bond issuance. There are a whole host of ideas that have been out there but let's really look at those and focus on how do we offset safely in good positive ways that reduce bond market liquidity.

Likewise, central clearing. I haven't heard one person talk about that today. We've taken something out of the banks. We've put it in a central spot. These are for-profit entities. They don't have capital. They don't use stress testing. They are not safe the way they're designed today. That is the single biggest systemic risk I can see, I can identify. I know it's there today. I don't have to wait for that future event.

Let's focus on fixing that and making that unfinished business from -- let's take credit for the beginning part, central clearing, but now, let's make sure we put the roof on the house and we nail down all the shingles. And, of course, in the equity area, we also need a level playing field. We need a whole day to talk about that.

So, the second bar, product regulation. I think everyone's talked about it but we have two papers out there on the website. One on funds structures and the interrelation of different mechanisms within a fund structure. The tool kit that a Board might have or a manager might have so that if you had an event what could you do about it? Let's build the broadest tool kit possible.

Likewise, liquidity risk management. The idea that managers are always fully invested. It's just not true. The range of what people do is very different. It's even different within a fund complex from one product to another. High yield is managed differently than emerging market debt, differently than bank loans and certainly differently than equities. Let's recognize that. Let's understand that and, then, frankly, let's raise

the bar industry wide through stress testing and other things on liquidity risk management. And, I know I'm almost out of time if I'm talking very fast, Doug. (Laughter). That's the problem being the last panel.

So, a couple of quick conclusions. We completely agree horizontal regulation, it's the way to go. If you think about it at the product level, money market funds. If you regulate three money market funds differently than the rest of the industry what would happen? Money would move from the ones people like better to the ones people didn't like to the ones they liked better.

Activities, same thing. OTC derivatives. If we took the top banks and said, you know what, you're going to be regulated differently than the rest of the banks then the money would move. People would either do more business or less business based on who they thought was better to deal with more cost efficient, whatever criteria they used. So, you have to do as we saw in those two examples. You have to do horizontal regulation. Same thing is true about all the issues in asset management.

And, then, I also want touch on. There is a huge need to differentiate between what is idiosyncratic risk, what is market risk and what is systemic risk. And, although, we hear often don't worry, we understand. This isn't -- you know, we're not looking for market risk; that's not what the questions and the thing come back reflect.

So, if you think about the seismic changes that have occurred just in the last couple of months. Japan makes some big announcements about asset allocations shifts and monetary policy. Huge movements in equities. Greece, the elections. Your oil price shifts. All of these things dwarf the decision I can think of any individual asset manager ever making so let's have some perspective of what kinds of decisions are made, who makes them and what is the magnitude. And, then, lastly, engagement, engagement, engagement. These are incredibly complex issues, although, I've now said it in five minutes or less, talking very quickly. (Laughter). And, I went over my five minute

allotment. So, I'm off the stage. (Applause).

MR. STANLEY: So, less than ten might be more realistic than five here but this is the second time that I've been at Brookings discussing asset management and the first was in December 2013, which was, if you recall, a very heated moment in this asset manager debate. But, since that time there actually seems to have been some real progress on this issue which is always a pleasant surprise when you're working in Washington, D.C.

And, I'd first like to talk about what I think that progress consists in and the area of agreement and consensus that seem to be emerging, which I think are going to be evident in these, you know, comparing my presentation to Barbara's as well. But, then, the very important areas of disagreement that remain for the future.

And, the best source for the state of play on that emerging consensus is the FSOC release that Patrick discussed and also the December 11th speech by Mary Jo White, which is a really a terrific speech on the SEC initiative. And, that speech calls for action in two broad areas and the first is the management of liquidity in operational risk, particularly ensuring in the capacity to provide redemptions when in a fund or an asset manager is under stress.

And, the second is transparency in reporting of products and positions, both to regulators and to investors. And, the FSOC notice adds on, I think, an emphasis on leverage, which I think is actually also part of this emerging consensus. And, I think that the commitment to address these areas is just extraordinarily valuable. It's very valuable that there's a broad recognition emerging that the mismatch between promises of liquidity to investors and investments in complex and illiquid products could lead to what are effectively bank runs on asset managers or on funds.

