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PUBLIC ROUNDTABLE TO DISCUSS RISK MANAGEMENT PRACTICES BY COMMODITY POOL OPERATORS

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P R O C E E D I N G S

MR. BARNETT: Okay. Thank you very much. So, we just got an interesting piece of information, which is that they're testing the fire alarm system in the other building and so they've turned it off and we shouldn't hear anything, but if in the testing they accidentally turn it on, we're not supposed to freak out and run, but our security folks will tell us when there's a real thing and then we'll run for it.

All right, so, just in case.

MR. ROBBINS: That's risk management, right there.

MR. BARNETT: We've got a couple empty seats so maybe we'll wait one more minute, okay?

Okay, we're going to get started. So, good morning, everybody. And after yesterday's closure due to another snow day -- I think I'm going to have kids going to school until July the way it's going -- we're really glad you were able to come today to lend your expertise to this discussion about risk management practices by commodity pool operators.

My name is Gary Barnett, I'm the Director of the Division of Swap Dealer and Intermediary Oversight, or DSIO. That's the CFTC's operating division that has oversight responsibility for CPOs and CTAs.

My colleague --

MS. OLEAR: I'm Amanda Olear. I'm the person that most of you spoke to on the phone. I am an Associate Director in DSIO and my team's primary responsibility is the regulation of CPOs and CTAs.

MR. BARNETT: And we know from our discussions with industry participants that risk management is becoming an increasingly important topic for investors and managers and that risk management practices are being implemented and are developing. So, we look forward to hearing from you and from these industry experts about the current status of the market in terms of risk management by funds or commodity pool operators.

Before we can get started with the core

principle topic today, let's cover a few housekeeping items. First, the schedule and the agenda, you know, the first part, let's make sure our cell phones and Blackberries are on vibrate, take calls outside the doors, sound travels pretty well in this room.

The bathrooms are all the way in the back. I ran into somebody headed there earlier. It's not -- you go out, you go to the back, and it's all the way in the back. If you stop before in the kitchen area you'll think it's not there. Anyway, you go all the way to the back and then turn left.

Our schedule today contemplates three sessions, the first one, we're going to start right away, we'll be looking at risk management practices in direct investment funds, and we'll go from now until 11 and we'll take a 15 minute break, and then we'll return for about 30 minutes to finish up our first session.

And then we'll return for a shorter 45-minute period to focus on fund of funds and we think they have the same sorts of issues plus more, and so we thought we should do a little breakout on that to hear about those issues as well.

Then we'll take an hour lunch -- we'll take an hour break for lunch, and then we'll turn to a session where we compare the experiences we've heard about and we'll try to see whether there's similarities, differences, takeaways that we could get from that, best practices, what view of the future, that sort of thing.

MS. OLEAR: When you're speaking, to use your microphone, you press the button. When your microphone is live, the red light will come on. When you're finished speaking, just press the button again.

MR. BARNETT: Thanks. Okay, so let's go around the table. Let's start here. And maybe briefly introduce yourselves and your institution.

MR. LLOYD: Sure. I'm Tom Lloyd, I'm the general counsel with Campbell & Company.

MS. KAISER: Heidi Kaiser. Deputy

general counsel, chief compliance officer at Campbell.

MR. PRADEL: Phillipe Pradel. I am a fellow at Campbell.

MR. FELSENTHAL: Steven Felsenthal, general counsel and chief compliance officer at Millburn Ridgefield Corporation and its affiliates.

MR. PENNINGTON: Hi. Warren Pennington. I'm a principle at Vanguard Group.

MR. MITAL: I am Manish Mital. I'm general counsel at Halcyon Asset Management. We are a alternative asset manager managing about $13 billion in hedge fund and CLO assets.

MS. PLAVAN: Hi. I'm Katie Plavan. I head our investor relations effort at MKP Capital Management. MKP is a diversified alternative firm founded in 1995 and manage over $8 billion in AUM across two core strategies, credit and global macro.

MR. LANDO: I'm Dov Lando. I'm the general counsel and chief compliance officer at

MKP Capital.

MR. SPILLANE: I'm Todd Spillane. I'm chief compliance officer for Invesco Advisors and for the Invesco funds.

MS. TORTAROLO: I'm Nicole Tortarolo. I'm head of investment structuring at UBS Alternative and Quantitative Investments and we're a fund of hedge funds.

MR. NICHOLAS: I'm Jay Nicholas. I'm global head of operational due diligence at UBS Alternative and Quantitative Investments. We're a $29 billion fund of fund.

MR. ROBBINS: I'm Greg Robbins. I'm the chief operating officer for Mesirow Advanced Strategies. We're a $13.5 billion fund of funds with offices in Chicago, London, and Hong Kong.

MS. RODRIGUEZ-AYALA: I'm Emma Rodriguez-Ayala. I'm the general counsel at Mesirow Advanced Strategies.

MR. BARNETT: Thank you all. All right. So, I guess to -- we've worked out of our questions here. So, to start our conversation, let's go around and each -- and ask each -- one speaker from each group, I guess, or they can join each other -- from each institution, let's talk and get a picture of -- an overview of your business structure and maybe the governance structure for that business, composition of the governing body, and then the types of risks that that business structure creates and how those various types of risks are addressed.

So, basically an overview of the kind of business, governance, just high level, how do you do it and what do you think about, and then the types of risks that that business process generates that you look at, and then how do you address those risks. Okay? And we can take our time, but let's go through each institution then. I'll turn it over to you, Tom.

MR. LLOYD: Sure. Thanks. Campbell & Company is a commodity pool operator and a commodity trading advisor, obviously registered with the CFTC, NFA member. We also have a wholly-owned subsidiary that is an SEC-registered investment advisor and a subsidiary that is a FINRA- and SEC-registered limited purpose broker dealer.

So, the -- we've generally categorized the type of risks that we look at everyday as sort of one category being regulatory, sort of compliance, risks, operational, counterparty investment risks, human capital, and then sort of to sum it all up, strategic or reputational risk.

From a governance standpoint, you know, we are a -- we're a closely-held corporation, so we have a, you know, a board of directors consisting of, you know, owners and officers of the company, and we have an executive committee that consists of ten people, including the chairman of the board, CEO, president, and heads of each of the sort of business groups. I'm on it. The head of trading, two heads of business development, different divisions, and research, CFO, and CTO, chief technology officer.

MR. BARNETT: Great. Okay. Thank you.

MR. LLOYD: Thank you.

MR. BARNETT: Go around?

MR. FELSENTHAL: Okay. Milburn Ridgefield Corporation has, not necessarily by that name, but we have been around since 1971, which makes us one of the oldest -- as far as I can tell -- one of the oldest CTAs, CPOs around.

We are also closely-held, so we are owned and operated by the same people. There are seven shareholders who form our executive committee and then on a day-to-day basis we're also managed by a management committee, which includes the various senior level people including the executive committee members and people -- and the other people who are head of core areas of our business. And the reason we have that structure is because we want to make sure that people who are actually implementing things on a day-to-day basis have an understanding, one, of the entire firm and how it works and what the interplay is between the various groups, and to facilitate communication. You'd be surprised how much you miss if you don't actually meet in person and force everybody to talk every once in a while, you'd be surprised how much you miss. And that -- and the reason I'm making that point is that leads very well into the risk discussion because if you have adequate communication and you understand what every line of business you have is doing, then you can properly identify risks and aside from the general rule of "follow the money", which is everybody's colloquial way of saying, you know, that's how you find your real risks because the real thing -- the real temptation is to steal money, but there are lots of other kids of risks.

So, I use that as a platform in which I can -- I listen carefully -- in which I can identify risks and ask people questions and try to think about.

And then I sit down with the business people and actually try to identify, you know, aside from identifying the risks, okay, what do you think is a good way to discuss -- you know, to address these risks, to mitigate them, and to test them? And I involve everybody in the firm in that kind of identification process and the testing process itself.

So, that's a general overview of that area, but we're also a, you know, registered investment advisor with the SEC so we also have those issues that are unique to SEC-registered firms, and a lot of them, you know, I find more and more that the types of risks that you're concerned about, even from a regulatory perspective, even from a legislation -- even from a statutory perspective, are very much the same a lot of the time or if they're not statutory in one area, they're something that you should be considering anyway.

So, in terms of dual registrants, I think there's -- tends to be more and more convergence than overlap. We are also have an affiliate that's registered with the FCA in the UK and, you know, again, you know, I find that there's very little that between the CFTC and the SEC, there's very little additional -- there is some -- that I have to do for FCA kind of risks or

UK or EU. You know, there are some, but you know, those types of risks, other than the statutorily prescribed things, which tend to be different, but a lot of the same concerns are being talked about over there as well.

So, you know, that's my overview.

MR. BARNETT: Great. Thank you.

MR. PENNINGTON: I'll go for a couple of minutes just to give you a perspective on -- Vanguard is one of the largest mutual fund firms with over $2.6 trillion in assets under management. The perspective we bring reflects the nature of the firm as well as our shareholders. We are shareholder-owned. The structure of our firm is that the funds own Vanguard.

We've been a pioneer in index mutual funds. We currently offer open-end funds, ETFs and fund of fund structures. And they're both active in index strategies, but almost all the assets that we manage are in funds registered under the '40 Act, the Investment Company Act of 1940.

The governance structure we have in place reflects that shareholder perspective. We have over 18 million shareholders. They range from over 80 years old, a substantial number of them, and an equally substantial number are under the age of 21, so that gives us four generations of shareholders from people who've lived through the Great Depression to the newest generation that has witnessed the global financial crisis and watched that.

Our structure reflects the fact that they've hired us to invest according to the objectives that we've published in the funds, and they also expect us to manage the risks associated with the operation of the capital markets. So, we've provided a fund schematic that gives kind of the typical fund risks that are out there, that's one of the things to the staff of the CFTC. I would echo the comments of the earlier folks here, Steve and others, you know, the regulatory requirements that are in place from the Investment Company Act cover quite a few risks that we manage. There are requirements around daily mark-to-market valuation, liquidity requirements, the requirement for daily redemptions, and a structure which has an independent board of directors over our funds.

In addition to that, as an advisor -- as the investment advisor -- we're also subject to the Investment Advisers Act, which has other requirements around it that give us some risk management alternatives, things like reporting and recordkeeping requirements, segregation of assets, and anti-fraud provisions.

I would like to point out that Vanguard's mutual funds, as well as our collective trusts, are actually exempt from CFTC registration under Rule 4.5 exclusions, so that forms part of the discussion here. So, we appreciate the fact that we can participate and your inclusive arrangement to the discussion.

MR. BARNETT: Thank you.

MR. MITAL: Hi. I'm Manish Mital from Halcyon and until Steve started speaking, I thought we'd been around for a long time, but we've been around since 1981. We manage, as I mentioned, hedge funds, CLO assets, and recently we started sub-advising on '40 Act funds as well.

When it comes to risk and risk management, I'd say that by far our greatest oversight comes from our investors. We've been voluntarily registered since 1997. I'm formerly from the SEC's enforcement division. My CCO was an AUSA in the securities fraud unit in the U.S. Attorney's Office, and while we both have a government perspective, there is nothing that compares to the type of oversight that we get from our investors, some of whom are at this table, and they come in routinely and they do their job, and it's quite systemic and I understand why they do it. They are fiduciaries to their own investors, but it's evolved, certainly, since 2008. You know, one of the things we get asked now and one of the main things that we look for in our agreements is to look at the counterparty risk of our counterparties, of the broker-dealers that we're transacting with.

So, we've instituted a monthly review where we have consultant who used to be with one of the prime brokers. We have one of the lawyers who deals frequently with all of these folks, and then we have an insolvency lawyer who specializes in derivatives, a former colleague of yours, Gary, Azam Aziz, who looks at our agreements on a quarterly basis to make sure that we're getting the best terms and that we're getting the right triggers in case the counterparties themselves default.

So, risk management has taken on a significant aspect in our business over the past few years, which is fortunate for us. You know, we've always touted our risk adjusted returns, and now people are asking about that.

MR. BARNETT: Interesting. Thank you.

MS. PLAVAN: Hi. I'll just speak to the structure of MKP Capital and I'll turn to my colleague, Dov, to speak about some of the risks that we face on an ongoing basis.

MKP Capital is structured, as many hedge funds are, with a management company overseeing a number of onshore and offshore entities. Our management company is led by our CEO and four other principle owners, which collectively are our management advisory committee. We've separated the business really into two distinct groups, the investment side of the business and then what we would typically call the operational side of the business, which comprises marketing, investor relations, middle- and back-office, our technology group, legal, HR, finance, et cetera.

We -- our investment side is comprised of our portfolio management team, our risk team, as well as our research and strategy group. You know, there's a number of overlapping committees and groupings to make sure that, you know, everyone is aware of the firm collective risks.

We have, as I mentioned, the management advisory committee, a formal brokerage committee, compliance committee, valuation committee, and we additionally have an independent board of directors that weighs in on our individual fund offerings.

MR. LANDO: Actually, you already touched on a lot of the governance and control functions. I mean, just to expand on that is, obviously, there's a myriad number of day-to-day risk oversight procedures. I mean, we really focus on it on a continuous basis, but I think Katie touched on the key, more formal control functions, which, again, things like the compliance committee, a brokerage committee, our valuation committee. I do agree, I would second, and probably Katie would even be better able to speak to that, but what Manish had said about the pressure we're constantly getting from our investor base. Very legitimately, the investor community wants to hear that we're focused on all these risks and they don't want to hear, when they come in, that they raise a concern and then we say, "Oh, that's a good point. We should find a way to address it."

So, we always have to be thinking ahead

and predicting what their concerns are going to be and they're very, you know, focused on this. They're thinking broadly as well. They're creative about it.

I personally -- I actually, at a previous point in my career, worked at a fund of funds and I was on that side of the table and I think fund of funds are interesting in the fact that they are, themselves, funds and they have to deal with all the risks that come with running a fund, but then obviously they have to be overseeing the underlying funds that they invest in.

I think they'll be better able to speak to it, but I think it's -- you know, different funds are very different in terms of -- in the types of risks that they're facing and the way that they should address those risks, and so, you know, fund of funds come in, I believe, in my experience, with that kind of flexible approach. They have things that they want addressed, but they also are sympathetic to the fact that different organizations will be organized differently. And then, you know, in my personal experience, transitioning over to a trading fund, you know, any organization will focus on the risks that they face on a day-to-day basis.

If you, for example, use soft hours, then that's a particular risk you have to address. If you don't use soft hours, then that's outside of scope, just again, as an example.

But I do feel that it's important to continuously challenge yourself on those risks, continuously -- I mean, one thing I'd say is, in my mind there's a three-level approach to it, you have certain things that are in place all the time, that you put in place that are supposed to monitor and mitigate risks. As part of that, there should be on some frequency, let's say a quarterly basis, a summation of that or a -- like, for example, a brokerage committee meeting if you're talking about best execution, and the brokerage committee will meet and overview what's happened over the course of the quarter make certain decisions.

But then there's a third level with some -- a lesser frequency, let's say an annual basis, to take a step back at a big picture and say, is the system we have in place appropriate? Is the -- are these quarterly meetings focusing on the right things? Is there some new development because of a change in the regulatory environment or change in our business or change in an industry that we have to take into account and we have to adjust? Because you need to address those things in advance. You cannot be reactive to those kinds of pressures.

MR. SPILLANE: I just want to throw one thing out on what you said, Dov, it's also a daily thing too. Right? So, you know, I just think about what's going on in Russia and Ukraine and everything else and sort of a new risk that popped up for us, we need to be aware of, so it's not only the quarterly and the annual, which obviously I agree with, but it's a daily process too.

So, Invesco is a very large public

company, I think many of you know it. We manage north of about $775 billion at this point in time, primarily in the United States a mutual fund company, although we do have a fairly large institutional business. We also run private equity. We've got a private equity distressed debt firm, private equity fund of funds firm, a bank loan firm. We do real estate, both securities and direct real estate, high net worths, pretty much everything you can think of in between.

Also with a number -- a large number of affiliates overseas that do something similar in their jurisdictions including the UK, including Frankfurt for Germany -- for continental Europe, Canada, Japan, Hong Kong, Australia, Taipei, Taiwan, you get the general idea.

The reason I bring those up is those are all service providers for me in terms of the funds, so it certainly brings those elements of risk and we need to be paying attention what's happening not only in the United States but it's also happening on a global basis.

At Invesco we have a corporate structure that the firm has managed essentially by about 14 SMDs, senior managing directors, over each one of the different business lines, then the shared services, which includes legal compliance, operations, IT, accounting, those kinds of things.

The SMDs comprise a -- what we call a CRMC, which is a corporate risk management committee. They meet on a quarterly basis. They get presentations by each one of the different business units on an annual basis. So, it's sort of a cascading effect. So, the risk gets sort of bottom up, but they also get pushed from the top down.

Each one of the business units is responsible for having its own risk management committee, so there's, again, about 14 of those that happen periodically throughout the year. I am fortunate enough to sit on a couple of those, and again, we do reports from each one of the different business lines identifying -- previously before the meetings, obviously -- identifying any new risks or any changes we see to the heat map.

