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**Quarter Ended 6/30/10 Performance Meetings**  
 August 26, 2010  
 Retirement Fund Conference Room

**Board of Trustees Present:**

Joe T. San Agustin, Chairman, Board of Trustees  
 Gerard A. Cruz, Member  
 Wilfred Aflague, Member  
 George Santos, Member  
 Antolina S. Leon Guerrero, Member  
 Katherine T.E. Taitano, Member

**Staff Present:**

Paula M. Blas, Director  
 Rosalia Bordallo, General Accounting Supervisor

**Other Present:**

Terry Dennison, Mercer Investment Consulting  
 Doris Flores-Brooks, Office of the Public Auditor

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## 9:00am-9:45am Economic & Capital Market Development

Gerry Cruz: We'll go ahead and start today's meeting. We have Terry Dennison here to discuss the 2<sup>nd</sup> quarter (3<sup>rd</sup> quarter fiscal year) performance report and so I'll turn the floor over to Terry Dennison. Terry Dennison: First item on the agenda is the discussion of the markets and the economy. In the large book, under tab 1 and we'll work from this. Basically I'll say in summary that the news has been pretty much relentlessly negative. More bad news today on a number of fronts including housing front where new home sales are at a 50 year low and used home sales have also declined dramatically. Durable goods orders if you exclude aircraft are at about a 20 year low. It's just very poor results. Our chief economist before this week thought that the likelihood of a double dip recession was probably about 30%, I suspect that number is now higher, although you could make an argument that we never actually got out of the first recession. The bond market which is a way for the market to signal its view of the future has been sending very, very strong signals of very difficult economic times ahead. U.S. treasury yields at, not just unprecedented lows, at almost ludicrous looking lows. This morning the yields came up just a bit this afternoon, but this morning, the 3 month treasury was yielding a little under 16 basis points, the one year was just a little over 26 basis points, the 3 year 76 basis points and the 10 year treasuries were at 2.54%, just extremely low yields. The significance of that is, one, the market's belief that the economy is heading into very much the negative direction and also a concern about risk. There is a sense that not just the Greek style sovereign debt risk, but now spreading to Ireland where the credit default swaps on the Irish banks, particularly Anglo Irish Bank which did a lot of lending in the housing market is in bad shape, there's suspicions about the Spanish banks and frankly we make we'll talk more about this. Beginning to a point where even the U.S. is going to run into issues with borrowing. There's some forecasts of what the debt situation in the U.S. will be 10 year's out, there was an exchange of academic papers, one suggesting there wasn't enough free capital in the world to finance the U.S. deficit. Literally if you took in all the free cash in the world, you couldn't cover the borrowing that the Treasury is going to have to do 10 year out. Assuming reasonable levels of interest rates, the annual cost of that debt in terms of interest would be about \$900 billion, which is substantially more than the U.S. defense budget, so literally the crowding out both in terms of available federal money, federal budget as well as the availability of credit for non-federal purposes, we're sort of now heading into a very bad place.

All of this bore on the market in the 2<sup>nd</sup> quarter, the S&P 500 declined 11.4%, for the year it's down 6.7% and we're pretty much back down now to where the last 10 years, the return on equity was pretty much zero. We're going to probably get some more bad news on Friday, that's Friday, mainland time when the Government is going to report unemployment and revision to the 2<sup>nd</sup> quarter GDP numbers. The first estimate of 2<sup>nd</sup> quarter GDP was about 2.4% there's a --- of debate now among economists as to what it's going to, the second revision is going to look like, one thing that got a lot of press about a week and a half ago was a significant decrease in U.S. exports. U.S. exports are dollar for dollar a part of GDP calculation, the initial estimate was 2.4%, the range now is between 1 and 2% and there are serious over minded people who think that it could be less than half of 1% positive growth which obviously bodes ill for the 3<sup>rd</sup> quarter numbers.