And, I think that raising the bar on stress testing and operational risk across the entire industry, not just in a few designated large managers, should be

extraordinarily beneficial. And, of course, there are major, major problems with the current state of transparency in data reporting for funds, for insert for their positions, instruments and activities that really urgently need to be addressed. And, Nellie talked about that from mutual funds, it's even worse, far worse for hedge funds and for separate accounts.

So, that's really something we need to make progress on. Now, these areas of emerging agreement fall into what one might analogize to micro prudential regulation. What I would call micro prudential investor protection regulation in asset management. That's not micro prudential in the sense of bank regulation, in the sense of insuring the solvency of the entity because that's a very tricky concept in the case of asset managers. But, in the sense that, that agenda is about whether a particular individual asset manager can follow through on its commitments to its own investors.

There's much less consensus on what might be called the macro prudential aspect of regulating asset managers. The ways in which the actions of asset managers create externalities for other people in the system and can effect broader credit intermediation and secondary impacts on those that are not their investors. And, there's also, of course, less consensus on the hot button issue of what kind of role the Federal Reserves should play as a banking regulator with systemic risk focus in the oversight and regulation of asset managers.

But, before getting into those areas of disagreement, I think it's worth saying that implementing the agenda that the SEC has laid out is probably a really necessary first step to further progress on any of the other areas that we're looking at. Without better data reporting and without the right kind of procedures for stress testing and operational risk management, at the level of asset managers, the individual asset manager, it's going to be very difficult to get a concrete understanding of how funds fit into the broader systemic risk picture. And, we're going to get lots and lots of those

"coulds" that Mark Flannery pointed to. And, there's also a close relationship between micro level investor protection and broader systemic stability because financial panics tend to happen when you break promises to investors.

But, the areas of disagreement, I think, are also very important and just putting my own cards on the table, speaking here for myself, I believe that there is a crucial macro prudential justification for the regulation of asset managers. With the end of Glass–Steagall and the move to more market mediation of credit supply (see market mediation Barbara not shadow banking) disruptions in asset markets are becoming ever more important, both to the solvency of safety net banks and to the supply of real economy credit.

There's also an increasing correlation and similarity between the financial exposures of dealer banks, hedge funds, insurance companies and other entities that perform an asset manager function. An argument that sometimes made against regulation of asset managers is that asset managers are completely passive and simply act as an agent for investors. Even if one believes that, and I know I do, it's ever more important for financial stability to understand investor behavior and asset markets. And, asset managers are the institutional vehicle through which a lot of investor behavior is planned, coordinated and executed.

I also think it would be foolish to ignore the ways in which asset managers could, there's that word, come to engage in bank-like activities on a large scale. I'm not speaking here about commercial banking with insured deposits but the comparison would be the investment banks that were so central to the 2008 crisis, which in some cases look like gargantuan hedge funds.

While I'm not suggesting that asset managers are currently engaged in those kinds of activities at that kind of scale, I think it would be short-sighted to ignore their capacity to do so. To those who say that rules governing mutual funds already

protect against possible abuses in areas, like leverage or balance sheet investments and illiquid instruments, I would reply that conventional mutual funds are not necessarily the concern here. We've got to look at hedge funds. We've got to look at separate accounts. And, also that the framework of regulation for mutual funds actually is somewhat of a prudential framework. It's somewhat bank-like, if you like.

And, in fact, it shows some of the benefits of prudential restrictions, for example, on leverage, and certain kinds of oversight for funds that bank regulators probably are equipped to do. Now, this raises the hot button issue of the role of the Federal Reserve as a prudential and systemic regulator of asset managers. I should start here by saying that I'm very sympathetic to those who warn of the dangers of importing a prudential regulatory mentality into the oversight of asset management. The last thing we would want to do is import the culture of too big to fail and its accompanying moral hazard into the asset management industry.

There's also a danger of importing a kind of risk adverse too big to fail mentality into the oversight of the financial markets themselves. I'm speaking here of the danger of seeing the prevention of financial market violality as an end in itself. Regulators should not be focused on preventing market tantrums, which is a phrase that's been getting used more frequently recently, that in market tantrums that involve temporary spikes and volatility are not really the regulator business. What the regulator should be focused on preventing broader disruptions in the real economy, which is a different issue.