In addition to all that, we have a lot of the things that a number of people have already mentioned, including the fund's board, we have a compliance committee, there's a number of other committees too that hear reports from the advisor on what's happening. We actually do probably more meetings than most fund complexes. We do eight regularly scheduled meetings. I do a presentation at every single meeting, including the opportunity to have an executive session with the trustees at each meeting.

Risks, again, investment risk is key. We have a separate 100-person dedicated group that is only looking at investment risks and doing very deep, fundamental research on each one of the portfolios. They will meet with the group CIOs on a semi-annual basis to review each one of the portfolios with the portfolio managers there and asking sometimes very hard questions -- why do you do this, why do you do that? -- in addition to the compliance group, which is doing its daily work and quarterly work and annual work -- in addition to the internal audit group, which is also looking at all these kinds of things.

So, I sort of would describe it as a compilation of all the different components. There is no one set risk program, shall we say, but it's a compilation of all those things that give, I think, our CEO, and I would say the chairman of our board, the comfort level that we can deliver on the things that we promise to our shareholders.

And the worst risk of all, I think many of us all know, is the headline risk. It's really not terribly important that the headlines are true, they're there, it is a reality, perception is reality.

MS. TORTAROLO: A&Q sits within the broader UBS. We sit within global asset management. Our management company is wholly-owned by UBS AG, which is itself a public company.

A&Q is registered both with the SEC and the CFTC. Then we also have an affiliate that's registered by the FCA.

We have offices -- well, our main office is in Stamford, Connecticut and then we have offices in New York, London, Zurich, Hong Kong, and Tokyo.

From a, you know, a governance perspective, we have a number of, you know, we have a number of committees that manage our firm, one of them includes a management review committee that meets on a monthly basis. All the participants are the heads of the various different groups and we cover the transactions that have occurred for the month and discuss various other issues.

Also being within a bank we're structured probably a little bit differently. We do have our legal and compliance group that is in the corporate center and is not in our business line, and they report up through different channels, I think and that is the same also with our risk control group. They also report outside of our business lines.

Separately, I think, is being part of a bank we're also subject to an internal audit and so we're subject to those risk controls as well, and then Jay can talk about some of the things we look at from a fund of funds perspective when we're looking at risk on the hedge fund side.

MR. NICHOLAS: Sure. I'm sure some of the things I will say will be similar to what Mesirow says as well. But, you know, some key things we have to take a look at is, one, the investment risk, what return we're looking for, and what's the risk we're willing to accept with that. We break our teams down into a couple different categories, one is an investment team, which is broken down by different strategies, so while we're focused, you know, specifically on commodity operators, we invest across a wide variety of strategies, equity long/short, CMBS, macro, currency.

We also have the operational due

diligence team, which I head up globally. Our job is to understand the risks of these hedge funds from a business risk standpoint, understand what controls they have in place, what we can do to mitigate certain areas to get more comfortable with things. We invest in a wide variety of hedge funds. They could be super large to some of the size people that we have here, or they could be very small, they could be three- to four- to five-people shops where we need to figure out how we can best create a control environment that we can get comfortable with the money that we invest so that we know when we ultimately redeem, that money will be there.

I think some people have pointed out as well, like Todd at Invesco, it's not just a monthly process, it's a daily process that we need to understand.

We look at funds also with a risk group. We will take a look at the returns that have been produced by the various funds where we question and run our own analytics to make sure that things make sense. So, it's a combination of both qualitative and quantitative, both top-up and -- top-down and bottom-up when we look at funds.

Some key things we look at would include liquidity, because we have our own products that we manage. We have certain liquidity profile for our investors, so we need to make sure that our funds can meet the liquidity of our investors, so we have to look at what we invest into that we can do that, and that could be a combination of funds that provide monthly, quarterly, or annual time horizons.

The other thing we'll spend a lot of time on is understanding how those funds are set up from a governance perspective. Nicole actually heads up a lot of that group, which we like to call client advocacy, but it's making sure that we have an independent board of directors who is there in case we feel that the manager isn't representing the fund and investors in the best interest we have a conduit that we can go to. And I would say we and also Mesirow have been pretty influential in trying to push that standard forward.

Just running through real quickly, I won't go into too many details, key things that we'll look at, you know, not only from the investment standpoint but from the back offices: How is the firm structured? Where is it structured? How is the fund structured? How many staff do they have? Do they seem competent?

Valuations, do they make sense the way they do it? Is there some way to independently verify it? Is it done consistently? We'll take a look at the trade processes, the reconciliation flows, cash controls, who can set up an account, who can move money, what kind of service providers are involved in that.

We'll talk to them about counterparties and financing. Leverage gets a lot of highlights in terms of what took place, you know, from 2008, so understanding how do funds manage their financing to match the asset duration of the investments that they're making? We spend a lot of time on that as well as how do they calculate and do that.

We want to understand, how do they handle compliance? It goes without saying compliance has been an enormous growth, not just in the U.S., but also worldwide, so how do funds manage that? In some cases it's being done with in-house teams that have grown. In some cases the consulting environment has grown dramatically with people who are ex-SEC/CFTC members who help them out. And business disaster/IT recovery, what controls are in place there, right?

The key thing is really making sure in that case that they have the ability to operate. We've had hurricanes hit the East Coast. We've had earthquakes. How do funds manage that?

What I can tell you is in general, hedge funds manage that very well. The other thing we look at is the service providers, verifying who they use, both through emails and phone calls, and it's amazing that the service providers, as they get to know you better, are very up front about, you know, which clients -- obviously, they have clients, they want to protect them -- but they'll tell you who's easier to work with, who's not easier to work with, right, and our approach has always been pushing the boundaries higher. So, what might have been acceptable back in 2000 might not be an appropriate standard now. So, while MKP and Halcyon say that, you know, investors are pushing them, I would say we're probably in that category of always raising the bar to make things stronger and tighter.

You know, when we talk about reputational risk, no one likes a hedge fund that blows up. You certainly don't want to be in it, but the reality is it's bad for the entire industry, right, and so that's how we manage our business.

MR. ROBBINS: Yeah, thanks, James. I think just to put a little more meat on the bone of what James has said, well, first I'll start with Mesirow since you asked about our specific business structure.

So, we sit within a holding company that is private and employee-owned. The principles in our business own more than 5 percent of the shares of the holding company, and so from an incentive alignment perspective, that's something that's extremely important to us. In fact, at the level of our executive committees and our investment committees, which are two of the main governing bodies of our firm, we have an agreement that we're required to invest 25 percent of our after-tax net income in either shares of our holding company or in our funds.

So, it's a big deal to us to have incentive alignment with our investors and that I personally, and people in those roles, have a lot to lose if our business doesn't go well, just as our investors do.

Similarly, as MKP and Halcyon know, we demand that the managers we invest with have a significant portion of their net worth tied up in their funds and their businesses for the exact same reason. We think it's a great way of creating incentive alignment.

Back to the formal governance structures. We have an executive committee that is the overall governing body of our group within Mesirow Financial. We also have an investment committee that's responsible for the investment decisions that are made at the firm and we have an operating committee on which my colleague Emma sits, as well as I, that is in charge of helping to identify and manage the operational risks and operations of the firm.

Like Steve at Millburn, we've taken both a top-down and bottom-up view towards identifying and managing those operational risks, and I think as you think about this, those risks are really less tied to our structure than they are to the types of businesses we do. So, you know, we've identified in the spreadsheet that we've put together for the firm -- or the PowerPoint we've put together for this presentation today, some of the risks that we generally identify in our structure in the investments we make -- I think they've been already identified by others at the table -- investment risk, counterparty risk, liquidity risk, operational risk, and compliance risk, and we actually have a formal dashboard -- a risk reporting dashboard that we use with our board of directors where we have those risks enumerated, identified, and then tracked, and then when the holding company's board of directors meets, they're looking at that risk dashboard and checking us and assessing where we're at on those identified risks. So, we do have another layer of governance with regard to the specific -- what we've identified as the major risks of our business.

A separate point of oversight for us is our funds have an independent board of directors who we report to at least quarterly and once a year we have in-person meetings with them and to the extent there were significant incidents at our funds, we would have to report to that board of directors and get them comfortable with what we were doing and how we were addressing those risks.

Going back to something James said and bringing this way up a macro level, you know, we are not only managing investor's capital -- or operating funds ourselves, but we're overseeing the investment of capital of the funds we invest with, and just to hit on something he said, and Dov had mentioned this as well, I can't emphasize enough how each individual investment fund has its own unique risk profile, and I think one of the challenges for any regulator, and it's certainly a challenge for us as an investor, is trying to think of the industry in any way as kind of a monolithic or uniform beast that has one group -- one set of common risk factors.

So, just to give you a little bit of an example, at any time we're invested across 60 to 80 different hedge fund managers in maybe 80 to 120 different products that they offer. Those fall into the -- we generally bucket the strategies we invest with as hedged equity, credit, relative value, event, macro and commodity, short dedicated managers, and then just generally an opportunistic bucket. And within each of those we have numerous sub-strategies and we are expecting each manager within those strategy buckets and within those separate sub-strategy buckets, to implement their investment program and to manage their risks in their own unique way that's appropriate for the expectations they have set for us.

So, like James and UBS, we create essentially tracking profiles, tracking indexes based on, say, what we expect the manager to be investing in from a sector exposure perspective, from a country exposure perspective, from a market cap perspective in both their long and short and gross exposures. We have that tracking index running next to their performance at all times and if at any time their performance deviates from that basic tracking index, we are on the phone with that manager trying to understand why that happens.

We also roll that up to our portfolio level, so we're tracking those exposures across our entire portfolio and we're doing a risk look-through so as Halcyon and MKP are monitoring their counterparties, I'm sure UBS does the same thing, we're surveying our counterparties across all of the underlying funds we invest with and rolling up our global exposure to prime brokered counterparties to understand where those are at.

So, I guess the overarching perspective I want to leave you with is there isn't a one-size-fits-all approach, the reason you need sophisticated people like James and Nicole and Emma at the top of this being a pain in the rear for our friends at the direct trading funds is because we view each of these very individually and we're constantly evaluating and progressing how we think about risk and as they said and as James suggested, demanding more and more from our underlying managers so that we're all comfortable where we sit in the industry.

MS. RODRIGUEZ-AYALA: And what I would add also is that we have our own end busters that perform the same due diligence on risks on us, so even for our portfolios, because we do so many custom portfolios for particularly large institutional investors, those portfolios sometimes have risk parameters that differ among them. So, for us, it's monitoring the risk of the underlying portfolio but also making sure that we comply with the risk expectations for our own investors, which often vary.

MR. BARNETT: Wow. Okay, very helpful. I've got questions from -- you know, questions from what do we do at the bottom, the technique to manage risk, but the discussion that sort of started evolving over here and came around, which was fascinating, was -- and I think it was -- in Dov's defense, nobody said "ignore daily", it was -- yes, I wanted to jump in for your -- because I know you didn't skip that, but it was very interesting because, you know, you think about -- you're hearing things about, you know, the committees with the heads of the lines of the business and you start thinking, like, but could that get sort of ingrown, right, because you --

but then all of the sudden then you're talking about -- but then somebody was talking about the annual meetings, you know, and following trends trying to get ahead proactively on things and then the annual meeting to see how well is it working and are we picking up all risks.

But I guess, so, on the one hand I want to get more detail about what people are doing on the daily stuff to manage these risks, but also maybe this -- sort of this governance or reporting up thing where the equity-like folks are -- you know, how do you make sure they understand what's going on and how is it being communicated, not just reactive, like, what happened here and what kind of on-the-ground decisions get made, but also then, as it filters up, seeing what's happening and making it understandable for people who are sort of like not the guys in the trenches.

And if you have thoughts on that and how does it work in the fund space, but I heard that discussion -- it was kind of fascinating. If you kept it just in the trenches there'd be like potentially conflicts and then there's also this education thing that's got to go on and then it's got to be communicated up and it's got to align itself with where people want this business to be going.

So, can we get thoughts about that sort of flow of information up and the decision-making at the top? And then we can go back down later to talk about what are you doing really to -- you know, the more mechanical stuff to manage risk, those kind of risks that you all identified?

MR. LLOYD: Sure, you want to start with us again?

MR. BARNETT: Sure thing.

MR. LLOYD: Sure. We have -- several people talked about investment risk, you know, that is a daily risk and we're, you know, a model-based -- we have a model based portfolio but we also have an investment committee that meets every day at 8:30 in the morning and that consists of our CEO, our president, our head of trading, our head of research, and several input -- input every day from several of the research groups.

So, you've got that on a daily basis. You also have our traders daily are, you know, monitoring news, monitoring-- you know, they know who our executing brokers are and our prime brokers and, you know, they will have the ability if news comes up about or even rumors come up about a specific fund that's maybe an executing broker, you'd want to just pull them out, you know, until something like that settles down.

So, I mean, that's a good thing because it's like somebody else said, you know, when you get that call, you know, what's your exposure to Lehman, you want to be able to say none, right? I mean, that's the -- that's sort of the goal.

And our executive committee meets once a week and literally, you know, there are -- as far as how information filters up, you know, we have, again, you know, people on that committee who are right -- who basically run the groups that, you know, do the different aspects of risk monitoring, you know, like my group oversee the legal compliance team, the investment ops team, and the trading operations. You know, things like having the traders report up through a different chain than trading operations, which does settlement, you know, to try to keep, you know, control of the potential of a rogue trader type of person.

So, it is important, you know, that it is a daily process for us and I think for a lot of the -- you know, obviously for the trading companies as well. Heidi?

MS. KAISER: Yeah, I would say sort of at the top level or the highest level, the executive committee is thinking about what are the risk tolerances for the different types of risks that we face, but then when it comes to actually identifying the risks and monitoring the risks, that's really the job of the people in the trenches, and then you have to have a system in place where those individuals are identifying the risks, how are we going to monitor them, what are the key risk indicators that we need to be looking at on a periodic basis, if that's daily, weekly, monthly, quarterly? And then what's the probability of those risks materializing? You know, is it really remote? Is it near certain that it's going to happen? And then is -- what's the impact of that?

And you might have a risk that is probably going to happen but the impact of that is very minimal to your business, minimal to investors, but you might have something that's remote, you know, counterparty risk. It might be remote, it used to be remote, but the impact of that is extremely great, so that's something that you're going to be looking at on a daily basis.

But really the highest level is looking at, then, accountability. Who's accountable for the risks? And then letting sort of the trenches deal with, you know, sort of managing them, mitigating them where necessary, and then reporting up, okay, what are maybe the top ten that we're dealing with or what has changed over the past year? What's a risk that we're facing now that we hadn't been facing before?

Because I think at the highest levels you can't be dealing with the weeds, but you need to impress what are our tolerances and what do you need to be bringing to us on a periodic basis so that we can be making decisions?

MS. RODRIGUEZ-AYALA: And at the risk of jumping in outside of order, when we're going around here, just because you address or ask specifically how do the executives at the top of the governing committees get educated about what they need to be thinking about.

For us that is an ongoing process, the start of the matter is they all kind of started at the bottom level and moved up, so they do have a general understanding of kind of what's happening at the bottom level.

When we do reporting to them, it's done on an ongoing basis for any large issues that need to be addressed and we make sure that they understand both the intricacies of what we're talking about and the repercussions of the risk, right, the consequences of if it's not addressed.

But also we systematically, on a quarterly basis, have a compliance meeting with the executive committee that we go through consistent risks that come up and because of the risk dashboard that they all have to review as well and be aware of, we are comfortable that they understand kind of the big picture risk.

When you're talking about the little picture risk, that's Greg's job, so he can address that, but as head of the operating committee, he needs to understand kind of all the technicalities of our business to be able to address risks.

MR. ROBBINS: Yeah, and I think I just can't emphasize enough that -- and I think it was Todd who had said this before -- the daily -- you know, it's funny, we all come into our office in the morning with a daily list of tasks we want to handle and then, you know, we get picked apart by the issues of the day and, you know, even though we're investing globally, we're a 127-person firm. So, it's not like there are layers of decision makers between what's happening on the ground and the actual decisions that need to get made to address this risk. So, I just -- I'd like to emphasize that it is a daily, ongoing process of managing risk and you're not only kind of reporting to other people internally, but as I think others around the table have mentioned, the outside pressure from our investors who are investing very large sums of money with us and have their own reputational risk concerns. You know, like UBS, ours is largely an institutional business and the consequences to those investors of being invested with us when something bad happens is extreme as well, and we take that very seriously and they do.

So, to the extent there is a prime broker in the news with some kind of pressure, I guarantee you it's not just me walking over to the side of our research floor asking how we're monitoring that risk and staying on top of it, our client team has beat me over there to say, I can't have this in the news with this exposure to this prime with our investors being upset about this.

So, they're constantly -- we're constantly reporting to those people in a way that we take very seriously, and I assure you, they do as well, so --

MR. BARNETT: Quick, quick, sorry, don't lose your thought, I just wanted to ask a quick question. So, Heidi, going back to your point about essentially materiality, talking about the likelihood of occurrence and magnitude of if it occurs, so how do you get into alignment, or if you're making that determination, materiality determination, well, I guess, how do you communicate it and how is it decided?

So, I mean, if the folks on the ground are implementing or are they making the determination about whether it goes up, or is that being communicated down to get a feel for what is contemplated to hit that band?