Unemployment which is not just an economic social issue it's also a political issue, it's definitely going in the wrong direction. Last week we went over 500,000 in terms of new claims for unemployment insurance, that's a reversal of a trend that looked relatively

positive. They will also report unemployment rate on Friday, again U.S. mainland time and it's probably going to head back up towards 10% and that actually significantly under weights unemployment in the sense that if you add in not just people seeking full time work, but people who are working part time who would like to work full time, unemployment rate is something above 17%. Among the scary numbers is a percentage of the population that is working, that number which has historically been above 60% has now fallen below 60%, so we have a lot of people who have simply just left the work force, given up trying to find jobs.

There are some statistics here such as the Institute of Supply Management, a purchasing index, it declined, which basically signals that one of the strengths we saw in the kind of head fake rebound we had from the recession was inventory filling during the trough of the recession in 2007, beginning in 2008 most entities stopped buying things, stores stopped buying inventory, manufacturers stopped buying raw materials. So when it looked like the economy was beginning to turn around, there was a significant amount of activity that could be attributed to inventory pipeline filling, obviously the shelves were empty and the manufacturers process input were empty, so a lot of the apparent growth we saw coming out of the recession really had to do with inventory pipeline refilling and it's pretty clear that's now largely ceased and what's going to matter now is final sales and with consumers de-leveraging either voluntarily or by other means such as having their credit cards cut off or their credit limits reduced or the inability to borrow further, they're not in a position to increase in final sales. Manufacturing which really was the big engine of turn around now seems to be stalling. You saw that capital good orders declining, the Government spending is actually also declining as we sort of come to the run off phase of the stimulus program. So I think the estimates of our chief economists and other economists that were probably looking at something between 30 and 40% probability of a double dip recession is probably going to --. This interestingly enough with the exception of a few places like Germany, is largely a global phenomenon, even the emerging markets are beginning to see some slow downs, now they're not going negative, they're just coming down from their very, very high rates of growth. So some of these have to do with real estate bubbles in China, a slow down in the demand for commodities, which is the source of revenue for a number of emerging markets as China stops trying to buy the entire earth, so I think we're in for a more difficult period going forward here.

The Federal Reserve and there's been some interesting debates if you read some of the economic blogs which I do pretty regularly, there's a very active debate within the Federal Reserve about what to do in order to stimulate the economy. I was reading an article that the Feds running short of ammunition, if you think about it, they've cut interest rates to zero, short term rates are basically at zero. They've been going through a program of quantitative easing which is basically through some transactions effectively printing money and they seem to be unable to stimulate the economy and if this sounds a little bit like Japan, the parallels are pretty significant. Japan has had a zero interest rate policy now for almost 2 decades and the result in terms of economic growth has been pretty much nothing. They were looking at potential stimulative efforts, most economists thought that the first one that they would go to was to either to reduce or stop paying interest on bank reserves. While nobody seems to have any credit, nobody seems to have any money. The reality is the actual money in the system is just mounded up, the banks are flushed with money, corporations are flushed with money, nobody wants to spend it, but the reality is when the banks were in very perilous financial state, not only were they given some direct aid by the Federal Government, they were being given sort of back vindictive door aid by the Federal Reserve

paying interest on the reserves that they're required to hold at the Federal Reserve. It was a little less visible way of increasing bank profits because they could effectively borrow money for nothing, lend it back to the Government and get paid interest. So if you do this on a large enough scale you can produce some pretty good earnings, which is what you've seen from the bank.

So one thought would be, and the problem with that is it didn't incent the banks to make loans. Basically if you could borrow money for nothing, lend it out to the Government to get paid, why take any risk. So the sense was some of this Government action was actually reducing the availability of credit and the incentive of for banks to make loans.

The second thing they could do was re-start the purchases of mortgage backed securities to support the mortgage market. During the worst of the economic environment, they said we will buy mortgages so that supporting the mortgage market, keeping mortgage rates low by basically the Feds simply buying all the mortgages that were out there.

The markets for non-agency mortgages were pretty much non-existent. So basically the only buyers of mortgages now are Fannie Mae and Freddie Mac and the Fed. They stopped that program at the end of August or at the end of April rather and the sense was that they may restart that.