I actually have a toddler right now and he does frequently engage in tantrums and the only time I get involved is when it looks like he's about to stab himself in the eye with a pen or break the family china and regulators should follow that principle as well. At the same time, I think that the Federal Reserve and other prudential regulators do and should have a role to play in asset management regulation. I think the jury is very

much still out on whether this role should involve any FSOC designation of individual asset managers for prudential supervision, at least at this time. But, I think the prudential regulators need to be involved now in several ways. First, the information being generated by new data reporting and operational risk oversight by the SEC needs to be shared across all key regulators, especially the Fed, the office of complex institutions at the FDIC and dealer bank oversight of the OCC. The stress testing regime being instituted for asset managers needs to be integrated into a broader stress testing regime of liquidity and capital stress testing at both banks and central counter parties. And, I completely agree with what Barbara said about the importance of central counter parties there.

And, finally, regulators should work towards appropriate consistency in the oversight of similar activities when they're conducted in different entities. That's an issue, not just for things like securities lending, but for derivatives evaluation, which is enormously different. The derivatives regulation and asset manager management has not caught up to the things that we've learned in the crisis and the new Basel rules that are being made.

But, I just want to end, and I'm ending, on an optimistic note here. We really have our work cut out for us implementing the agenda that's already been laid out by the SEC and the FSOC. It's going to be a considerable operational and, perhaps, political challenge. As I said, the information produced in that agenda, if it's properly shared, will tell us a great deal where to go in other areas. Thank you. (Applause). I get to anchor the left side. Isn't that nice?

MR. ELLIOTT: Well, again, thank you all. We are running significantly late so I will forego saying very much but just a few quick comments of mine before we take questions from the audience. Paul, I really appreciate you giving the opportunity for me to plug my one book. I've written a book called *Uncle Sam in Pinstripes: Analyzing*

U.S. Federal Credit Programs. He's essentially proposing another one. So, I've sold literally hundreds of books here. (Laughter.) I hope we can sell at least a few tens more off of that.

But, the substantiate part I want to make is while it's an interesting idea, one of the things I always worry with these programs is even if you get the pricing and structure right at the beginning, all of the political pressures are for you to charge less and less over time and be less and less careful about who you apply it to and spread it out more broadly.

So, as you think about how to do this, I would strongly recommend thinking about how to provide some structural mechanism for keeping it from getting it out of hand, even if you do conclude it's right in the first place. And, I will mention, I think Barbara, in addition to a great deal of clarity, had the prettiest colors by far (laughter) from the presentations. I will definitely have to learn from that but I think all three of the panelists were very clear in what they said. They have fairly different views so I will not start a Donnie Brooke up here among them but rather given the time, let me give you about 10 minutes in the audience to ask a few questions if you have some. Otherwise, I'll talk more so come on. We can do this. Well, not you. You've got a couple in already.

Is there anyone -- well, all right. Then, in that case, I'll ask a question and you guys can think about more. Um, Marcus, I think you and Barbara have fairly different views at this point. It sounds like you believe that there are a great deal of potential systemic risks from asset management, significantly more than it sounds like she does, and I'll give her a chance to speak for herself. What do you think is at the heart of why the two of you disagree, assuming I've correctly characterized that? And, I'll give you a chance, too, Barbara.

MR. STANLEY: Well, first of all, I think and I've sort of structured what I

said around areas of what I think are emerging consensus, I think there are actually a lot of sort of practical agreements that we have in terms of what next steps are in terms of what to do, even if there are some bigger conceptual disagreements lurking behind it. I mean, Barbara did seem to be in support of that SEC agenda that's been laid out in support of stress testing, in support of greater disclosure and information reporting. And, as I said, I think those are extremely valuable things and I think that they're going to be able to inform us in thinking about whether we really do disagree on the other areas.

And, in terms of the sources of disagreement, I mean, you know, I could sort of re-give an entire speech on that. I think it's just, you know, BlackRock has a $250 billion balance sheet. It would be the 15th largest bank in the United States. It's got access to trillions of dollars in investor assets that it could potentially use as collateral to do a lot of different things. It's got probably the greatest capacity of any institution in the world to develop or some of the greatest capacity to develop and market complex new instruments and products and we should remember that and distribute them. And, we should remember that bank distribution through their CDO desks -- was new products through their CDO desks was very important part of the crisis. And, I'm sure Barbara's going to, you know, come in here and tell me why they can't use all the assets on their balance sheet and they have these restrictions on the use of the assets under management by investors. But, especially, for stuff that's not a conventional mutual fund, I just think we can't just say that's off limits and that can't create a systemic risk. I mean, I just don't see how you could conclude that based on the knowledge base we currently have and the experiences we've had.