MS. KAISER: It depends on what type of category you're dealing with and who's addressing the risk. There are a lot of different risk assessments that might be made. On the compliance side we do a risk assessment and it's really myself and my team that are assessing, okay, what is the impact -- potential impact, and what's the probability of this actually happening, and we do a chart and then the ones that are either very significant in terms of impact or are very likely to happen are the ones that we'll raise to, say, Tom or executive committee.

And then with that, we're also looking at what are the internal controls or ways that we're mitigating these items, and it may be that there's an item that there's a high impact or high probability of happening, but we're very comfortable with the controls that we have in place, the procedures that we have in place, and maybe the training that we've done with our employees or the way that it's being monitored that we feel comfortable that either EC is already aware of it, he's getting information on it, and there's nothing we need to take action on.

If it's something that maybe is new, then we need to talk to the players and figure out, okay, well, how are we going to manage this, how are we going to monitor this?

MR. LLOYD: (inaudible) just to add to that slightly, one of the things that more and more -- you know, we have, obviously, fund of funds, institutions, our own sponsored funds that are sold through selling partners, but more and more of the due diligence teams, you know, obviously are digging deeper and deeper and deeper on this, and a lot of funds like us are doing what used to be called a SAS 70, it's now called a Statement of Control. We had an investor who required that years ago, so we've been doing that and it's, you know, where your entire control process is set out, you know, sort of from beginning to end -- like, you know, if a dollar comes into a fund or a dollar comes into a managed account, here's where it goes.

And then we have our corporate outside auditors who, you know, test that, you know, and so it's helpful to be able to deliver that to -- and it used to be a real market, you know, plus with institutional investors. I think it's kind of becoming baseline and maybe you guys can talk about that. I know it's baseline for -- you know, for outside administrators and obviously that's some of the -- you know, if we're going to have something administered externally, obviously that type of due diligence with them, it's -- you know, it's pretty baseline now.

MR. MITAL: Yeah. Our client base is largely institutional pension funds, institutional investors, and the fewer times that you can say no to something, the better.

MR. NICHOLAS: You know what, I'm sorry, if I can jump in. On the SAS 70 or the SSAE 16 that you were talking about, it's not -- it hasn't actually become that commonplace. We see some of the larger firms deciding to do it and pay for it. What we have seen is almost the requirement of these independent administrators to perform that task. So before 2008, it was not uncommon to have funds do their own accounting to have an administrator who basically just took the NAV that they produced and just send it out to investors. That has dramatically changed so that you have essentially parallel books and records being done both by the hedge funds and by the administrator who reconciled between the two.

So, I just wanted to make sure we're clear on that, that the SAS 70 or what's now the SSAE 16, definitely not commonplace.

MR. BARNETT: Okay.

MR. MITAL: But I think that's one of the interesting things about the industry, right, the people here, we do one, we'll do anything. If there's -- if I ask for a resource, if I need to hire a person, I'll get a person and, you know, you have funds here that specialize in distressed investing so our PMs are very focused on this. We have independent boards. We have -- you know, I've got a 10-person team.

The problem is, is that you're looking at, you know, an industry that's very diverse, and so these guys can speak much better to the people who aren't like us. You know, we -- I'd say we run fairly similarly to a broker-dealer in a sense in the way we do risk, and that's voluntary. Right? It's voluntary but it's coerced and it's because the investors are going to demand it and I'm not going to get pension fund investors coming to me otherwise. They'll go to the smaller guys seeking alpha, and, you know, they might be willing to go to a 5-person team who's not doing a SAS 70 who doesn't have my, you know, 10-person compliance staff, my back office, my operations, and so it's very hard to look at the fund industry as a homogenous group, you know, because you've got the folks like us who have the resources, have the experience, the PMs, you know, especially when you look at shops that specialize in distress, every single day they're looking at counterparty risk because that's their training. They would be -- it's in their DNA, they wouldn't do anything differently.

MR. FELSENTHAL: And it's not just because -- I don't want to give the impression that these guys show up at our office and say, we'd like you to jump up and down and stay in the air for 30 seconds at a time, that we're going to go do that -- although we would.

MR. MITAL: Yeah, I will.

MR. FELSENTHAL: But no, in seriousness, it's not that every question they ask -- if they come in and ask for a SAS 70 or SSAE, whatever it is -- they change names, I lose track -- but, you know, a lot of these -- not everything is driven by the due diligence -- the consultants and the due diligence people who come to your door. Everything's driven by, you know, wanting to be a clean shop without having any reputational issues and wanting to do things the right way. And, you know, yes, when they come in and ask us questions and we say, oh, yeah, we do that -- yeah, that's a perk. That's great and that's the only way you're going to get any kind of institutional investment.

But you're not always relying on the -- such sophisticated due diligence providers. There are people in between who aren't capable of doing that kind of due diligence and I don't want to give the impression that that's the only thing driving this kind of risk management exercise or anything like that. There are lots of drivers, the most important one is wanting to stay in business and not wanting to end up in jail. And a lot of those things are -- you know, on a basic level, there are lots of drivers, not just these questions -- I actually brought with me a due diligence questionnaire, not to share, but you know, these things are lengthy and they get you thinking a lot, and they're getting lengthier and more specific, like I was looking at it trying to think, okay, what are the kinds of questions we were asked -- you know, I first got to Millburn in 2004 and, you know, back then the due diligence questionnaires were a lot shorter and they were more willing to accept due diligence questionnaires that were the -- there's this AIMA form due diligence questionnaire.

Now everybody has -- seems to have their own questionnaire and they want you to answer their specific questions and they're getting more and more specific, which actually, as much of a pain as they are to fill out, you know, and to have to review every one of them, but they are helpful in terms of -- you know, I divide risks into trying to identify risks into subjective and objective sources and, you know, one of the things for objective sources are these questionnaires, are enforcement actions, are new rule releases, reading actually these 100-whatever page rule releases and looking for the nuances and the things that the concerns raised, not just the rule itself.

You know, we all want to abide by the rule, you can read the rule, it's -- you know, whatever it says it says and you do it. But what are the concerns and the reasons that went into one particular rule and things like that, and then you look at, you know, aside from the enforcement actions there are lots of these periodicals out there. There are law firm alerts. There are all these things that are all helping us identify the things that we should be concerned about.

And then on the flip side there's the subjective things where you meet with your people whether -- and before, you know, I focused more on the top-down, but on the bottom-up kind of thing, there's nobody in my firm that I'm not meeting with, everybody from the person who's sitting at the front desk, the receptionist, okay, trying to figure out what the risks are that are associated with her responsibilities, you know, is the door locked when you leave? If you go to the bathroom, can somebody just walk in? If you -- whatever it is. You know, not everything is a technical risk, and those are very daily risks too. Where are the files kept? Are they -- is it locked? Is it secure? Can anybody get in there? How?

You know, and mitigating those, such as putting cameras in place or having the door locked and things like that.

And then there are things that are so important in terms of daily kind of risks that -- and, again, we're mostly a quantitative shop, so a lot is relying on algorithms and models and things like that, and so one of the challenges is to hard code as many of the risks away in order to mitigate them.

Now, you can't get rid of everything, but you say -- such as speculative position limits and other types -- or even position accountability reporting, which is different than speculative position limits -- and other types of trading kind of just daily risks that could come up at any point. The more you can create systems where something can't occur because the system won't let it go through -- now, clearly everything doesn't work that way and you can't just rely on that, but for daily risks I try to automate as much of the prevention as possible, but not rely on it. You know, I guess sort of, you know, trust, but verify, and so I think that's an interesting aspect that -- you know, and these days there's so many ways to automate things and so many things -- and such reliance on these things, which facilitates our ability to then test and focus on other things that can't be automated. So, it's a changed world in that respect.

But, you know, I do find also, you know, people have been in this industry for a while, especially, you know, your operations folks or accounting folks, your traders, and people like that, you know, I'll wake up in the middle of the night thinking of a risk, you know, three o'clock in the morning, you know, it's -- you know, I mentioned earlier when we were talking a little bit, it reminds me of the Seinfeld where Jerry wakes up in the middle of the night, writes down a joke on a little piece of paper and then goes back to sleep and he can't find the paper in the morning.

So, I usually find the paper, but I think of these things and then you go into work and typically you go -- then go to the trader or a trader and say, oh, well, what if this happens? And they have an answer. They've thought about this already. It's a very -- you know, surrounding yourselves with quality people who are not necessarily compliance or legal people, who really understand the business and can relate to it and incorporating them as an integral component of your program in identifying and dealing with risks, is integral and I don't know how you can operate without that. You could have 20 compliance people walking around and never really -- and all 20 of them would never really, really understand what a trader did until they sat in the trading room for a month and actually, you know, traded.

And, you know, they're not doing that. Nobody wants me trading. So, I think, you know, that's an interesting way to think -- that's how I think about it, in that sense.

MR. MITAL: Yeah, and I think one of the -- you hit the nail on the head. I mean, I have the luxury of being glib about these things and saying, yeah, I'll do it because it's all -- you're asking the question a different way. It's internally driven, right? You know, when we did the SAS 70 it's because my CFO thought, hey, I think the partners would appreciate this.

You know, these -- when I was in the government, you know, I remember in '04 thinking about hedge funds as these lightly regulated shadow funds, and they're not. For the most part, they're franchises, and people are, you know, treating them that way and people are running them as responsible businesses. You know, you have problems, just like you have in every industry. There are going to be a percentage of policemen, a percentage of doctors, a percentage of lawyers who are going to be corrupt, but for the most part, the industry is fairly institutionalized, run by people who, you know, one of the differences between hedge funds and other industries is, you know, people who are very aligned in the interest of the fund.

You know, it's not like you hold a few shares of the stock and are getting a salary and a bonus. You know, these are people who are completely invested in how the fund is doing and usually thinking long-term, not one-two year returns.

So, you know, risk management is -- it's just core to the DNA of what a firm does.

MR. FELSENTHAL: And a lot of -- you know, the whole idea of a SAS 70, you know, while I was happy to hear that it's not, you know, has not become a requirement, I would have said the same thing. You know, we have a fund of fund strategy as well as we're a direct manager and so we see things from both perspectives and a lot of what we think about is, you know, sometimes I'll meet with our fund of funds team and say, okay, what are the most important things to you when you're going to see a manager, and then I'll take that information and say, okay, well, let me think, do we have these things in place, what is our -- how do we deal with that? How do we deal with the things that are important to you?

And then when a scandal comes up, you know, wherever it was, I go look at our file on that manager because our fund of funds has probably looked at that manager. So, I go and look at the file on a manager and see what their conclusion was and why they reached those conclusions, what questions they have that tipped them off that this, fortunately so far, was not somebody we wanted to go into, not somebody we wanted to invest with.

You know, it all started with the scandal of he who shall not be named and so, you know, that was the first thing I did. And I found that to be a good process to think like a fund of funds person in terms of looking at what you're doing.

And so I thought about the SAS 70, for example. You know, we have some '34 Act filings, you know, '34 Act filing pools, and so with that, you're required to make Sarbanes-Oxley representations as to your internal controls. Well, who wants to do that if you haven't actually tested your internal controls? That'd be a pretty stupid thing to do.

So, what did we do? We brought in an outside consultant to come in and examine our internal controls independently and I found many people have viewed that as a very good substitute for a type of SAS 70 for a fund organization, especially if you have an independent administrator that -- and that administrator, as was noted, probably has a SAS 70 also or SSAE, whatever.

MR. SPILLANE: When I think about risk, particularly the thing about what you were saying, Steve, one of the things that when I first got there I thought about, what are the tools that, I should say, my people have, to be able to use to identify potential issues and making sure that we certainly have the right technology in place so that they're not looking for the needle in the haystack.

But one of the things I've talked a lot about at our firm is that I can hire a whole room full of people, an entire room full. Quite frankly, it doesn't dial my risk profile down one bit. I have to have the right tools in place, the right technology tools, and we've spent a lot of money on technology.

But then there's the second component, this goes to your point about escalation, right, so one of the things that is critical to the success for our compliance program is the fact that we really look to hire very experienced people into the compliance department. It would be unusual, more unusual than not, for us to hire someone 22, 23 years old right out of college.

I think about the person who runs my fixed income monitoring desk right now, spent 15 years as a money market trader and then I co-opted her to come over to the compliance side. And I have a whole slew of people like that who came to us from the business so that they understand the risks that are inherent into the business. Because, quite frankly, I can teach you the rules, I can actually -- I can teach you the communication skills that you need to work with our internal clients, I can't teach you 15 years of money market trading. I can't.

Okay, so, that's some of the things that when I'm looking for people in order to dial down my risk profile, that's important. But the corollary to all of that, in my mind, is making sure that you have created the right culture internally, both within the compliance and within the business, that it is safe to raise an issue. And they happen all the time. It's not unusual and if you don't have that, everything gets pushed down and your risk profile, in my mind, goes up dramatically.

So, I'm very -- first of all, I'm very visible in our firm and people can come and talk to me. What I'm trying to get my people to do, and I'm very fortunate, I have quite a few, is that each one of the individuals has their own network. I have my network of friends, shall we say, and each one -- and so we create a spider's web.

So, we're creating a layer of compliance and one of the consultants I know described it as distributed compliance, I actually thought it was a pretty neat term, so that I have touch points within -- and I do have a real fancy chart here --

within each one of the different business areas within my firm, each one of my staff members has a touch point and it's more than one, so that at the end of the day if there's an issue, if there's a risk that's now bubbling up and becoming more critical than not, we're going to get a phone call, and I will assert that it would be more unusual than not for someone to call the office of the chief compliance officer. It's not going to happen, folks, it's not.

At the end of the day, this is still a people business. They're going to call people that they know, so part of my overall responsibilities, and I think this is the expectation from the board, is that they understand there is someone who that they can talk to. And, again, it's not just my job, this is all the way across the entire firm. That helps, in my mind, give us a lower risk profile at the end of the day that we're not going to have a huge event, have a rogue trader go completely off the tracks. Because if somebody tries to do that, I'm going to get a call either from trading -- one of my compliance officers who's actually monitoring what's going on in the trading, but to even get that far, I'm going to get a call from operations and settlements saying, huh, what's going on here, why are we doing this.

That's the mitigation that I'm looking for so that we don't get those headline risks.

MR. FELSENTHAL: I think along those lines, you know, it depends on the size and nature of your firm also. You know, it is -- in a shop like yours, I can't imagine -- it's not possible for you to know every person there and for you to just walk around and chat with everybody there, you'd still be chatting. You wouldn't have been able to make it here today.

But in certain smaller firms, and I'm not necessarily talking two-man shops, I'm talking places that have, say, 50 people, it is possible for one -- for you to make -- for everybody to feel comfortable talking to you, and it partially goes into education and how you approach everything. You never want to create a "gotcha" atmosphere because then you never get meaningful feedback. You want people to understand that if they see something and they tell you about it, nobody's getting in trouble for it, unless of course it's evil. But nobody's getting in trouble for it.

People make mistakes, everybody makes mistakes, and the important thing is to, you know, make us aware -- you know, if you see something or somebody else sees something, make us aware of it. It's not going to get the person in trouble, but we're going to be able to handle it and fix it and move on, and once you create a track record of people understanding that you're not out to get them and that you're all part of a team and pointing out that if you're in a shop, if you're working in a shop that has one of these blow ups, well, everybody then has trouble getting their next job.

You could have had nothing to do with the blow up, but it's on your resume, nobody wants to hire you. So, everybody -- once they understand that and they see that and you're trying to make it fun, you're trying to make sure people aren't thinking of, you know, evil compliance, stay away from them, and put yourself on a different floor and everything like that and, you know, as soon as you get there there's a phone call going out warning everybody you're coming.

So, you know, a lot of it -- and this is exactly what you said, on a different level, in a smaller shop, it's just a matter of creating an atmosphere and getting everybody to feel like they have a role in compliance, risk management, and that they have a personal interest in making sure that they're working somewhere clean.

And once you get over that hump, which I think it took me about a year, you know, where people -- you know, when I first came in, you know, people were thinking, oh, yeah, he's compliance. Then we got to know each other, we went to lunch, we hung out, you know, we created an atmosphere where they thought of me as a team member, not as -- you know, just another person. And I got a lot of open communication and I learned a lot and really understood how our business works and now we're at the point where, yeah, if somebody has a problem, whether it's a personal -- even if it's a personal problem, you know, they're coming to talk to me about it.

And it could have nothing to do with compliance, which takes time, but it's a great atmosphere to have and it's well worth developing because you can really feel like you have a team in place, even if you can't hire a room full of people, you have a firm full of compliance officers and people who are testing risk management are interested in mitigating your risks.

MR. PENNINGTON: I think we're hearing one size doesn't fit all. I think one of your questions was initially how do you decide what needs to get up to the boards or in that governance structure, how do you decide what is material. Because I feel like, you know, within

Vanguard, the board of trustees meet regularly and each time they have a meeting, risk management is on the agenda, there's a topic discussion.