The sort of last thing that people thought they would do was simply buy U.S. Treasury securities in the market for a couple of reasons. One, it would have been seen as sort of the last resort. Basically the optics around it would be very negative because the sense was, my god, if the only way they can finance the deficit is the Government buy its own paper back. So the sense was that would be the last place it would go.

The other thing is and it doesn't take in the minds of people who understand the process, too many dots before you get to Argentina where basically the Government just completely debases the currency and has another arm of the Government just to buy bonds to they can just print money without any limit. One thing that kind of shook up the market about 2 weeks ago is the Federal Reserve went right to that last option and started to buy treasury securities and that sort of spooked the market because they kind of skipped over the less provocative from an economic perspective and went straight to the last thing people expected.

We've been through a period where everybody expected that inflation would take off because of just gigantic fiscal stimulus, trillion dollar deficits, tremendous, monumental stimulus where basically not only do we have a zero interest rate policy, the wording of the Fed pronouncement was, we're going to keep this for an extended period and that's part of the debate as to whether or not that's such a really good thing. Despite the concerns about inflation, inflation and inflation expectations have been declining, in fact at this point when we do modeling of portfolios; we typically will have a deflationary scenario, but maybe a sign of a probability of 5 or at most 10%. I think the likelihood of a deflationary scenario was no longer trivial, it's probably not 50%, but it's probably more like 20% and a deflationary scenario is a very serious situation and part of the concern is that as the Fed exhausts its ammunition or is reduced to less efficacious ammunition, if we start to slide into a deflationary environment, there's simply not a lot of things you can do.

The consumer confidence increased moderately but then sank back again at the end of June. Clearly the state of very poor economic news we had at the end of July and so far in August is not doing people's mind set any good. The psychology both on Main Street and on Wall Street is pretty negative.

If we turn to page 5 and look at what's called the TED Spread, which is the spread between 3 month treasury bills and the rate at which banks lend to each other and you can see at the peak in the financial crisis, right around the weekend when Lehman Brothers failed, this spread which is a measure of the markets perception of risk simply got absurdly large. Basically the only way that one bank would lend to another bank is at astronomical interest rate and that has settled back down again, but if you look at the last month or two, that spread has what, certainly nothing to the level that it was in the post Lehman period, but there is a sense that risk is increasing in the system and that's part of the reason that your seeing yields fall and prices soar on treasury securities because at least historically they have been perceived as being risk-less. In the broader scheme perhaps that is not quite as purely the case, but at this point we are dealing with literally a bubble in U.S. Treasury securities. When we look at the performance of the pension plan and look at the performance of fixed income that has not been an easy environment for active managers. At this point, the inflow into bonds and mutual funds, the inflow into treasury securities across the board has literally constituted a bubble and if we do move into a higher interest rate environment, the losses in the fixed income market, particularly the treasury market are going to be huge. You're going to see treasury securities lose 15-20% of their value because of a rise in interest rates and most fixed income managers and they had Bill Gross on CNBC this morning and basically he said the same thing that there's just a huge bubble in treasury securities unless we really are back to looking at an apocalypse, treasury securities are hugely over valued, unless you just assume the end of the world financially.

So another way of looking at risk is on the equity market, that was previously looking at the fixed income market, this is looking at the equity market famous VIX Index, which is a measure of the embedded or the expected volatility in the equity market derived from the pricing of options. You can see at the same time we saw the TED Spread get very wide, in the 3<sup>rd</sup> quarter of 2008 we saw the VIX get up to absolutely astronomical levels and neither of these are some sort of hypothetical dream land sort of number. You could trade these securities, you could buy and sell the VIX. There are people who have put real money bets on the establishment of these prices so the reality is there are people buying and selling at these prices and you can see the VIX has started to pick up, risk in the system is apparently getting larger and larger.