MR. ELLIOTT: Barbara, what do you think is at the core of the disagreement? (Laughter).

MS. NOVICK: Well, quite honestly, I didn't think today was going to be a firm specific conversation but given the comments made -

MR. STANLEY: I didn't say anything negative about Blackrock, by the way.

MS. NOVICK: - they do need to be addressed and facts need to be put on the table. So, just to clarify. My background is I'm a founder of BlackRock. We're 26 years old. I've seen it grow from a blank sheet of paper to what it is today, $4.5 trillion dollars of other people's assets. The assets you refer to as being on our balance sheet are actually not assets on our balance sheet. There are different accounting conventions and in the UK the way insurance works it shows on your balance sheet and there's an exactly offsetting liability and those assets are not available to creditors. So, our actual balance sheet is quite small and I would take exception to what you've said.

I think Josh said it the best earlier. Questions should be asked. People should get educated. People should learn what the actual information is. We work on behalf of our clients. We manage other people's money, period. Simple as that. We do welcome looking at everything from operational risks to looking at fund structures. We've even written extensively on all of these topics and suggested a number of changes.

So, it's not to be defensive. It's to put facts on the table and let's look at real facts and then have a real discussion. Thank you.

MR. STANLEY: I mean the figure came from Blackrock's 10K so I'm sure you're completely correct that there are all kinds of restrictions and limitations that make it different than the assets held on bank balance sheets.

MS. NOVICE: I think we should have an offline discussion. This is really not the appropriate place to have that, okay?

MR. STANLEY: Well, I mean, I'm not sure why you would take it personally. I would note the success of BlackRock and its growth but I think the investor assets are also an issue. I mean, when you're doing things like indemnification for securities lending, you know, the company itself, the company's resources are put at risk

and that's an activity that banks undertake and it's a bank activity that's regulated one way on the bank side and another way on the asset manager's side so.

MS NOVICK: So, could I just briefly reply to securities lending indemnification. So, people should understand, first of all, we act as a securities lending agent. We are not the actual owner of the assets. We're not lending our own balance sheet. Of the indemnification where we lend we only deal with banks that are government insured counterparties. We don't lend to anybody else.

The indemnification we're providing assumes two things. Number one, the counterparty fails. The only counterparty's being government backed banks. And, two, that we take collateral. We over collateral every transaction from cash to securities and the collateral would have to be insufficient. So, first, the government regulator entity would have to fail. Second, we'd have to have a short fall in the collateral and then the only thing we're indemnifying is that differential. Let's say we made both decisions bad. Let's say the whole thing blew up. The losses would be the client losses. This isn't a leverage situation. This isn't like a bank. We're not going to go out of business. We have more than enough liquidity to cover any possible exposure. So, it's a red herring issue, just like the balance sheet one, which is a misinterpretation on our 10K. Thank you.

MR. ELLIOTT: I'll leave it there. I was afraid of starting a Donnie Brooke, I apologize. David, you have a question.

MR. WESSEL: David Wessel from Brookings. Barbara, in the first panel there was a lot of discussion about the extent to which asset managers were just doing the bidding of their investors and it seemed a little simple to me and I walked into a conversation between you and Peter Fisher that I want to invite you to share with the audience. What role do the consultants play? What role do the consultants play in advising clients and to what extent are they a mechanism for hurting behavior that we

need to pay more attention to?

MS. NOVICK: That's excellent question. So, there's very little understanding of how asset allocation decisions are made and all of you work at entities where you have a 401K plan. Just think about what's on your 401K list, how those choices were made, who made those. The answer is there's a whole of group of consultants. They're called sometimes pinching consultants or investments consultants and they're all over the world. Some of them are quite large in the amount of assets they advise and they will make a change in their asset allocation model. They'll make a buy recommendation, a sell recommendation on an individual manager. You saw in the Pimco case recently; lots of money moving. Some consultants said they made a buy recommendation on Pimco after Bill Gross left. Others said they had a sell recommendation. Some had a wait and see. So, the role of those consultants were actually instrumental in understanding assets flows across the industry, both across managers and across asset classes where people choose to change their asset allocation itself. Thank you.