Part of that is educational, so sometimes we'll be presenting topics to the board of trustees to make sure they understand the risks inherent in the business, and part of it is an ongoing reporting, sort of the state of the state of risk management so that the highest level dashboards that would go -- but the way those end up getting compiled is kind of the discussion we've had earlier -- there's a breakdown of the various areas of risk so the funds themselves have the investment risk within them, so you have to go way down into the weeds on a daily basis, as has been said over and over, so we will have -- every single fund will have an investment risk view of that fund on a daily basis with thresholds and tolerances and heat maps and dashboards that end up getting into sort of a weekly or monthly report-out to CIOs of the regions and depending on the strategies, and that will get up into the business heads and ultimately roll into an overall statement.

Similarly, on the operational risk side, which is where you get into the advisor and the service providers, the distribution areas of our firms, we have what we call a global operational risk council. Heads of the businesses from the investment side, IT, a huge source of risk for all of our firms, fund administration, legal, compliance, audit -- this is a forum where we get together globally and discuss the nature of our products, the nature of the operations, things happening in the markets and our firms, and we have to form sort of the dashboard report to that group as well. You get into what are the policies that drive all that.

So, a small shop, which is great, you can actually go talk to each individual, get to them personally. We don't have the luxury in a larger shop so you tend to be more policy driven, right? So, those policies get set based upon a variety of factors in the internal governance structure that we have in place.

And finally there's a general sort of a business view of risk and that's the nature of the firm, again, so we've got publicly-traded firms here, privately-held, mutual-owned, bank-affiliated or owned firm. So, those overall business risks, which I think is slightly different topics.

MR. LLOYD: One of the -- I just wanted to echo just briefly, you know, what Steve said about sort of what we would call human capital. You know, you have to have -- and it's funny because in the CTA/CPO world, you know, we have 140 employees and about $3.7 billion in assets, and we are -- we're not a small firm. You know, we're not the biggest, but we -- at this table, you know, Millburn and Campbell are the small firms, but there are significant -- there are three to five-people CTAs out there who are getting allocations because they're providing alpha.

So, obviously, what they do is very

different from what we do, which is very different than what Vanguard does. But when I -- I also have a background in the SEC and enforcement and back when it was NESD regulation and enforcement, so and then was with a large global bank broker dealer before I joined Campbell in '05. And one of the things, you know, to go join what was then to make the jump from a big bank to a small hedge fund -- in my view, small at the time -- one of the concerns I had was sort of the integrity of the people.

And what you -- you know, they were very proud at the time -- again, we go back to '72 -- of having, you know, knock on wood, a very clean regulatory record and it's got to be -- and that was sort of before we were just becoming registered with the SEC so we had to put in a lot of different things into place.

But it was so ingrained and it has to be so ingrained in the culture of a company that you do things right, that you don't hide mistakes, that you report things up the channel no matter where, you know, the traders, you know, the people in accounting, the people in, again, trading operations, which does the checkouts, you know, I mean, it's just like obviously on a much smaller scale but, you know, we would hear if something was irregular in a trade checkout.

So, really human capital, hiring the right people, and getting them -- you know, having them ingrained into the culture of your firm is very important and, you know, when Heidi's team does the annual compliance training, we get every -- every time you get people coming out of that with questions. Oh, I have an account here, is that okay? Do I have to move it? Do I have to register it? Do I have to -- whatever. You know, you do get positive feedback, you get feedback, so, again, you know, it's -- the roles of compliance and the roles of, you know, legal and audit are viewed -- definitely viewed somewhat differently, you know, in a larger organization, but you can still build relationships, but I think it all does start with people and it's, you know, hard hiring the right people and then weeding out people who are, you know, not consistent with the culture of the firm, so.

MR. LANDO: I know we're coming up on the break. I don't know if --

MS. OLEAR: We'll cut the break short. It'll be fine.

MR. LANDO: No, I was just going to -- I mean, a lot of it is echoing what's been said and maybe to reiterate a point I had said earlier about the three approaches -- three levels of approach to risk, and what I really think of them as is a circle, because you have the daily procedures, you have the periodic, let's say it's monthly/quarterly, and then you have the occasional, let's say it's once a year. But they feed each other so it's, for example, that annual review, which is what decides, well, what procedures should we have in place that is on a daily or, frankly, real time -- in a lot of cases -- basis?

So, the point I was going to say is,

especially if you think about on the operational side, in terms of the daily, I would very much echo the significance of the individuals involved in the organization. In my experience in this industry, one of the things that I've always been impressed with, we have a very high caliber of people. They take a great deal of pride in what they do, they take pride in their function, they take pride in their firm, they understand the larger picture, they're not just, you know, with a very narrow focus, like, this number has to come in and I plug it in here -- they understand where that fits in the organization and therefore they understand when something's not being done right.

And you have to have the right culture, I absolutely agree, in terms of empowering people to speak up and to know where they should go and to feel that they're going to be encouraged and, frankly, you know, appreciated for speaking up. So, again, the way I think about it with this three legs to that stool, on the daily basis it's about having strong procedures in place so that they're thought out in the first place, so that if something goes wrong, it's going to be caught by one of those procedures and that the people who are involved in running it are going to know what to do about it and know that they have to do something about it.

And then when you think up at a higher level, whether it's on a monthly, quarterly, or more on the annual basis, what I try to do is to try to make sure that the different functions are subject to some kind of annual gut check. And just to give some examples that, you know, some of these are specific to our firm, some of these are just generally industry practice, one is, it's already been mentioned, but the formerly known as SAS 70, the SSAE. That's a very good control review of operational controls and you're really put through the ringer when you go through that and it does force you to question yourself, and you're doing that voluntarily. That's something that firms are doing, yes, obviously to some extent it's marketing, but a lot of that is internally driven just to make sure that you're doing things the right way.

Other controls on that less frequent basis, there's obviously the NFA self-exam. That's a great opportunity to review your procedures, not just check it off and compare, to black line to last year, but to revisit everything, has the business changed, has the industry changed, are we giving the right answers to these questions. In parallel to that, obviously, under the SEC, which, you know, most -- many of the industry are subject to, they also have an annual compliance review requirement and that is also something that you have to tailor to your own organization, but I think it's a very healthy opportunity to take a broader view of all your risks and make sure that you're addressing them in a reasonable way.

Other things that I think are common in the industry are, just on an annual basis, reviewing your policies and procedures, again, fresh look, think about what's changed, it's already been mentioned also the -- it's common in the firm to have annual employee education, and that in itself, even preparing for it, is a gut check, and then you actually perform it and you're talking to every single employee at the firm. At our firm it's at least once a year. We have a mandatory firm-wide employee education. Every single person from every single group is going to go through that and they're really encouraged to speak up, to give feedback, and I do learn things at the end of it. People will come to me and say, oh, here's a thought about something, and I'm glad to say it's not -- I don't get surprised, but it does give me, you know, pause, maybe, oh, here's something we can refine. That's a good idea, let's follow up on that.

There are other, again, infrequent reviews. We review our offering documents to make sure that they're still current, we obviously have the financial audits of the firm, which is another gut check on the evaluation process, which is, obviously, a very critical process, and to, I think, the point that you had started the question with, is those also lend themselves to feeding information to a senior level, so a lot of these things are reported -- at our firm, in particular, we have a compliance committee, which has representation from senior members of every aspect of the firm, so that's a good forum where we can report changes to our policies and procedures, where we can report the NFA annual exam, where we can report the SEC annual exam. And it's a method of making sure that the people at the top are well informed about what's being done, and also since they're the people with the biggest picture, they can push back down again and say, well, how are you addressing this concern, and it's a constant, ongoing cycle.

MR. ROBBINS: I just want to make sure -- there's one group that I don't think we've -- I mean, you're getting the picture, I think, that there's this huge mosaic of people in charge of risk or that contribute to the risk process. I want to make sure we didn't omit third-party service providers, because one of the things that I think is really critical for you to understand is that you not only have the internal people that folks have been talking about who are constantly on top of this, you not only have gatekeeper operational and investment due diligence teams that are looking at this externally and also sharing best practices or pushing towards best practices that we see across all of these really smart people who are internally developing their own best practices, but -- and Dov touched on the audit process, it's not just the audit process, the law firms that are involved in this practice area tend to be very sophisticated and very in-depth in terms of the regulatory compliance issues.

We also have credit facilities, I think most people here either probably use credit through a PB or through a third-party lender, those people are in our business because they need to be and we're constantly reporting to them on risk metrics and measures.

We do FX trading on behalf of some of our investors and so you've got those counterparties who are, you know, we're monitoring them but they're equally monitoring us, and, you know, we've talked a lot about SAS 70s here. And I just want to hit on something James said, after 2008 it became industry norm for there to be third-party admin. Obviously, the SEC's custody rule has something to do with that as well. Those third-party admins are the biggest AAA-rated great credits in the world and have their own SAS 70 and compliance and audit departments. They don't move cash -- our funds don't move cash without instructing them to move cash, and they don't move cash without knowing where it's going, right, and so I just want to point out, from a risk-control perspective, and importantly, from a fraud-control perspective, cash doesn't move within our firm, it only -- it stays external, and then the same process goes for valuation, right, like even if we're doing shadow accounting or watching our own books and records and our managers are doing the same thing, valuations are being done ultimately by third-party service providers who aren't, by the way, valuing these positions in isolation.

If three different credit managers share the same admin and try to put a different mark on the same position, all three of them try to put a different mark on the same position, that admin is going to have a conversation with those hedge fund managers.

So, I just want to make clear that, you know, you've got gatekeepers, you've got the people internally who are developing these processes, you've got the gatekeepers who are demanding it and sharing information in terms of best practices across firms, and then you do have third parties who, you know, frankly are often the deepest pockets in this game and can get sued if things go wrong, and so they're extraordinarily interested in making sure that risks are tamped down and managed at all of our firms.

So, I just wanted to make clear that that's part of the mosaic here.

MR. MITAL: Yeah, I mean, to piggyback on what these guys are saying and what Dov was saying, we do all the same processes that you're talking about and, you know, the people who lead it, I hired a guy from our audit team at PWC as our deputy CCO and a guy from the NFA exam staff to be our analyst, to do the forensic testing, but that's -- you know, when you go across this table and look at what investors demand and third-parties demand, there is so much that we are forced to do to run a good business and it starts with the human capital point that you were making. You know, and you can't legislate or regulate against that, really, because you can't regulate fraud, right? I mean, if somebody wants to do an annual exam that doesn't mean anything or wants to do these things that don't mean anything, they will. You know, we've all seen that.

So, it really is dependent on an industry that's somewhat mature, you know, we're much more mature than we were in 2008 and that's really policing itself to ensure that it sustains.

MR. LLOYD: I would just add one thing to follow up on the third-party administration. Obviously, post-Madoff, you know, it is required, right, to post independent NAV calculations. So, you have firms like our size who had always done internal NAV calculation within a fund accounting team that you knew and trusted and had the processes tested and all of that.

So, a lot of folks -- I mean, I think James mentioned this -- are doing full shadow accounting on their third-party administrator because you want to make sure they're doing it right.

Now, they have, as Greg said, tremendous, you know, incentives to do it right, but you have, you know, your internal people doing it, comparing NAVs, comparing prices, and they're getting, you know -- they're all getting, you know, feeds from the prime brokers to test it out.

So, you know, the controls -- you know, the additional controls of third-party -- that third-party administration has brought to bigger funds has, obviously, you know, improved, you know, the risk of that level, which is bad pricing and obviously some problem with the NAV's pricing.

MS. OLEAR: Okay, so, it is 11:11. Let's break for, shall we say, ten minutes and then come back around 11:20. Thank you.

(Recess)

MR. BARNETT: Okay, we are going to get restarted. That was great. That was greatly appreciated.

So, we've got about 15 more minutes until we go to the next section and we wanted to -- we thought we'd covered almost everything that we'd been wanting to cover in this session.

We did want to ask you, this is a sort of an on the ground kind of question -- how do you address situations where there are things that are inconsistent with your risk management program, when you do find breaches or violations? And how do you typically deal with that? And the other one was, somebody talked about Sarbanes and talking about what outside administrators require

-- how do you test the efficacy of your policies and procedures or whatever mechanisms you have in place that you control, and so on? How do you test efficacy and then what do you do when something goes awry?

MR. MITAL: I'll start on efficacy just because, as I mentioned, we just hired a guy from the NFA exam staff to help us with this. Our view is that your policies are only as good as they are implemented, so you can draft the best policies in the world, but if you don't know that they're actually being followed, what's the point? And it's a key concern when the SEC exam staff comes around to folks like us too. So, we have actually a four-person staff that spends a large amount of their time on forensic testing and every single policy we have, and I actually have our risk matrix here that has the test for it, but every policy that we have, we test. So, I don't care if it's, you know, whether or not you have outside business interests. Then we have a test for it that we'll randomly select a partner and Google search them or, you know, however you can come up with a test, we task the examiners or our analysts with that.

And that's, I think, extremely important. It's not required, per se, but the SEC will demand that of anyone that they come into.

As to what do we do when we find problems, it's important to remember that we are lawyers with a client, and the client is the firm, the firm and the fund. So, we will report up and then if we need to, we'll hire outside counsel, you know, we'll conduct independent reviews because, again, the client could be the fund in that instance as opposed to the firm, so you want independence, but the situations vary and, you know, I think that it would be -- it wouldn't be smart for me to say, well, of course we would, you know, report or do anything because we're lawyers and we have a client, so we have to do what is prudent and responsible.

MR. SPILLANE: I think it goes a little bit to order of magnitude, right, so, I mean, every day you're seeing little nitty stuff that happens and, you know, the question is, you know, at what point does it become more systemic? Is there a pattern? Et cetera, et cetera. And what I'm looking for is to be able to sort of nip it in the bud, hopefully, so that it doesn't happen ten, twenty times, and there I want to make sure that we provide some level of education, but it's also letting the respective management teams aware of what's going on.

So, for example, if there was a breach on the code of ethics and someone had a personal trading violation, and they forget one, maybe not that big a deal in the grand scheme of things. If they do it three, four, five times, you've got my attention, perhaps, and now we're going to get your manager involved. It is a management issue, it's not just a compliance issue. It's a management -- it is their issue.

One of the big things I want to make sure, and I'm sure everybody else in this room here wants to make sure is that, I don't want to be their supervisor. I do not have the ability to hire or fire or change compensation. I will make some recommendations, but I do not have that ability. I do not want to be a supervisor. It's a management issue. And we're going to make sure it's dealt with in an appropriate way there.

But in the aggregate, remember, I still have obligations to report up to the board. I probably think I'm the only one here -- I have a dual reporting relationship, right, so I'm different than probably everybody else in this room in the fact that I actually report to the board, okay. They pay my compensation, part of it. I also have a line into the management company. So, I actually have a dual reporting obligation, okay.

So, I take that -- obviously, that role as a direct report to the chairman of the board very seriously. So, we give them a full transparency as to what do we see, particularly as it relates (inaudible) to the code of ethics. I'm not talking about every little nitty potential break on the investment monitoring side, because most of that is a little bit of noise, but if there -- again, if there's something systemic, they're going to hear about it. That's the order of magnitude, I think, that you need to make sure that you're dealing with when you're talking with your fund boards and those kind of things.

MR. LANDO: I was just going to speak specifically and talk about how to deal with the breach. So, obviously, it will depend upon what particular process you're talking about, but to use an example is trade errors. So, you know, obviously, everybody has to have a method of overseeing, identifying, and dealing with trade errors. So, again, just using that as an example, the way I would look at that is there's two ways to keep an eye on it, one is going to be basically the self-reporting, the person who was involved in the error knowing that they have to report and feeling that obligation to report, and then there's the need for there to be a top-down oversight. And I think it's important -- and I think it is the practice to kind of have both elements of that. And I think this was already mentioned earlier about, you know, empowering people, having the right culture, educating people and making sure that they understand their responsibility and understanding that it's in their own best interests as well as in the firm's to self-report. They want to get ahead of these things and we do -- you know, when we deal with things like that now, when people self-report, we -- you know, we don't punish people for self-reporting and, in fact, we appreciate it and we express that appreciation and we use those as examples to communicate throughout the firm, this is the way it's supposed to be handled, because if we're the ones who identify it rather than you self-reporting it, it's going to be treated very differently.

But then at the same time, we do have to oversee it ourselves, and there are various different ways and there is no, you know, one size fits all way to deal with monitoring for things like that. Again, just to use some examples there, you know, we can monitor investment performance, we can monitor allocation of trades, we do independent email review. There are a lot of different things that we can do from the top-down to monitor for errors.

So, it's the confluence of those two, I believe, you know, I feel fairly confident that our process is reasonably designed to address that risk.

And then, of course, there's making sure that you have the right procedure in place to deal with it when those issues arise. So, again, using trade errors we have it as a written policy, but then it's implemented in practice, you identify -- first of all, you identify an issue and you have to look at it and say, okay, is this really a trade error, and you have to understand the facts to make that assessment, and then you have to deal with it. Let's say it's a trade error, you have to make an assessment of who's responsible for that, for the cost of it -- well, you have to actually quantify the cost first, then you have to assess who's responsible, which is going to be dictated by policies and disclosure documents, you have to track it because you have to be ready to speak to someone who asks you, especially if it's a regulator who wants to see your log, and at the end of it you want to be more proactive and think in terms of, well, what can we do to mitigate the risk of this in the future.

In some cases you're going to look at it and say, look, this is just a risk, this is just reality, fat fingers is a possibility, but it can -- you know, it can still be mitigated with technologies, with redundancy systems, and things like that. Or, you know, there are other ways that you can, at a higher level, mitigate and reduce the likelihood of that particular risk occurring in the future.