If we turn to page 8, the upper left hand corner is looking at GDP; kind of a sad commentary is that 5 year average number of GDP 1.2%. Our economist thinks you need about 2% GDP growth to hold unemployment stable to deal with new entrants into the labor force and that's net new entrants including people retiring. So we're significantly below the level of GDP growth that's necessary to maintain GDP growth. Another reason that this matters, and we're going to get into this when we talk a little bit later about looking at asset allocation policy and the actuarial rate. When you look at the long term expected return for equities, how much you expect to get paid by investing in stocks, it's the sum of 4 numbers, it's the sum of GDP growth. Now that's assuming that corporate profitability which is directly what we're measuring is a constant proportion of GDP. Actually right now corporate profitability is a relatively high proportion by historical standards of GDP, so if we go back to the old

observation of aggression to the mean, the share of GDP represented by corporate profits is likely to decline, but if we're looking at GDP in a new economy that's not a robust 3 or 3.5%, but much more toward the 1.5 to 2%, the first number in our calculation of expected return for equities is called at 2%. The second is inflation and inflation is low and despite tremendous monetary and fiscal stimulus, if you look at the market's expectation, again trading real money so this is not somebody's just silly guess, this is real money estimate of inflation, forecasts now are below 2%. The third component is dividend yield, dividends increased in the early to middle part of the last decade because of changes in the Federal tax policy it actually became advantageous or more advantageous for share holders to be paid with dividends rather than capital gains because of the change in taxation. There's some possibility that will go back to again taxing dividends at ordinary rates which will be a disincentive to pay dividends. Finally a factor called PE expansion or price earnings ration expansion. PE is the measure of cheapness or dearness of stock prices and if you're looking at low growth and a long period, potentially a decade or 2 of low growth, because again of the new normal, re-regulation, de-globalization and de-leveraging, you add up those numbers and you get something in the vicinity of 5.5 to 6%. So if you think about the long term expectation for stocks as being 5.5, maybe 6%, where historically it's been above 10% and most asset allocation assumptions are 8 or a little bit below 8, the largest creator of wealth in the post World War II period is going to lose about 75 or a 25% rather of its likely return.

If you look at bonds which are simply priced at the treasury level of inflation plus what economist call the premium demanded for deferred consumption, which is perhaps 3%, inflation at 2%, you're looking at bonds at 5%. So when public and corporate pension plans look at their earnings expectations, which in many cases are somewhere around 7.5 to 8%, it's a challenge to find a combination of 6% and 4% that gets you to 8%. So we're going to have some very interesting discussions about asset allocation and the actuarial rate of return. These numbers really do matter.

Let's move on to the next page, looking at page 9, you can see the huge rise in unemployment rate, unemployment rate is a lagging indicator, it tends to rise after, even though the recession is over with, but if the recession isn't over with, the expectation is it's going to rise beyond these levels and again if you look at what you might argue is true unemployment, which is not only people without jobs, but people who are working part time like a full time job, nearly one person in 5 is unemployed.

Consumer confidence in the right hand panel you can see while it's improved slightly, it's still at a very low level and it has subsequently sank back to near it's low.

I mentioned inflation expectations at the end of the quarter; the expected inflation by looking at the different pricing between nominal bonds and tips was less than 2%. That number has shrunk dramatically, when we talked last quarter it was 2.14%, so inflation expectations have been falling.

Turn to page 10, looking at the countries in the world, the red are in recession, some of these are obviously pretty notable, Iceland which had an almost comic financial failure having to do with some issues with their banking system. The recovering even at this point is becoming questionable so basically we might be seeing perhaps not may turn red, but certainly more moving out of the recovering and back into the moderating. If you look at who's expanding, they're emerging markets, its South America, its Asia. Special case among the developing countries or the developed countries in Australia largely because the Chinese

are buying it and shipping it to China. The one that is doing the best in Europe is Poland, again another emerging market doing very well. We're going to talk a little bit when we get into the discussion of asset allocation and the discussion of what do we do in a more difficult world about the importance in investing in emerging markets and perhaps increasing beyond where we are today the allocation of emerging markets.

If we turn to page 11, looking at the funding status of the U.S. corporate pension plans, the combination of very low interest rates because corporate plans in the U.S. have to value their liabilities at the Double A corporate bond rate, they don't get to pick like public funds do at the discount rate and as bond yields have fallen, the valuation of the liability, this is a present value calculation and as the interest rate falls, the present value of a stream of future benefits starts to approach the sum of future benefits. So they've had the perfect storm, their liabilities are increasing while their assets are losing value.