SPEAKER: Can I ask why this has anything to do systemic risk? I mean, I don't (inaudible) the advice and things like that?

MR. ELLIOTT: I think the question is if we're trying to understand why do people tend to move in all the same direction and we have a very simple model in our mind that doesn't represent reality. If all the consultants say let's get out of Malaysian tomorrow, it could have a big consequence for Malaysian. So, the question, it goes to is there something in the structure of the industry that magnifies the effect of the shot. And, I was just asking for an institutional detail.

SPEAKER: But, this is, again, just a principle of agent problem that occurs everywhere so either I make that decision myself and all individually we decide to get out of Malaysian or we have a bunch of consultants we talk to, they convince us to

sell orders on Malaysian.

I mean, I don't -- it may be something that disburses information and makes people think the same way but I don't know what that has to do with an externality in systemic risk. If everybody wants to get out of a market, in the world I live in, they should be able to sell and get out of the market and the price will go down and that's not a systemic risk in the way I view things -

MS. NOVICK: But -

SPEAKER: - because the market can correct it.

MS. NOVICK: I think he's getting at the heart of Gaston's presentation earlier. If let's say, all the consultant's recommend in getting out of an emerging markets and all these clients move their money out of emerging markets into something else, what would happen in emerging markets? Now, I would say, that's a question you really want to understand better the role of the consultants because it's not the asset manager making that decision, it's the asset owner and the asset owner's usually in consultation with their consultant.

SPEAKER: Okay.

MR. ELLIOTT: Josh actually wanted to ask -- one quick question, Josh.

MR. GOTBAUM: It may or may not be quick in which case you'll just defer. I see a couple of basic points about, all right, there was a systemic crisis. Part of that systemic crisis came from a product, which people didn't understand, neither the regulators nor the other. What I'm curious about, Marcus, is the same very intelligent, very well-meaning people who missed CDO's. Are the people who you are presuming somehow should catch the next one and what I'm curious about is if we move away from a standard disclosure form of resiliency toward product regulation, who's going to figure what the products are and do you trust them?

MR. STANLEY: Well, I feel institutionally bound to say that neither I nor

AFR, the organization I work for, has any position on whether BlackRock or any other asset manager should be designated. The only reason that I was using these examples was not to pick on BlackRock, in particular, but to talk about how asset managers -- but to protest against the idea that asset managers, as a class, should be ruled out for designation in propertunity. So, that is not something that we have any position on.

And, the second point I wanted to make was in response to this issue about markets. As we move toward more market mediated credit things that happen naturally in markets do become threats to financial instability. It is not a contradiction to say if we're going to meet -- do a lot of real economy and credit intermediation through traded markets and we're going to allow traded markets to structure the products that people rely on as money-like and need to rely on for short-term stability evaluation, then, stuff that happens naturally in free markets is potentially going to present a financial stability risk and we have not completely figured out how to handle that, I think. And, what happens in markets is extraordinarily dependent on institutional detail.

You can see this in what happened to Tri-Party Repo, which triggered off the crisis. You had a market where people were legally forbidden from taking possession of the collateral that was being used for their loans, where there was massive intraday credit exposure that people didn't understand and where that market was critical to funding all kinds of systemically significant institutions.

So, you know, these little details are lurking out there and they're very important to look at. And, in terms of this question, I think, first of all, the separation of -- you have to look at disclosure and product regulation as linked because if you allow people to have a completely free hand to define products of unlimited complexity, then disclosure is really not going to help you very much.

Whereas, if you standardize products -- the more you standardize, the more disclosure is going to help you, I think, and, the more you can rely on investor

discipline. And, in terms of the same people who missed CDO's, you know, it is true that there was not really a fundamental overhauling or change in personnel of the U.S. Regulatory System after the crisis. And, that was not, you know, I think that you can raise some serious questions and issues about that so.

MR. ELLIOTT: So, it's kind of -- now, I will say, I'm making an exception for a former vice chair of the (inaudible) her so Don if you want to ask a question. (Laughter). Okay, then, everybody can go home. Thank you all. (Applause).

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Expires: November 30, 2016