And, again, but that's just an illustration. I think different risks are really dealt with different ways.

MR. MITAL: Yeah, and to be fair to my

firm, I was speaking broadly more for your perspective that, you know, I think on the big errors we're going to, you know, do whatever is best in the interest of fund finance, but we have, you know, our CCO actually does report to our boards. She has the ability to fire. She has fired people for issues. You know, we have the oversight. It goes back to the human capital issue that if you train people and tell them you can come to us, you know, if we get ahead of an issue it's better than being behind it. That's great. But if there were -- I haven't come across the issue, but if we had a massive problem, you know, you're going to do -- we're fiduciaries, right, so we are not in the role of being, I guess, self-regulated in the sense that, you know, to do what's best for the system, we are -- we have to do what's best for our fiduciary clients.

So, we're always going to take that stance.

MR. BARNETT: Great. Warren, you're a very patient man.

MR. PENNINGTON: I think I'll maybe turn to the schematic we provided. I think some of the discussion around testing of policies and procedures is built into the '40 Act. Down in the center middle we have listed just a sample of the primary SEC-regulated fund protections.

As Todd mentioned, the CCO role is a formal role, a regulatory role. There is a requirement in 38a-1 from the fund's perspective and in 206(4)-7 from the advisor's perspective to have these policies and procedures in place to ensure they're adequate to maintain compliance with the regulations, to test them on a periodic basis, and to report out on an annual basis to the funds' boards. So, maybe I can leave it to you there.

MR. SPILLANE: Yeah, and that's, as you might imagine, a very, very elaborate process and something that, quite frankly, I think the board looks forward to every year, and generally it's about a 60 to 90-minute presentation similar to this that I do to the fund's board to review the results and go over -- answer any questions that they have. And certainly a good component of that is done in executive session, which means that it's literally just the independent trustees, not the interested trustees, and myself, and it's a very frank and honest conversation.

MR. FELSENTHAL: I think, you know, getting, you know, back on a basic level, I think Dov essentially said much of this, is that you'll see a problem -- well, first of all, as far as the testing, you know, you're in a constant state of testing and, you know, I created back in 2004 when I didn't know anybody else who had this, but now I think everybody has it and they didn't copy me -- but, you know, an automated compliance calendar that spreads things out throughout a yearly period. Because, you know, the rules, technically -- the SEC rules, Advisers Act rule and Investment Company Act rule requires an annual review of your compliance program. The NFA self-exam questionnaire theirs is also an annual thing and I view that sort of as the same thing, really, if you use it right.

And so, this idea of an annual review, well, if you save it all for, you know, now, well then you're never going to get it done in a meaningful way.

So, you spread it out over a period and you figure out a way and you look at every -- the challenge is identifying every issue that you think needs to be addressed in your policies and procedures and even if it's not there, I can find other issues that you didn't necessarily write up, but it's an issue or it's something worth testing for.

And then you use -- and both subjective and objective ways of identifying those issues, and then you think of, spread throughout the year, a way of testing each one of those issues. It can be a technical way of testing an issue, you know, and you can call it forensic testing or you can call it just, you know, testing. It doesn't matter what you call it. You know, we tend to get very term-specific, but, you know, I think, you know, I was just discussing, you know, I plant names in order to check our AML testing. So, I plant names in our client list and see if they catch them. If they don't catch them, okay, if they don't catch them that was a good test, if they do catch them, that was a good test. Why? Because now I know there's an issue. So, my testing leads -- is really an analysis of trying to discover problems, problems that aren't necessarily discovered otherwise.

And so, you take both types of problems, you analyze the problem, you say, okay, what is the problem? What's the nature of the problem? And first of all, first in my mind is, okay, is there a resulting harm to anybody? Now, a lot of the time it's a rule or technical violation of a rule, or whatever, not to minimize that, but hopefully there's no harm to an investor. If there's harm to an investor, you immediately, you know, raise it to a different level and you try to figure out how to deal with it in the best way.

And then -- and so, you want to correct

any damage, first and foremost, and at the same time, or immediately thereafter, you want to fix the problem. And what I mean by fix the problem is not say, okay, put this Band-Aid here, what I mean by fix the problem is, I view it as a personal failure, to a certain extent, not monetarily, but otherwise, if my policies and procedures, which I own, it's my baby -- if there's a failure of those policies and procedures in some way, so I want to think about, okay, why did it fail? And usually my conclusion is, well, nobody here wanted to do anything wrong, it doesn't seem like -- they didn't benefit personally in any way, they just messed this up.

So, how can I, either fix my policies and procedures, or if they don't need fixing and they were right, how can I educate people better? So, part of my testing is I'm constantly checking people's reading comprehension. It reminds me of the SATs, you know, you can write it and people can read it, but it doesn't mean they understood it and it doesn't mean they comprehended it and it doesn't mean they're doing it.

So, part of your testing is geared towards that and then the challenge is to make sure everybody knows about it and think of creative ways to educate people in order to make sure they understand. So, I use -- notwithstanding my earlier reference, I use Seinfeld characters, I use all sorts of things, I just randomly ask questions every once in a while that they have to answer, I offer a prize for the first few people who get back to me and get it right or anything like that. I want to see if people understand what it is that they have to do, and I find that that solves a lot of the problems because most of the problems we face are not problems of people stealing money, and those problems we know how to deal with. Those problems, you call the regulators, you call the people, you make sure they're in trouble, they're gone, that's it.

The other problems are a challenge to identify and really you don't want to get anybody in trouble for them, you just want to fix them and get the right people in place and the right people on board.

So, you know, again, like I said before, it's not a gotcha kind of testing necessarily, and you enlist other people to help you do this testing and to help you discover things for the sole purpose of you being able to fix it, and I think that's really a focus -- I definitely have an opinion on how people are supposed to view compliance and how it's supposed to work and I really do think of it in the way that I described and I think that -- in that sense, it helps you find the risks, address them, mitigate them for the future and then, you know, as the SEC is so fond of saying in their compliance rule, identify, detect, and then correct, and that's really the process that we're going through. I applaud that -- that SEC rule, I don't often say this, I think it's a good thing.

You know, I think that they got a principles-based approach in which they had said, okay -- you hear it here, we all have different approaches to everything and my policies and procedures would be entirely -- entirely inappropriate for the Vanguard Group. They would be completely, you know, off the board, you know, horrible for the Vanguard Group, but they're right for us and they're tailored for us and to have a specific rule, to have a specific idea as to what every place has to have is just foolish, I think, to have this kind of principles-based approach where everybody is mandated to tailor something for their firm and expected to do something, which I think is currently the case, that I think that's the right approach.

MS. RODRIGUEZ-AYALA: Thank you. One thing that I was going to add, because I feel like there's a little gap here, that there are no smaller shops represented and so I'm speaking for them only because we're investors in some of them. The issue of policies and procedures, we have tons of them because we're a big firm, but for some of the smaller shops where it's four or five people, there's no sense in having that many documentation because they all work together and they're all monitoring each other and what they often do is rely on outside help to monitor what they're doing and I want to make that clear because there is an industry, a consulting industry for compliance and legal services, many of those shops, they're small, but they actually are managing significant assets and often of big institutional investors so they can't afford to hire some of the big top named law firms to help them with compliance and their monitoring.

So, I want to make clear that when we're talking about these extensive, you know, policies and procedures books and, you know, risk matrixes like dashboards that we do, we're taking into account those smaller shops that have no practical need for that because it's five guys who speak to each other, and so they work together, they understand and communicate about the risks, and they help -- they have outside help that comes monitor their efficacy or if they have a breach, help them understand where's the harm, how do you respond to that.

I just want to make sure that that perspective is not lost.

MR. PENNINGTON: I think probably just since the discussion is with the Commission, we were focusing a little bit about that structure of the '40 Act and all of the good things that we would talk about within each others' forums and as manager of managers or fund of funds, but when it comes to the overall industry, I think, we wish that everybody were a good actor. I think we've got fantastic people on this panel, but I think the '40 Act protections and the fact that there are requirements as opposed to just good practice, is one of the distinctions and I suppose that the sort of coming up with a set of them, whether it's the idea that we have to have the portfolio transparency on a regular basis and we've got daily mark-to-market valuation, so you have control of that fluctuation, that NAV that's published, the liquidity requirements that are built into the fund structure so that the investors know generally what kind of liquidity they should expect with their funds.

Limitations on leverage is another thing. I think leverage was a significant concern, especially when we talk about commissioning the products that you regulate. There are limitations on leverage for our funds. There are also requirements for when we do use derivatives, what we have to do to segregate assets to cover those derivatives positions. The independent custody or the third-party custody of fund assets, and I suppose that check and balance between the trustee records, the bank custody records, and the firm records is an important distinction. Prohibitions around affiliated transactions, so, again, that goes to some times the conflict of interest or the incentive structure that's in place. And that oversight by an independent board of directors with the CCO requirement is -- I don't think we need to underestimate that one. It is, again, required, but not a "nice to have".

MR. SPILLANE: And the one that we haven't talked about here, at least in particular to the '40 Act is the role of the independent auditors. Certainly the PCAOB has raised the stakes for them over the last few years and so that is an additional control that we have that is certainly required to review each one of the portfolios and actually do a lot of forensic testing on the valuations.

And one of the things we are having to do right now is to actually go back and do fundamental analysis, particularly on the credit side, to come up with a derived price to make sure that it agrees with the pricing vendors, and certainly we are not in the position as a fund shop just to be able to rely, unfortunately, on the pricing vendors to give us a feed as to what the actual price of a security is. We actually have to do that ourselves. That is, under the '40 Act, solely the responsibility of the board. It is delegated to the advisor. We hire pricing vendors, but we have to make sure that it is correct.

And then, so what I was alluding to, the independent auditors come back and actually do an independent calculation on a number of securities, not just one or three, it's a very large number. They will pick a fund to go through on an annual and semi-annual basis. It's very strenuous. Very strenuous.

MR. FELSENTHAL: I just want to point out that, you know, I think it's important to draw a distinction here a little bit between if you have -- you know, we were talking a little bit, a lot of these things that were mentioned just now -- some of them are -- just to make sure that we see the distinction, you know, some of the protections that were mentioned just now are Investment Company Act of 1940 things and some of them are also incorporated in the Investment Advisers Act of 1940, and some of them, interestingly enough, are only in the Company Act and not in the Advisers Act, and there's a reason for that.

It's not -- you know, to the extent the SEC, in making -- Congress, and then in making the -- in various Acts, and what they incorporated in what and what they continue to incorporate in which, and the SEC in terms of their rulemaking, and you know, certain rules apply to certain types of entities depending on the level of risk there is in those types of entities. And I don't want -- I don't think we should go so far as saying that just because there are all these protections in the 1940 Act, well, the CFTC should look at these protections and incorporate the same exact protections, and the CFTC has the same exact approach in terms of, well, if you have pools that are exempt or pools that are 4.7, which is not exempt but not subject to everything, and you have things that are just no exemption, there are different rules and regulations and things that apply as appropriate.

And I don't -- you know, while I do think a certain -- you know, there is a certain (inaudible) -- so, I think, my point is that the CFTC rules and the NFA rules also do address most of these concerns to the extent they need to be addressed in that context, and I don't think it's -- you know, I don't think a wholesale incorporation of the Investment Company Act of 1940 applying it to commodity pools would make any sense. I think the NFA and CFTC have thought about the protections that are necessary and incorporated them.

MR. BARNETT: Okay. So, we're sort of out of time but really quickly -- and Warren, you've been -- did you have another word -- because I know you've deferred out -- real quick, just quick final statements and then we'll move to the fund of funds topic.

MR. PENNINGTON: Yeah, I think my comments in pointing out the protections in the '40 Act were not as a suggestion to the CFTC of what you should do --

MR. BARNETT: We didn't take it that way.

MR. PENNINGTON: More of --

MR. FELSENTHAL: I just want to be sure.

MR. BARNETT: A risk guy -- a compliance guy. Got it. Got it. Anything else before we switch topics? Okay.

So, now we're going to move to our second session and talk about fund of funds and I guess we'll just start it -- you know, given the fund of funds unique situation, as both an asset manager and as an investor, how does your risk management differ from the rest of the -- from the direct investment funds.

MR. NICHOLAS: All right, so speaking from the A&Q hedge fund solution standpoint, like you said, you have to, I guess, break it down between two different separate topics. Looking at it overall, we have a internal risk group and then we also have a risk committee that is external, and so the risk committee is responsible for reviewing the overall performance, how funds are performing well within expectations, if our products, which is what we call them not to confuse them with the hedge funds we invest into, have any of their own violations of guidelines that may be in the offering docs, those would be raised, you know, and they would look to, you know, identify were those passive or active breaches -- and what kind of timeframe that we need to correct that.

Nicole had touched on the fact that there's an internal audit group within UBS that will come through periodically to do reviews and then we also have people who sit on the various different committees, for example, I sit on the investment committee, the manager approval committee, the management review committee. We also have the risk committee. I sit on that as well. We're a bank. We have a lot of committees.

So, that's a part of the mosaic that he talks about understanding people talking to one another. They way we're actually set up as well is trading desk style, which means, like this, everybody's sitting around each other, all the different groups, investments, (inaudible), investor relations, so it's a very open forum. So, if issues come up, we can discuss those and address those.

Similar to what other people said as well, we have a compliance culture that is, if a issue does come up, raise it and let's figure out how to deal with it.

The other side of the equation, I guess, is when we're reviewing the funds that we're in, you know, the investment team, you know, we talk about expertise in the culture, a lot of people on our investment team actually have trading backgrounds or they've been chief risk officers at hedge funds. We feel that's an important thing to be able to understand of people we actually invest into.

On the operational due diligence side, some of us were former CFOs, chief risk officers, controllers, people who came up through the industry, so hopefully we understand some of the issues that the hedge funds face, we understand that things don't run perfectly every single day, there's problems and errors that come up. That's the reason you do reconciliations and train people, and what we want to understand is their culture, you know, how does that impact them. It's something we would follow up on.

In addition to that, transparency has become a more heightened thing in terms of understanding the risks they're running. As a part of the investment process, we try to understand what kind of performance do we expect out of them, what kind of volatility do we expect to come with that performance, and a whole lot of other statistical data that's probably not worth going in here into this that's a little bit more complex, but at the end of the day, it comes down to, is performance in line with what we would expect relative to indexes and peers, is volatility aligned with that as well, and is there a return relative to that risk in line with what we're investing in? Okay, so that's the high level.

The other thing we do is we want to

understand from an operational standpoint, are they doing everything we've talked about, so our approach, like some of our peers, is before we make an investment we go on sight and we want to sit down and we want to meet them, look them in the eyes, look at the offices, and it depends, if we're going to talk to a large firm, we'll talk to the COO and the CFO, but we also want to talk to people who are in the back office who are actually doing the day-to-day.

If it's a smaller firm, and it's got the five people, we'll probably meet with all of them, and that's fine. And that's where we will try and impress upon them that we understand they may not have all the control infrastructure a large firm might have, but what they can do is get as many pieces in place to mitigate problems, and as we've touched on before, that's where the third-party service providers come into play, that's where the independent administrators are much more important, because we're going to place more reliance on their controls and have them involved, which may mean they have to sign off on the movement of cash in addition to what might be going on within the fund.

We're going to be looking at them to look at the valuations much more closely. Here where we're talking about, you know, funds that fall under the CFTC, many of these happen to go through exchanges, so the valuations are a bit easier to deal with. You know, but you could also have things that might be forwards that they have to do some kind of correlation analysis.

We spend time looking -- and, you know, the other thing we do is we do an onsite review about once a year as well and we cover all the same topics that we covered in the first time through and we want to understand how things have changed.

What we don't do is ask, has anything changed in the past year, and have them say, no. What we do is we actually walk through everything again, right? And then our approach has always been, if there's something they're doing, which we don't think is as strong as we need it to be, that's where we'll have suggestions and we'll work with them and we'll say, example, maybe only one person signs off on cash. You know what, guys, we really want to see two signatures. We want to make sure that at least one of those signatures is somebody in the back office, if possible. There could be a situation where the portfolio manager is valuing the securities and we'll say, no. What we want to do is have the administrator valuing, we want to have the back office to value, but we do want the portfolio managers to look at it to make sure it makes sense. So, those are a couple examples.

We have cases where we meet with the compliance people and we don't feel like they have taken the responsibility as seriously as they need to, and that will be discussions we'll have with, you know, one, we'll covey that to the compliance team, but we'll also go directly to the CIO and the COO and say, we think we need some enhancements here.

It may involve having to bring in a new compliance officer. It may mean bringing in additional people. And it's not the same answer for each firm, you know, so if we were to talk about some of the really large firms, it wouldn't be uncommon to see ten compliance people running around. Frankly, we would expect it. They have to. They're trading in all the different geographies.

We have a small firm we're looking at now with four people. The COO is acting as the compliance officer, he has some background in it. I can't claim that that's his strongest forte, so what do they do? They work with some of the outside venders, a few come to mind, and they could do it both in the U.S, there's groups like this over in Europe, and in Asia, and we spend time getting to know those service providers to make sure they really understand what they're doing.