Looking at the employment, we've touched on much of this already on page 12. One of the things that is increasingly clear is the slight improvement we saw and the unemployment rate has less to do with people finding jobs and more to do with people leaving the work force, they stop looking. A statistic that I think is kind of interesting is the bottom bullet where 45.5% of the unemployed have been looking for work 27 weeks or longer. So we're not just looking at a transitory level of unemployment, we're starting to see the kind of structural unemployment that you find historically in Europe. Again that labor force participation percentage, the percentage of people with a job has now fallen to 58.5% and this is the whole population, including infants, people in jail and people who have formally retired, that number has been above 60 since the 1980's so literally the labor force participation.

Now if you think about, where does GDP come from, GDP comes from people working, there are a lot of calculations that go into it, but they can be simplified by number of workers times productivity. Antolina Leon Guerrero: What about retirees, the number of retirees go out, are they contributing? Terry Dennison: They're contributing, but there are a lot of retirees going back to work because with the losses in their 401k plans and the corporate sector, perhaps their children are now living at home again, all of those factors is making it difficult for people to stay retired. So there are ins and outs of all these numbers, but they don't provide an attractive looking picture.

If we turn to page 13, the dollar in the 2<sup>nd</sup> quarter rallied, it fell again in the beginning of the 3<sup>rd</sup> quarter it is now rallied particularly against the Euro. The Yen incidentally is at a 15 year high although it's come back or come off a little bit. This has less to do with the strength of the U.S. economy than the relative strength versus other countries, other countries currencies, particularly the Euro are in much worse shape than we are, so while we're in bad shape, they're in worse shape, which the way in which these work make us look good. Antolina Leon Guerrero: What caused the Japanese Yen to rise suddenly, they've been stagnant for almost 2 decades now. Terry Dennison: You have to some degree a sort of 32 -- - effect, the money has to go some where and as the Euro becomes undesirable, the Yen is at least being seen as stable, it doesn't have the kind of external debt. Japan is the most indebted country in the world as a percentage of GDP, by far the most indebted country, but they owe it to themselves. Their external debt is very low. Our problem is we have a lot of debt and it's --- to other people, particularly Chinese people, Chinese Central Bank, other emerging markets, other providers of energy. If you look at what treasury securities are owned by Chinese and other emerging Asian countries, plus the oil exporters, it's



astronomical. Our debt is much more dangerous than the Japanese debt. The Japanese basically simply owe it to themselves, we owe it to other people. Part of the reason they owe themselves in debt is they invest in Government bonds, they're very happy to take a 1% JGB, Japanese Government Bond, they're perfectly happy to take that. So basically you've got a combination of tremendous debt, but a population perfectly willing to own the debt at very low interest rates. That's how they save, if you look at the Japanese postal savings, which is basically the largest pool of capital on earth really, most of it is invested in Government bonds. So they don't have the same issue that the Greeks have where basically they need somebody to buy their paper and more frankly the U.S. may get to, whether or not people will be willing either to buy it an interest rate they can afford to pay or whether there is literally enough money in the world to finance it.

Page 14 we talked a lot about the housing situation, while prices have been rising, that has stalled to some degree. Foreclosures are up dramatically, a lot of the foreclosures has really run out and banks in the mainland are now getting much more aggressive about foreclosing on defaulted loans. Last month's pre-owned house sales were the worst in 15 years and new home sales were the worst in 15 years. There's something like a 9 year supply of already built and vacant homes in some of the hardest hit areas like east of Los Angeles, in Las Vegas, in Miami, so literally if they didn't build houses for 9 years, they wouldn't run out of houses. Construction as we've discovered is a huge component of GDP growth. The wages are relatively high, you buy a house, you tend to buy new appliances and new everything, I can remember when we bought our first house, we celebrated the first day we didn't go to the hardware store twice. So literally when people stop buying houses, the reality is it has a knock on effect throughout the economy.