And what I will say is it's not uncommon for those service providers not to only help the small firms, but to also help the very large firms as well, and one thing they'll do is do mock audits where they'll go through and test the controls. And one of the things that the smaller guys might get hit on first is they might say, well, these are our policies, but they haven't drafted anything. So, we want to make sure that they've drafted something so that that's what they follow, and then have somebody test that, which is usually going to be one of the compliance groups.

As a part of our process, we also will look at reconciliation, so we want to make sure that the trust would verify the information they had told us is accurate. So, show us that the values you have is consistent with what your pricing sources say and with the administrator and the prime broker or FCMs. Let's make sure that the positions you claim you hold actually tie back to the custody records. Let's take a look at cash controls and look at reconciliations.

So, I can't claim that we do a full audit. We don't. That's not what we're hired to do. We're much more from a consulting perspective, but we think that we're able to do a process-driven but risk-focused approach on the funds, and its continual monitoring and like Greg had said, understanding who are the counterparties, who are the FCMs.

If we hear of a potential issue in the industry, we want to understand, what are our risks, what are our exposures, and you know, we may talk to different firms and say, how are you assessing the risk with your different counterparties as part of that process.

So, that's kind of a high level of how we look at it, you know, from the top down, and then at the funds that we actually invest into, but it's a continual process and, you know, we do some risk assessment of who we consider to be riskier and who we don't. I can tell you this, we're invested in over 200 hedge funds right now. I've probably looked at 1,500 hedge funds since I've been doing this, everywhere. If I was to say, what is best practice across the different categories to (inaudible) begin with, I've probably got five hedge funds that can actually accomplish that. Okay?

So, the best practices versus the bar to actually meet our standards are different, and that's fine, but we think it's really important to be able to invest in both large hedge funds and the new guys who are spinning out because we think they offer different opportunity sets and so we consider that when we, I guess, create our portfolios.

MR. ROBBINS: I think our process is very similar to what UBS does, so I don't have a ton to add on the granularity of what James was saying, but I do want to point out one thing that I think is implicit in what he was saying but is just critical to keep focused on as you think about the difference between our business and the direct trading business, which is, we are one step removed from the asset, right, and so as you're thinking about the processes we do in building these, you know, tracking indexes to judge whether the managers are doing what we expect them to do -- and, again, I want to make really clear on this, risk isn't a bad thing, right, you have to take risk in order to have return. It's whether the risk you are taking is within the expectations that you've set with your investor base. And so, what we're constantly trying to do is, on a month delay, because that's when we're getting final returns reported and whatever position transparency we would get reported, and I think this is one part of risk that may not have been talked about a lot, for a significant percentage of our portfolio, for 80 percent -- more than 80 percent of our assets under management, we either get position transparency reported to us directly or through a commercial risk aggregator.

So, there are third-party risk aggregators out there who, if a hedge fund manager isn't comfortable reporting positions to us because they're concerned about our acting on that or doing something that they wouldn't like, they report it to a third-party risk aggregator who is not in the markets and that aggregator, in turn, reports to us with less transparency than at the position-level or on an aggregate basis with other hedge fund managers so that we can't slice and dice down to the position level.

My point being, that comes to us on a delayed basis, right, and so in some respects it's a little bit like the reporting the regulators get. It has to come through on a delayed basis, and so you're looking in the rearview mirror a little bit on all of that stuff in terms of understanding if your expectations were being met, and then we are having monthly calls with the managers who we invest with going over how their returns may have differed from what our expectations were or what the primary drivers of return were and what areas of concern are arising for them and their portfolio.

So, the challenges in our business of being one step removed and being delayed and evaluating risk in terms of what happened and then rolling that up to our portfolio-level and saying, okay, what do we think is going to happen in the future and how are we running our portfolio analytics, and at the same time recognizing that the direct trading managers need to be constantly changing positions and need to be constantly changing their risk profile and adapting to that adds a level of challenge to this that I don't think we can kind of understate and makes it really difficult for us to be as real time as possible when we think about things like regulatory reporting and I think we've written some comment letters to the CFTC about the challenges of responding to reporting within a certain time cycle just because these guys have to do their job, they have to get their NAVs published and their information together, and then they have to send it to us and we have to roll that up from 200 different sources and get a conglomerate from that, and then we have to produce a report that goes to our investors and to our risk management committees and things like that.

So, I think the process is very similar. I just want to make clear that that delayed aspect of it introduces an additional level of challenge that you don't have when you're interacting directly with the asset, so.

MS. RODRIGUEZ-AYALA: And that's what I actually would view as the difference in a fund of fund versus a direct trading fund. So, if you look at the schematic we put together, we said, oh, the five general risks, which everybody has talked about, all of those risks apply to everybody, but the issue for us is that that investment risk is on a delayed basis. We don't have position-level information and so we need to do everything that James talked about to try to get in front of it as much as possible and try to get as much information as possible as we can about all of these risks without having that position-level information.

And I think that's where the big difference is, because something like liquidity risk, sure, we're intermediaries of liquidity, meaning our investors get certain liquidity, our portfolio doesn't 100 percent match that liquidity. That's the point. There's different strategies in the portfolio. We have to worry about making sure that the portfolio can match the investor's liquidity. Direct trading funds have to do that as well, right, they could give investors monthly liquidity and then put private equity investments in there and they just blew the portfolio, right, so they have the same concerns about everything else. For investments for us, it's just the delayed aspect of it and the lack of transparency in a portfolio-level basis.

Having said that, as fund of funds and as allocators, our job isn't to build a portfolio of positions. Our job is to build a portfolio of hedge fund investments and a portfolio that works together. And so from our perspective, it's an issue about minimizing the risk of position-level issues while making sure their portfolio meets the expectations of our clients at the strategy level and at the allocation level.

MR. NICHOLAS: I might just add one thing. I mean, we've talked about the rearview mirror a little bit. What I would point out though is many hedge funds provide weekly NAV reports or performance returns, so, you know, it's a little delayed but you usually get it within a -- you know, if they calculate on Friday, you get it on Monday. If there's big events taking place in the market, Crimea, right, you have a general idea of which hedge funds that you're invested in might be most impacted by that, you're not sitting waiting until the end of the month to get on the telephone with those guys. You get the portfolio manager on the phone that day and talk about, what does the portfolio look like, what kind of changes might you be making so that we could expect that.

And then, based on those conversations when the returns do come in, if those diverge, that's when you would have a follow up conversation. So, you know, you're not blind. Your better transparency might be when you get all the aggregate data in at the end of the month, but, you know, the way the teams tend to be broken out is people specialize, they're assigned by the different hedge funds, their job is to understand what's taking place in those hedge funds so that the expectations of what we expect to see are either consistent or not, and based on that, you then decide whether to stay in the fund or not.

MR. LANDO: I was just going to make an observation. I understand the distinction you've kind of drawn in this panel between the trading funds and the fund of funds, but I think a theme that is even broader, and picking up on something Emma said earlier, is that one of the good things -- or what I find particularly helpful about this industry is that it's an industry that encourages innovation, it encourages creativity, and allows for a lot of differentiation.

So, I think that the spectrum is actually a lot more nuanced than just saying trading fund and fund of funds. You know, there's funds that invest in equity, in credit, in commodities, in all kinds of different things, and

I think that it is appropriate for each one of those organizations to develop their own procedures, their own method of overseeing risk. To some extent, they're all going to be subject to certain factors. I think Greg touched on it earlier about the other participants in the industry, the administrators who are going to do their own function, the prime brokers, the custodians, the fund auditors, the fund boards. There are a lot of other external, you know, players that we don't get to control and they're going to impose their own rigors on what anybody does, no matter the size of the organization, but I would expect, you know, a three-man shop to look very different from a 200-person shop and, you know, I'll speak in terms of our firm. The way we are today is not the way we were five years ago, nor should it have been. Our firm has evolved and I think it's appropriate to expect that kind of differentiation.

MR. PENNINGTON: At the risk of restating the obvious, I would say that, you know, in terms of our platform and other RICs, you can't have fund of fund structures not related to commodity pool operators and the kinds of things. We also have multi-manager platforms. We'll have a fund with multiple managers on it, but the risks more related to lack of transparency and valuation aren't necessarily captured as much because of the daily mark-to-market evaluations.

MR. LLOYD: Just to follow up a little bit on the points of -- on liquidity and daily pricing, some -- there is a big difference between if you're trading futures and forwards contracts that are priced -- you know, exchange-traded, at least in futures and then priced daily. A lot of CTAs will do daily estimated NAVs, you know, that you can get by calling in to help with -- to help, you know, the funds and the other investors who are not, you know, seeing the positions on a daily basis, so that helps as far as that type of disclosure, but also from a liquidity standpoint, you know, there's a huge difference between what a lot of CTAs do and things like private equity, right.

So, as a matter of fact, in the 2008 credit crunch, a lot of CTAs, you know, viewed themselves as being treated as sort of, you know, cash machines because so much of the portfolio is segregated and kept in cash and can be used to meet redemptions.

So, it does really make -- you know, to second Dov's statement, it really does make a difference who you are and what you're trading.

MR. BARNETT: Going back to the interesting discussion about the -- you know, managing the diversions between expectations and actual results. So, as you're dealing with the -- you know, the -- okay, speak up. Okay.

MS. OLEAR: I'm having a hard time hearing you.

MR. BARNETT: All right. Dealing with the delay and some opaqueness, and then you're going through a commercial aggregator to get some information, getting what you can, and you're deriving some expectations and then you're finding the actual results may be in -- so, then you're on the phone with the fund manager. To what extent does that opaqueness -- how much opaqueness is there when you've got -- you're sort of -- your expectations aren't being met, you're back to the fund manager saying, what's going on, you're not telling me the exact positions, and -- but they have to kind of explain what's happening? Can you --

MR. ROBBINS: Yeah, well, I want to be clear. I mean, when we invest with a fund manager who doesn't provide us position-level transparency, that's intentional, right, we go into it knowing that we're not getting that and feeling very comfortable that we can still manage the risk of that investment. And when we do talk to the manager and say that performance was outside of expectations, I can't think of an instance where we haven't understood why that was the case.

Now, it has occurred that when we've understood that, we have been very upset. I don't want to -- you know, sometimes you find out that a manager has engaged in style drift or done something unexpected. Sometimes it's a, hey, look, I had one position that just hit and it was unexpected or there was something expressed through an options position and there was more implied volatility than realized volatility or, you know, there can be different ways exposure is taken that lead to different results even though the positions moved exactly the way everybody thought, so.

But there can be failed expectations and when that happens, it is very typically a conversation with the manager of, okay, should we be thinking about your fund differently, are we okay that you've now taken this big concentrated bet, if that's what's happened. If it did happen, are you planning on scaling out of it? What's your timeframe? You know, it isn't necessarily a fireable offense that someone has violated our expectations, but we absolutely need to know immediately what the plan is for either adjusting our own expectations, because we have faith that the manager can do what they've now taken on, which was outside of our expectations, or that the manager is going to get back within expectations.

Or, the third choice is, they say, you know what, Mesirow, we appreciate that you have your expectations. We think the rest of our investors would be totally comfortable with this. It sounds like this relationship may be over. And that's when we, you know, submit a redemption notice.

So, it's not -- you know, it is an ongoing conversation and as firms evolve and markets evolve and positions evolve, I don't want to -- it's not crazy unusual that these things happen and that hard conversations take place on the back end of them, and typically they're resolved to everybody's satisfaction, but sometimes, you know, we part ways with managers because of it, so.

MR. MITAL: Greg, I'd imagine that those gaps between expectations and results are probably not that -- are fairly atypical because from the fund perspective who has these investors, it's not a good business model to not be transparent, to not be ahead of the curve, to not let people know, hey, here's what we're doing. You know, so I'd say, you know, for the most part forgetting, you know, risk management or what we should do from a just pure business perspective, people are going to communicate with their investors.

MS. PLAVAN: As someone who's spoken with a lot of your colleagues at both of your firms, I'm well aware of how the frequency, the level of understanding of our client base, and the expectation that, you know, what we've set out and said we were going to do is something that we're going to follow through on and if there's deviation in any, you know, material or immaterial way, our clients are really the first that are going to want to know about it and want to understand, you know, and maybe to interpret that maybe to their end investors, to their boards, or constituencies.

So, I would say we're very aware of what any deviation from sort of what we've set forth in our business model and business practices might do to our client base.

MS. RODRIGUEZ-AYALA: And to clarify something that might not be apparent to somebody that doesn't look at our systems, the reason why we can set expectations, even without position-level information, is because before we even make the investment, we have a quantitative process of benchmarking what we expect from each managers given the information that they've given us, whether it is position-level information or risk reporting from the aggregator or specialized reporting that the manager provides to us that's not position-level but it's robust enough, and other market benchmarks.

And so, before the investment is even made, we have a benchmark that we say, this is what we expect from the manager and this is how they have to perform, and so that's what we're constantly comparing them to. So, we're not comparing to position-level information, necessarily, but we are comparing to a benchmark that the manager himself set for us and has agreed to and that's where we have those sort of discrepancies that we can go to the manager.

MR. BARNETT: How does it translate to your investor base then? So, there's kind of a -- you know, there's in some way what I'm hearing is sort of there's a time lag and some opaqueness, but it's not that serious because you've got -- you kind of get there anyway because you kind of have -- they kind of have to get you there. So, I don't know really how much there is, but ultimately you have to translate that. You can be comfortable because you live with it. How about does it change the nature of your investor base? Does it take more of an education process for investors? How do you deal with that end of things?

MR. NICHOLAS: I'll go. I can talk about it. Yeah, so one of the things we do when we are speaking to potential clients is, one, understanding, you know, what their level of risk is, we offer a variety of products making sure that they get into a product that makes sense for them. In many cases now we're actually creating a new product that's just for them with their own guidelines, okay. And in that, it covers a variety of things from expected risk of performance to volatility to number of positions that might be in the portfolio, to the different types of strategies. Depending upon the client, some want to get updates monthly, some quarterly.

I think one thing, you know, that's worth highlighting where we are different from the mutual funds is nobody's coming into a fund of fund or a hedge fund with daily liquidity expectations. Usually it's monthly, quarterly, we have some that could be annual, right, and you try and build a portfolio based upon that. And I think one of the things we look at, you know, while we're looking at the returns is, does it make sense with what's going on in the marketplace? At the end of January nat gas was going crazy, right, so you'd be speaking to the natural gas investors that we have and understanding, did they make money, did they lose money, and then really understanding as best we can what positions they had on and were they playing within that part of the curve, because, you know, not only is it understanding, you know, why did they make money, but does it make sense, is it consistent with our understanding of what they have.

I can tell you we have different types of investors that want more drill down than others. Some want a lot of detail in terms of how do they make money, where do we see things going a couple months out, and how that might impact their portfolio. We have some who are perfectly happy to -- they'll get the updates but it's really once a year that they want to know what went on in the portfolio and how did that fit into their overall portfolio.

Many of our investors are big institutions or endowments or pension plans. The reality is their allocation to us and to hedge funds, the alternative piece, is 2, 3, 4 percent. It's very small, right. So, you know, it helps in terms of their overall portfolio performance and based on that is, you know, what they're looking for.

What we do provide -- I think it's accurate to say we provide all of our investors with some kind of monthly report in terms of how they performed and how those strategies performed, and then, you know, depending upon how the relationship was established, some will get, you know, more frequent feedback from us, so both onsite where they come to meet us and then in many cases we'll go onsite to meet them.

MR. ROBBINS: That's right. I mean, the answer is it depends on what the investor wants. There are investors who are content with a monthly report of performance and there are investors for whom, before we would put a manager in their portfolio, they want basically what I'll call a mini due diligence report that outlines who the principles are, how we expect the strategy to perform, what we think the principle risks are, and they want to know a lot about that, what we think the performance profile will be, and then we're having monthly calls with that investor walking line item by line item through the portfolio.

So, again, as we think about this risk management mosaic, if we don't get a great translation from the MKP team, as a for instance to us, as to what's going on in their portfolio and translate that in a way that we provide our investors with confidence that we know what they're doing, you know, we've all got a big problem in terms of whether that investment will be ongoing.

So, you know, there are investors who just want the snapshot and investors who want to know exactly what they own all the way down, so.

MR. LLOYD: Just on the issue of transparency, from the trading company's position, obviously there's a balance because it's the intellectual -- it's our intellectual property, right, it is what, you know, makes -- what does everything for us. So, you have to balance the need for investor transparency with protecting the intellectual property. What you have to do, quite frankly, as the fiduciary for your clients.

So, you can -- if there's a big -- if the fund of fund or the institutional investor is a big enough investor they can allocate to a managed account, which can get them transparency, and obviously, you know, all the CTAs who are the end doing, you know, the trading just need to, you know, try to balance the need for making the investors, you know, confident in what they're doing with, you know, protecting their intellectual property. So, it is -- and there is some give and take on, you know, like Greg said, can we give it to you a week delayed, can we give it to -- you know, so they're, you know -- so, the groups do work -- you know, the CTAs and the fund of funds or the institutional investors work together to try to find the right balance for them and for their ultimate clients.

MR. NICHOLAS: I was just going to echo what Tom said. We don't require full transparency from the funds and I would say in the vast majority of the cases, we don't have full transparency. But what we do have are various risk measures that we look at that we receive from them and in many cases that's actually easier to understand because of the way they pair group trades together, that we would not be able to figure out based on full transparency.

Unlike Mesirow who does work with a third-party provider, we don't. We have our own internal system that we've developed. They do many of the same things. You know, so just to make it clear, we don't require the full transparency and in some cases we think that might actually make it more difficult for us to aggregate and understand the information across our portfolio.

MR. BARNETT: To do it internally do you have to have information walls up or how do you do that?

MR. NICHOLAS: So, our group sits separately within its own part of the bank, walls all around us. So, total information barrier. We're on a completely different floor from the investment bank, the prime brokers, anyone like that, and all the information is kept in-house on our own -- to my understanding, our own servers that nobody else has access to.

We have a data team that actually has to sit within our walls. We had looked at the possibility, you know, of trying to outsource that or in-source that somewhere else in the U.S. and the bank was like, absolutely not, so that's why we have a data team that actually sits within our walls as well to pull that information together.

MR. FELSENTHAL: On the transparency issue, you know, one thing to -- you know, I agree with everything they all said and to echo a little bit what Tom said is, it is a balance, so one way -- you know, first of all, when we provide greater transparency, we tend to do it pursuant to a nondisclosure agreement and also what we try to do is we try to take, you know, a least common denominator approach to what we disclosed to -- you know, we were getting all sorts of requests for all sorts of risk metrics, so we -- what we tried to do was take all the risk metrics we were being asked for, create a report that would provide that to all of the -- that would provide those risk metrics, that, you know, combine them all into one report and provide that to everybody who's requesting the risk metrics. So that way it's a sort of a uniform kind of disclosure to everybody rather than just to one individual or one individual place asking for it.

MR. BARNETT: Okay. I think we're at the end of our session. Are there any other comments you want to make before we close it for lunch? Okay. Well, great. Thank you. You're terrific panelists. Thank you. Really helpful.

MS. OLEAR: We'll reconvene at 1:30.

MR. BARNETT: Thank you so much.

(Recess)

MR. BARNETT: Okay, we're going to get started again. And we're now going into our third session, and as it says in the agenda it's about comparing experiences and best practices.

I had an interesting conversation right after -- right before lunch and so let me see if I can frame the issue and then throw it over to Katie and Dov, we were talking afterwards, so to start the conversation I was thinking, okay, let me posit, this group is great, good guys, but is there a concern about others who aren't doing all that should be done? Are you hearing the concern about the effect on reputation or negative impact on investors who maybe didn't know to ask and there weren't good risk management practices in place? Should we hope for adoption of risk management programs? Should we hope for best practices, agreement on best practices worked out through NFA and ICI and others? I mean, is that a good thing?

But then how do you take into account, is there an issue about cost of entry and freedom to innovate? And I was hoping that -- just interesting conversations and comments that I had gotten from Dov and Katie as we were going, so can I kick it over to you two to talk about your two sides of the conversation? Is that not fair?

MS. PLAVAN: I think -- I guess the first item really relates to, you know, what a particular, you know, hedge fund manager or hedge fund owner-managers want their business to look like. Do they want to be, you know, a small two-person, two- to five-person shop with a very small, closely-held group of clients? And, you know, they're comfortable with that type of business model and they want to just kind of, you know, trade, perform, you know, go about their day-to-day.

But I think for firms that do want to see, you know, continued growth and gain stature in the industry, gain credibility with dealers, continue to hire ever and ever, you know, difficult to find performing portfolio managers, you really need to grow your business, grow your assets under management, and that growth really comes with the investor demands across the board.

So, you know, firms that want to evolve, want to, you know, become larger and have bigger breadth, are going to really only be able to do that if they're willing to, you know, meet the demands of their investor base and so I think it's -- I don't think that there's a need to sort of impose something on these firms because it's really part and parcel of their growth and the way that they ultimately will only be successful is if they are, you know, kind of adhering to various, you know, imposed standards that really are part of their, you know, business model.

MR. LANDO: Yeah, I would just add on that, first of all, just to set some context, I mean, to ask about whether there should be best practices is almost to suggest that there are no standards now and then the question, should there be standards. And I think as already was mentioned earlier on in the panel, that there are a lot of things that already exist in the industry that establish certain practices such as, again, I'll repeat some things that were said before, the fact if you're regulated by the CFTC you go through the NFA self-exam, if SEC, you have the SEC's annual audit, you have -- your funds will have external financial audits, you'll have boards of directors that bring their own rigor, you have your administrator, your custodian, all these participants in the industry that frankly it is already the case that anybody who's in this industry and is operating and pretty much what the standard process or structure that any hedge fund, no matter how big or small, is already subject to a lot of these things that have been established in the industry for very good reason in that they largely accomplish a lot of the things that you would think you would want to be accomplished with best practices.

Beyond that, I do think that there needs to be room for creativity, for innovation. The industry is what it is today because, you know, 10, 20 years ago a lot of smaller organizations were able to start, were able to succeed and to evolve to where they are today and there needs to be that constant, you know, new blood being brought into the industry. Frankly, there's a higher barrier to entry in the industry now than there ever has been and it already sets a very high standard. If you want to launch with the kind of assets under management that you need to be successful, even from day one, you're going to have to meet the market demands that are much more rigorous than they were, say, ten years ago.

So, those are kind of self-imposed, whether it's from, you know, the businesses who know what they need to do in order to succeed, from the client base, the fund of funds or, you know -- and obviously, not just the fund of funds, institutional clients using consultants are also very demanding these days, even if you go to the high net worth, if you're on a platform, a private bank platform, those platforms are similarly very demanding.

So, I think that there is already this

-- all this is imposed already on the funds of all sizes.

MR. BARNETT: Let me just add one other element for your consideration, just to throw it out as it occurs to me. So, we know we're in an environment where, whether it's due to Volcker or Basel or whatever, that there will be, to the extent there's a move of risk, for instance, from banks to the less regulated space, to the unregulated space, there will be an increase in risk there. Just a hypothetical or theoretical question, but do you -- so, you'll be new players and different strategies and things that will absorb some of those things that get shedded. So, is it another consideration to think about, okay, here comes more risk, we can either wait until after there's a problem and then you see a reactive response to it or is it -- is there also a benefit for industry to, you know, have a focus on risk management and to incentivize some of that for -- obviously, it doesn't affect you, but for others, is there also another reason to do it?

So, and how does that play in, I guess? So, you've got on the one hand, if you want to be a large player, the investor side, I guess, and the other considerations are going to force you there versus the desire to have room for creativity, and then I just would like to throw into that mix, and what about the idea that there's going to be changes in the fund space as things -- as there's sort of a structural change of some things, I don't know what, but out of banks and into -- seeking a less regulated space, is that any kind of concern and should that be any kind of a consideration on whether industry wants to get ahead of the space, and is this any way to manage that risk, is that something that should be considered?

MR. LLOYD: I would say, to echo what Dov said, first about there really is a high, you know, barrier to entry now, right, you know, and that is, you know, making it more difficult for people to get in, but it's also making it more difficult for people who aren't risk-focused to get in. And I would say that the -- I mean, some of the things you heard, particularly from, you know, the fund of funds folks, the industry, the market, has, on its own, adopted -- adapted to what's going on. I mean, very quickly after the Madoff situation we had been -- you know, we'd been in business 40 years, we've been self-administering, doing our own NAVs, we were an SEC-registered transfer agent. We immediately started to get pressure from, you know, selling partners, in particular, especially selling partners who sell to accredited investors that, you know, they simply were not going to be able to accept firms, you know, that are purely self-clearing anymore.

So, the marketplace is driving this focus on risk and it has been happening.

So, I do think -- you know, everybody says we're all always fighting the battle of the last, you know, crisis, and I think that the market does react to it more quickly and I think the market has reacted to it relatively quickly.

MS. RODRIGUEZ-AYALA: Just to clarify your question about Volcker and Basel. Are you trying to get at if hedge funds fill the gap of the more illiquid or sometimes they're called riskier, but let's just say illiquid assets that banks are pulling out of, if hedge funds get into that gap, does that increase their risk to portfolios? What sort of risk are you trying to get at? I just want to make sure I understand.

MR. BARNETT: Okay, I mean, I'm not even sure it'd be hedge funds, per se, but you know, you read about funds set up to invest in portfolios of loans because banks -- when the banks weren't lending enough. Is that a hedge fund? I don't think so --

MS. RODRIGUEZ-AYALA: So, your concern is that the risk in the portfolios is increasing because they're filling back up now --

MR. BARNETT: But the risk to the investor, then, is if there's not, you know, appropriate diligence, is that a risk? I mean, if your concern is that there's a blow up in a space and then there's a regulatory response or there's an investor reaction, is it something that, you know, people want to get -- is that a reason to try to get ahead of it, again, through industry? I'm not proposing any of that, I'm just -- you know, or not? Just putting that into the considerations about barriers to entry versus loss of creativity. I'm just saying, we're also in a period of shifting markets and, you know, to some extent there will be new risk, new types of risk that come in and they're not you folks and maybe they don't have the same -- but you might be impacted by the same kinds of considerations to damage to the market, damage to the investor base, and so on.

MR. ROBBINS: Yeah, and I think, you know, if you look at the impetus behind the Volcker rule, right, it's to move risk off of banks' balance sheets to decrease the risk of failure at a bank and one thing that I think -- I just want to point out in terms of the risk implicit in -- some of that trading activity is going to hedge funds and hedge funds are finding it very profitable space to get into because, as the banks shrink, and this is a real danger to the markets from my perspective and we see it in what goes on at our underlying managers, the number of sources of liquidity are decreasing, right, so as banks merge, as banks get out of businesses, you used to have ten market makers or ten possible sources of liquidity, those are shrinking and so different parts of the market have to start supplying those and if there are fewer suppliers, spreads are wider, there's more profit to be made there, but then that comes out of somebody's pocket in terms of the wider spread, right, but one point I would make out in terms of -- hedge funds don't have leverage implicit in their balance sheet or a balance sheet where they can write that leverage from like some banks did, right.

So, they are often -- if a hedge fund is going to get leverage, it has to get it from somewhere, right, there's not -- they don't magically have this balance sheet that creates that. So, there is an inherent break through the counterparties they're interfacing with to get that inherent leverage, right. If you're trading futures contracts it's through an exchange where exchange rate margin is being required. You know, swaps contracts are now headed the same direction. And if they're getting leverage from a PB desk, the PB is assigning risk weights to that and putting the brakes on the amount of leverage that can be inherent in those trading structures.

So, it is different in terms of kind of the unmonitored risk that goes on, again, for some of the reasons we talked about in kind of the third-party check space, those are inherent in the relationships hedge funds have set up as they go into this business because they need sources of capital to do that.

So, I hope that makes sense, but I think it's -- from a market risk perspective, it's different in kind because you just can't see the levels of leverage due to the places that leverage has to come from.

From an investor risk, Dov pointed out that there are -- you know, because these aren't regulated investments, a large brokerage firm doesn't just throw open the doors and say, hey, everybody who wants MKP, come get MKP, right? There are only certain brokers who are allowed to sell it to only certain types of clients and only after the brokers due diligence team has completely gone through that hedge fund manager and done a similar due diligence process to what we described.

So, there is the gatekeeper function that's still in play and the minimum levels of investment that are required to access a hedge fund serve as the deterrent for anybody to do anything but go through a gatekeeper or apply extreme due diligence measures themselves to the extent they're capable of it.

You're not going to prevent -- and I forget who was talking about it before -- you can't legislate away fraud, right? There will always be some guy ginning up brokerage statements on an inkjet in his basement and handing them out to gullible people. Those aren't million dollar tickets though, right, those aren't even for the entrepreneurial hedge fund out there. So, I think we need to distinguish those circumstances, which none of us in this room can prevent, unfortunately, from what we can monitor and can prevent. So, I hope that makes sense.

MR. MITAL: I'll give you four different perspectives, the first relating just to what Greg said. When I was at the SEC, you know, I had two different types of cases typically, and all of my cases were hedge fund cases. You had the Ponzi schemes, right, where you had people claiming to be a hedge fund doing -- I mean, they're going to figure out whatever the flavor of the month is and they're going to be fraudsters. Or then you had the more systemic risk type of issues, be it insider trading, trading in swaps without, you know, having real ownership, things like that, and there, in '04, '05, it was the Wild West.

We couldn't figure out who was who, there was no information, but that's changed, which leads me to my second perspective that at Halcyon, we've been lobbying since 1997, when we registered, for mandatory registration, and now there is that and a lot of it is just to identify the people because it is reputational. You know, we're probably in the second or third inning of the institutionalization of our industry. You know, these guys are our investors and for the main growth, it's these guys' pension funds. You know, the high net worth is really shifting towards '40 Act funds and you see hedge funds, including us, that have '40 Act funds. Or, you know, there are still a lot of protections, so it's -- where as in the late '70s, early '80s, the hedge fund industry was high net worth, that's not the case anymore.

The third perspective I have is looking at what's happening to the CLO market. And, you know, in the UK and in Europe, it's completely dried up and corporate lending has dried up because of artificial rules and barriers created by the government.

Here, you know, there's a risk retention proposal that the LSTA and the MFA and others are fighting, and you know, for good reason given the fact that, you know, these aren't high fee models, they're -- you know, people are already involved, but it's creating friction to new issuance, it's leading to concentration, and it's having an effect on corporate lending, and that's bad for the economy.

And so that's now the final, going back to Europe, you look at AIFMD and the types of legislation that are being imposed by the European markets, and it is killing the industry and it's a really bad thing. I'm a pro-regulation, pro -- you know -- government guy, but you shouldn't tell smart people that they can't negotiate contracts or agreements the way they want to. You shouldn't tell hedge funds how much leverage you can impose. We didn't create any of the problems in '07, '08, right, we're not eight, ten times levered, and, you know, if people want to come to me for a five-year lock up vehicle doing purely illiquid litigation financing things, they should be able to do it. They want me to do long credit, short CDX fund and create it, they should be able to do it. And that's where we come in and that's what we provide, and now that there is mandatory registration, you can find us, but on top of that, to impose more layers would only stymie innovation. I mean, it's already -- you cannot start up a hedge fund right now without a seven figure spend on compliance. It's impossible.

You know, you used to have people starting with $50, $100 million, now you need -- to have a successful launch you have to have at least $400 million, and parochially, that's great, right, it's barriers to entry, that's good for us, but stepping back, it's not really a good thing for me as a person because I want to be able to invest in and see innovation.

MR. BARNETT: So, let me not exactly push back, but distinguish a little bit. So, let's pretend that we lived in a world where instead of Volcker, we had imposed risk-based deposit insurance premiums. And let's assume that instead of risk retention by owning some of the originated assets, we had had the originators retain underwriter risk through reps and warranties that were required to be backed by capital or something like that.

So, instead of talking about those risks, per se, we're still talking about then the people who invest in those risks who aren't you, but new people going into the markets. So, we're not creating liquidity risk by -- because you guys are arguing with the legislation, I'm not talking about legislation. I'm talking about people who are coming into the market to set up funds and taking on risk and we're just talking about risk management, we're not arguing -- I'm not trying -- it's not just Volcker, it's 200 percent risk weighting of assets under -- you know, whatever, where it becomes less economic to hold it there and you move it. I'm trying to focus on people who are going to take on risk because there becomes a little bit more of an arbitrage to take it on in the space.

MR. MITAL: Right, so I can't speak about Volcker because I just don't know it, but I can tell you about risk retention. There's the underwriter proposal which, you know, doesn't work because the banks don't -- you know, that's not what they're doing. They're not underwriting, they're just putting together the portfolio, and the problem to me in all of this is that we are saying, this is the right risk management tool, instead of, you know, saying there are many different risk management tools, let the investor and the manager figure it out so long as people have the right incentives and the incentives are aligned, and we can monitor them and we can enforce, you know, what laws are there.

To me, that's the better way to go about it because otherwise we are mandating that we know what the right risk management tool is, and it doesn't account for innovation, it doesn't account for, you know, the financial engineering and adapting to markets, which is really why people come to us. You know, I mean, that's one of the best things that we can offer.

MR. NICHOLAS: I have a thought as well. So, when I look at it, one of my concerns about when you try and come up with, you know, is there an absolute best risk management tool, usually what happens is there's been a black swan event, as they call it, and you don't -- you have another black swan event because you haven't thought about what that next risk is. So, my concern is if people say, you know, if you do A, B, C, and D, you should be able to manage the risk and the reality is something always seems to come along. So, that's one of my concerns.

The second is, if things do move out of the banks into the hedge funds or private equity or whatever vehicle, you know, one thing I think the managers and the investors look at, first off is, well, what's the liquidity profile that we're getting into, okay. So, let's talk about loans.

Going into a monthly vehicle on loans would probably not be what happens. Funds that we look at currently, that are doing loans and actually trying to fill in some of this gap tend to have annual to every two-year to every three-year liquidity or it's a five-year lock up with a run off.

You know, so we then have to figure out how does that fit into our portfolio.

The other thing I've noticed is generally leverage is much -- is down quite a bit from where it was back in '08. When you talk about loans, those used to be done a lot on what we call total recurrent swaps. That market is not in existence the way it was before. Generally managers are doing everything with cash, they're not levered.