(End of Economic & Capital Market Environment presentation)

## **Defined Benefit Plan**

### **10:00am-10:45am DB Plan – Quarterly Performance**

If we turn to asset class performance, before I go here, any questions or observations on the markets of the economy? Doris Flores-Brooks: It's so depressing, what do we do? Both literally for our own personal investments and as well as, maybe see how the Fund does... Terry Dennison: There aren't solutions to every problem, there are not solutions to every problem. There are a lot of pension funds now that are having to liquidate securities to pay benefits. In Illinois they're selling about 10% of their assets to pay this year's benefits, because the state doesn't have any money or won't give them any money. Now if you think about that, that's 10% of their assets that won't be earning next year. You can do that for 9 years and you just run out of money. There's been about 10 states, New Jersey, Pennsylvania, New York, Illinois, California, a couple of others that will probably go bankrupt in 10 years, the pension funds will go bankrupt. Basically they are burning through their capitals so fast that they're going to run out of money.

There are some very interesting studies that have gone on now, the law firm in Chicago, Sydley and Austin, very well known law firm did an analysis of what would happen if the Illinois pension funds went broke. It's a very state by state thing. An analysis on a state by state basis was done by a student at the law school of the University of Minnesota looking at exactly what the status is of pension funds around the country and they vary from like in

Arizona where the benefits are constitutionally guaranteed to Texas where it's simply a gratuity, they can just simply shut it off tomorrow, they can just say, we're not going to have a pension plan anymore, it's a gratuity legally. One of the interesting things about Illinois is while the benefits are guaranteed, they're only guaranteed by the pension fund, not by the state, so if the fund goes broke, the beneficiaries have claim against the bankrupt fund. So we could be seeing some really interesting things happen down the road here, but there are about 10 funds that are probably just going to run out of money in the next 10 years. Doris Flores-Brooks: Not only talking about the states, because what's happening is a lot of the counties have their own pension funds and the management there, what's been the talk there, because Rhode Island, I recall reading an audit, as many counties as they have, they have their own different fund and some are very generous, it's kind of like helter skelter type of thing and so the recommendation was to bring all the counties under the state be at least uniform. When you have counties like Los Angeles County and San Jose and San Francisco County, you're talking counties bigger than Guam. Terry Dennison: What are called the 34 - - counties, which are, there's about 25 counties in California that have their own pension funds that are part of PERS and many of the 34 counties are in bad shape too. The city of Pittsburg, Pennsylvania Pension Fund is 29% funded. What you run into when these funding levels get low is a sort of graveyard spiral, because what you have to take out of the fund is so large that if you have to take money out of the funds, there's a non-actuarial, almost an arithmetic factor where you have to make enough money every year to keep the fund stable or the rate at which you're taking the money out increases and the fund just implodes. State funds are in bad shape, the city and county funds are in worst shape, the worst are some of the special taxing districts where basically they've got huge benefits and no money, that's going to be another problem.

To answer your question, we'll talk about this when we get into asset allocation this afternoon, but some of the tools we relied on like equities, which have basically created an unbelievable amount of wealth in post World War II period. If we have another 10 years where equities return nothing, we're going to have to invest in something or we're going to have a problem, so we'll talk about that.

On page 16 it doesn't get any better. Looking at the returns in the equity markets for the quarter nearly double digit negative numbers across the board, year to date all negative, some not very negative, but all negative, one year numbers, remember the fabulous return we had a year ago, I told you to remember that good feeling... the 3 year returns, these are annualized so for example in large cap core, that's 9.5% a year negative for 3 years compounded, big losses.

Looking at page 17, the U.S. equity market, it didn't matter where you were, there was no good place to be. This is a little unusual, basically to some degree there's a belief that if you invest in a wide variety of asset classes that diversification will protect you against big losses, well what do you do when basically everything goes bad.

On page 21, again one of the arguments for diversification is well maybe your home market is going to do badly, but the other markets will do well. Investing internationally, numbers aren't as bad, but they're all negative and even emerging markets, which has historically has been a very strong diversifier and historically has done pretty well, it had a negative period. So this is representative of this kind of convergence, the idea of globalization and at some

point there's no place you can go that's so strange that they're seeing a different economy and a different market than we are.