So, it doesn't mean they don't have risk. If anything -- you know, they certainly are taking on loans that maybe banks wouldn't have stepped into that have some higher risks. They have to consider that with loan loss reserves on their books, but as an investor, that's something we're willing to consider as long as the liquidity makes sense for us and we can get comfortable with how they diversify those loans across the portfolio.

MR. MITAL: I think loans are a great example because if you look at UCITS versus the '40 Act, in a UCITS fund you can't transact in loans. Now, I can transact in small cap bonds that might trade once a month, but I can't transact in IBM syndicated bank loan. So, to me, imposing these false rubrics of risk management because we view that being -- you know, that might be -- bank loan is risky, is it's not really addressing the right question.

MS. RODRIGUEZ-AYALA: What I would add is, I think the message is, everything is different, right, but I think we have to agree that there is some baseline similarities, right, and I think we've talked all about them and we can say as a baseline, some of the regulations -- many of the regulations already require detecting and monitoring risks however that applies to your business.

And I think how we view, when we invest, and how I hope the industry views it is, we expect each of our managers to have done that and we ask about their risk management process in whatever form that is. So, if you're thinking back on a best practices, think it is difficult for us to come up with an answer for that, but I think we can all agree that it is best practice for generally a manager to comply with regulations that already require them to detect and monitor risks.

So, I am not sure, because I think we're all saying, it's different, it's different, but there is sort of like a very basic baseline that -- and particularly the risk we've already identified, investment, counterparty, liquidity, that people are already doing. So, if it's a best practices as far as you should be doing this on an ongoing basis, I think we can all agree that there is a baseline, but the specificity, I think, is what makes everybody uncomfortable.

MR. LANDO: I was going to circle back to what I think you were starting your point is to say, if banks are exiting certain investment areas and then potentially hedge funds might enter or grow in those same spaces, whether that's a risk to be concerned about, and, you know, one thing I would -- just to state the obvious, you know, hedge funds are not in a vacuum. The hedge funds are not, themselves, putting up the capital; it's their client base. So, really all it means is if banks, for whatever reason, whether regulatory or other, are exiting a certain asset area or investment space, so the question is, if the client base of the hedge funds wished to get exposure to that space, is that a cause for concern?

I would tend to say no, conditional on the fact that the hedge funds operate appropriately, that they make clear the risks that they're going to take, they communicate that to their client base, and then they stay true to that and then the client base is going to monitor, just like everything we've been talking about all day, about how the hedge fund client space is actually fairly good at monitoring for style drift and so on.

So, for that new client base to replace the banks in terms of the taking on that risk, I don't see that as any inherent cause for concern that would warrant some, you know, special action.

MR. SPILLANE: So, I'm sitting here back and thinking about the different businesses that are here and, you know, Vanguard, obviously one of the largest in the entire country and we've got me -- I'll put myself as more of the large-medium size, but lots of other different sizes, and I think back also to some of the other shops that I've been at, and I think about the one thing that's common, and I think you're hearing it. We all do these things, but the most important thing that I think that you need to take away from all of this is that when we do it, it's tailored so much specifically to our business.

I would say that we're all in the business of taking on risk, let's really be very clear about that -- we take on risk for our clients. That's what we get paid to do. Okay? But the one thing that's interesting here is that we all do this slightly different, or vastly different.

So, to try and put everything -- and I'm with the mutual fund world mostly -- but to try and put us all into your space or your space, it's almost not practical other than at a very high, 100,000-foot level, you should be looking at this stuff, you should be thinking about what risk management means and compliance means in your shops.

At the end of the day, these guys aren't going to allocate money to shops that if you don't have risk management, you don't have compliance, you're not even getting past the first step. You're not going to -- it's just not going to happen, right?

So, in thinking about from where you sit here now is, you know, you want to see it, but the most important thing is you don't want to see somebody go into a consultant firm, getting an off-the-shelf policy manual and say, this is our risk management program, this is our compliance program, we got it, we're done.

That's fool's gold, right? What you're hearing from the folks here is that if you want to be competitive, you want to stay in business, you want to keep your assets, you need to have it. You don't need a regulation, per se. The market will force it. And even if there's a vacuum in terms of banks getting out of it, the money's going to go somewhere else, the same rules apply. The same rules of the market apply.

MR. MITAL: Transparency and fraud are the two main issues that, at least when I was at the SEC, that we were tasked with monitoring, and I think the fund industry, be it '40 Act, fund of funds or hedge funds, transparency exists in the fact -- differently than a bank, if you're a shareholder, if you own one share of Morgan

Stanley, you don't know what the business is doing. If you own a limited partnership stake in a fund, you know what the fund is doing. You're going into it with eyes wide open.

You know, so that part of it is very different in our business, you know, and as it comes to fraud, you know, people always ask me, you know, investors say, how can I make sure that the people I'm investing in aren't doing insider trading? You can't. You know, somebody wants to do it, you can do it. You have to trust and that's, you know, you really can't legislate around the really bad stuff that we want -- that we would all love to be able to.

So, you know --

MR. SPILLANE: (off mic)

MR. MITAL: That's what I'm saying. There's laws -- so, you can't impose more to say, well, all this bad stuff happened over the past few years. We've got to get to it. Well, people want to do bad things, they're going to do bad things. You know, but our industry is a little bit different in that it is very transparent.

MR. PENNINGTON: I think swaps are an excellent mechanism for managing risk, right, but when you start to build up a significant, non-transparent, unrealized loss position that can end up being sort of forcibly liquidated and becoming transparent and affecting the entire market, I think that's where you get back to, maybe swaps should have been regulated earlier, right? That's something Vanguard would have probably had a different opinion.

So, I think that trying to mandate risk management versus trying to figure out where the risks are that we need to manage and regulating according to those risks is probably another way of looking at it.

The idea that the market will shift from time-to-time, you know, that's going to happen. We've had -- I worked at a prior firm that had a syndicated bank loan portfolio in a '40 Act fund. The disclosures on the fund were appropriate, the investments had to have a certain amount of liquidity, the structure was relatively complex, but the investors had expectations. Expectations of your investors on the hedge fund side wouldn't be for that amount of liquidity, for example, right? The sophistication of your investors might be at a certain level, there's a requirement there.

So, the protections and the safeguards so that the entire market continues to function are really where we would like that continuing focus on regulation and probably a little less on the firm-specific one-size-fits-all, which is not what you're advocating, but that firm-specific risk management approach is really difficult to kind of come to.

MR. BARNETT: Other thoughts? I think you're fairly unified on this --

MR. PENNINGTON: I think one last thing -- maybe on the complexity side, I think I agree with the transparency. Fraud is always a risk. But I do think that sometimes the complexity of the things that happen in the financial markets get a little bit ahead of the operation and the oversight and the governance structures that exist, and that's probably, you know, the one area that we would have to keep an eye on as the risk doesn't disappear, it just transforms and moves around and I think that's what you're trying to do is to try and anticipate that, as we all are.

I mean, some people will do it to make a profit. Vanguard wants to have that anticipation just to know what the market might end up doing for our investors and shareholders.

MR. BARNETT: Okay. All right, so you know, I think that what we had intended to pursue was to see whether there were commonalities and I think we've seen the commonalities, which is there's some very, very high-leveled -- the principles are kind of the same, but it's got to fit to the business.

So, in terms of trying, for us, to kind of hear about whether there are shared, you know, practices or something like that, I don't think we're going to go into that, and that being the case, I'm going to open it to other, you know, final comments or thoughts that people want to put on the record, but otherwise, I think we'll just call it short.

I think this has been -- I hope you don't take it wrong, because it's been amazingly helpful to get -- these last few minutes have been very helpful to us to understand, to digest it that way, it's just that it's so productive and so helpful and I don't think we need to explore the places where we were going. So, thank you for that.

Is any -- go ahead. Yeah.

MR. ROBBINS: If I could just say one thing. I feel like, in listening to everybody's comments, I think we've presented you with a common theme. I feel a little bit bad because I don't think we've been totally helpful in terms of delivering you an answer, right, and what I want to impress upon you is that these are things that allocators to hedge funds struggle with every day, right. If we could develop -- if Jay and I could develop a uniform code of risk management for the 1,600, probably, hedge funds between our two firms we look at every year, I wouldn't need a team of 50 analysts, right. I don't -- I would manage my operating expenses very differently, right. So, I guess what I want to impress upon you is, we look for these easy -- not easy answers -- we look for these uniform answers too and commonalities and themes, and if we could find them and manages our businesses more efficiently by utilizing them, we would.

Instead, what we've found is industry complexity proliferates and the level of sophistication your firm has to develop to anticipate that industry complexity, as it proliferates, it just compounds. And one of the neat things, frankly, about banks opening up some space for hedge funds is, everybody around this table is looking at new investment opportunities and we're saying, okay, the banks used to do it this way. Maybe that's too risky for my investor base, so I'm going to change it and do it this way instead in a way that Halcyon can sell to Mesirow with a specific volatility and return profile that we find interesting and appropriate for our investors.

But at the end of the day, you know, our investor base is 95 percent institutional, that means pension plans. The ultimate end beneficiary of what we do is someone who has retirement needs and who has, right now, way too much long only equity or long only bond exposure in their portfolios, and these opportunities that are rolling off bank balance sheets are actually, from our perspective, an extremely important way for us to deliver diversification and lower volatility at the end of the day, to that end investor group so that they can realize their goals.

So, we've talked about innovation and kind of not wanting to dampen down innovation. It has a real impact, not only on new and underlying start-up hedge fund managers that we all want to see grow so that the industry grows and we can do interesting things, but it also -- and this is a real concern for us -- it also has an impact on our ability to deliver that diversified return stream to that end investor group that desperately needs it and frankly cannot source it on their own through their 401(k)'s and things like that.

So, we feel very passionately about this and we're very concerned about it and we appreciate your calling this roundtable and the attention of everyone here to this issue because we think it's extremely important and we appreciate being invited to participate, so.

MR. MITAL: Greg, would you say that your biggest risk among your portfolios is valuation?

MR. ROBBINS: No, I don't think of it that way. No.

MR. MITAL: I get that a lot from investors that, you know, that the thing that they're concerned about, not with us, but across their investments, is, you know, is valuation, and I think that's something that the industry has really moved on over the past few years. And in swaps, it's not really a concern given that you have two parties that are negotiating and valuing, you know, together.

So, you know, I'd say that I've found that that's the biggest risk factor that investors are concerned about and that there's been a tremendous amount of progress on that front. Now, you know, people mentioned third-party administrators and all the other tools.

MR. LANDO: I was just going to chime in to kind of echo what Greg was saying but from a trading funds perspective, which is that, you know, the same idea that there is no simple preset solution from a fund of fund perspective from sitting in a trading fund, whether it's the GCCCO whatever -- any of the risk control functions, this is, you know, a large part of what we live and breathe every day. We spend a lot of time focused on it and to some extent I actually think that there are, like we were saying before, best practices, either imposed by counterparties or industry participants or just what's been fairly established, but there's also a very lively and continuous flow of information, especially on the operational side. You know, people in our positions are going to conferences all the time, they're getting alerts from their law firms, they're using compliance consultants, they're using a lot of resources -- frankly, there are a lot of peer groups just to always -- we challenge each other, we challenge ourselves, we find out what are other people doing, should we be doing the same thing, and we share, all with a view to enabling all of us to do our jobs better, especially on the operational side.

I feel that we all improve collectively. That's actually uniquely -- and much more available to us on the operational side than it is on the investment side, appropriately so. So, I similarly don't want you to have this impression that there is any objection to best practices, it's more that the way we're living right now, we -- or, I should stick to myself -- I believe that the industry is acting in a way to try to keep what they think to be best practices on such a fluid level that an attempt to formalize that, whether it's from a regulator or trade group or otherwise, would actually be counterproductive.

MR. NICHOLAS: I just have one more thought, not to belabor it, is, you know, you mentioned valuation. I think that's been a hot topic for a while. I think the industry's gotten better at doing it. Honestly, my biggest concern, if I had to identify one, is hedge funds keeping up with the continual compliance changes going on, not just in the U.S., but in Europe and Asia. It's very hard. They don't all coincide with one another. You need different people with different expertise, and, you know, usually if there's a valuation issue, it's -- they can be big, but usually it's something small and it's a small adjustment to NAV they've got to go back and restate.

If you mess up from a compliance standpoint, that could be the end of your business, right, because investors like myself, depending upon how significant it is, may say, you know what, not worth the risk, don't want to play with those guys anymore.

So, that's what has us most concerned, you know, among the (inaudible).

MR. LLOYD: And I would just add to risk, sort of paraphrasing what Todd had said, you know, there's an old saying that the best risk management program is to simply do no business, right, I mean, what we've -- we've all lived with a lot of unintended consequences of some well-intended rules from Dodd-Frank and otherwise, and whatever the rule is, there's always something, some thing that it hits that no one thought about or -- and to try to, you know, as Dov said, find a formula for the appropriate risk management formula or tools or policies or whatever, it's just -- it's going to have those same consequences.

And, you know, it's sort of echoing what James said. We, in the trading side, look every day for what is going on in Europe and what is going on here and what is going on there and what are we missing.

So, to put a new set of, you know, rules around risk management that would, by definition, not really fit any business, would, I think, probably just -- has the potential to do more harm than good.

MS. KAISER: It does and it has the potential, over time, to focus you on the wrong things. If you're focused on these prescriptive items that a regulator has given us, then maybe we're not as forward looking as we are now thinking about what are the risks that are immediately facing us, what's coming down the pike a year from now, so giving us that flexibility is certainly important and with resources drained as they are on the compliance and legal side, which is a lot of the groups that harness some of the operational risk, at least, in firms, that could be detrimental.

MR. FELSENTHAL: I'm not sure that adding -- I'm listening to all the comments and I sort of was a little quiet on this issue because -- and I was thinking about what everybody said. I'm not sure that there aren't some -- you know, I think we sort of understand there's some sort of sound -- I wouldn't call them "best" but I would call them "sound" practice kind of, you know, mosaic out there, which -- and I'm not sure that if, you know, there were a rule or some restatement of some sort, I'm not sure it's going to catch -- I'm not sure it's going to be caught by anybody who isn't already observing this mosaic kind of way of doing it. I'm just not sure what would be accomplished.

I'm throwing it out there. I'm not saying yes or no, but -- and I'm trying to think about it, as you are, apparently, clearly -- I'm just not sure it accomplishes anything.

MR. PENNINGTON: I think maybe another comment would be, where do we see, in our view of risk management, where do we see regulations helping our firm, and I think, you know, a smart regulation with a smart regulator is generally something they would appreciate, things like oversight of intermediaries. When we're trading, you know, futures, one of the things we do like is that there is some oversight there. Oversight of market infrastructure is another key area.

So, sort of the hubs of the infrastructure that we all work in this ecosystem that we're all living together in, to the degree that we can get good sort of risk-based regulation of those entities and based on what function they perform in the market, we're all better off. But sometimes pushing those out to the endpoints, which maybe a mutual fund is kind of an endpoint even though the shareholders are there, makes it a little bit more complicated.

So, I think, you know, new instruments in complexity, reviewing them, ultimately I agree, measuring risk appropriately and making sure you get compensated for that risk is the goal of our financial markets. So, I think we're all on the same page that it's not to eliminate the risk (inaudible).

MR. MITAL: To piggyback on Steve's Seinfeld references, since we're airing grievances, the biggest, I think, factual issue that regulators sometimes don't understand is, you know, we're asked about all the risk reporting we have to do, FATCA and all of this, and they say, don't worry about it, it's just coming to us. I'll be damned if these guys aren't going to ask me for it. Whatever I produce to you, my investors are going to ask for.

So, you know, to say that if we add new reporting or new disclosure and it's just going to the government, that's not the case. We have to hire people to make sure that it makes sense and to explain it to the investors who are going to ask for the documentation that we give to you.

MR. LLOYD: And I would just add, from a disclosure standpoint, you know, the disclosure documents, both the CTA disclosure document and the fund disclosure documents, you know, are very good tools for disclosure of the risks that we all face and the risks in our business. We talk about extensively about market risk, counterparty risk, conflicts of interest, and so, you know, from a disclosure standpoint, there is already a tremendous amount on it.

MS. OLEAR: If utilized appropriately. I was going to say, you guys do good disclosure documents. I have reviewed many that are not quite as robust.

MR. BARNETT: All right. Well, we thank you very, very much. Super helpful. Really appreciate it and appreciate your expert advice. Thank you so much.

(Whereupon, at 2:22 p.m., the HEARING was adjourned.)

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CERTIFICATE OF NOTARY PUBLIC

DISTRICT OF COLUMBIA

I, Irene Gray, notary public in and for the District of Columbia, do hereby certify that the forgoing PROCEEDING was duly recorded and thereafter reduced to print under my direction; that the witnesses were sworn to tell the truth under penalty of perjury; that said transcript is a true record of the testimony given by witnesses; that I am neither counsel for, related to, nor employed by any of the parties to the action in which this proceeding was called; and, furthermore, that I am not a relative or employee of any attorney or counsel employed by the parties hereto, nor financially or otherwise interested in the outcome of this action.

(Signature and Seal on File)

Notary Public in and for the District of Columbia

My Commission Expires: April 30, 2016