If you turn to page 22 drilling down into the emerging markets you can see it was a pretty much equal opportunity decline. Of the BRICK countries, China declined, India declined, Russia declined and India was down for the quarter, but up for the year. Incidentally just now, well in the last couple of weeks, China has replaced Japan as the second largest economy in the world and in a very short period of time, India will replace Japan as the third largest economy in the world. So we're going to have of the 4 largest economies in the world, 2 of them are going to be emerging markets and clearly the growth is substantial. They're probably several decades away from passing the U.S. Doris Flores-Brooks: It has to do with their large population. Terry Dennison: Large population, just tremendous growth, at some degree, as the workshop to the world and interesting because China has done it with manufacturing, India has done it with services. Indian manufacturing because of what they call the licensed --- where it's very difficult to get all the permits you need to do anything, really isn't a factor, but in services they have now outsourced, people are now outsourcing legal work to India, routine legal contract matters are getting outsourced Indian lawyers. I heard an interesting comment about the sort of European sort of dolce vita social motto where in France it's difficult to get a French engineer to work 35 hours a week, in India, an Indian engineer is happy to work 35 hours a day. That's how you create wealth, you create wealth by people working.

If we look at fixed income, page 24, again I mention the Federal Reserve, basically moved to the last step of buying treasury securities. I was in London for 2 weeks in the beginning of July for some company meetings and I've seen it there before and I went back and finally bought it, in the west end in the theatre district there's a small shop that sells coins and currency to collectors and I bought for 5 pounds, about 7 and a half dollars, a hundred trillion dollar Zimbabwe note and it's very handsome, it's not printed on one side, it's very handsome, it's engraved, it's got colors and pictures of African animals and it's 100 trillion Zimbabwe dollars and it's worthless because of inflation. I've seen it in the window and I said I just want to have it because it sends a very powerful message.

If we look at the bonds, Aggregate Index up 3.5%, up 5.3% for the first half and again this is simply because of this enormous rally in treasuries and the rally in treasuries is concerns about sovereign debt risk in Europe, some technical factors, the reality is that unlike the stock market, very low yields and very high prices in the bond market are dangerous again unless you assume an economic apocalypse because rates can't fall below zero. If you are getting 2.5% on a 10 year treasury, you're not going to get much less than that, you're going to not be able to get it for minus 2% interest, so the reality is the risk of bonds increases as the yields fall and the prices rise because any increase in the yields is going to produce huge capital losses. I mean if you're getting 2.5% a year for treasuries, all you need to do is have interest rates rise 5, 10, 15 basis points and you've wiped out your interest for the year. Gerry Cruz: Where do you go? Terry Dennison: Well, that's one of our problems. Gerry Cruz: At some point you've got to believe that this isn't secular, that it's simply cyclical. Terry Dennison: Yes, except if you look at some things that aren't cyclical, you look at the build up of debt. If you look at concerns now globally, now the thing that's amazing is the leaders in austerity are the Europeans, these are the dolce vita crowd, the we had 5 weeks vacation, we work 35 hours a week and they're the ones now who are the most aggressive, not just the Greeks, they had to, but everybody is now basically saying, we got to tighten our

belt to keep from having to eat our belt and the reality is they get it a lot more than we get it. If you look at the discussion of the G20 meeting, 19 of the 20 countries basically said we've got to cut our spending, we've got to live better within our means, one said, why don't we just keep spending a lot of money so we can get prosperity back, guess who the one is. So, I don't think we're going to have an apocalypse, but I think we can be looking at a 10 or 20 year period of very difficult economic times. Gerry Cruz: If we continue on the same path we're going granted, but if you also believe that what we're going through was simply a form of the match to get the fire to be ignited and what we're going through now is a short term stimulus in order to create the engine to drive private demand, then maybe we get ourselves out of it. I don't know if it's true or not because the reality hasn't panned out, but certainly that was the point of all the spending for the last few years. I think we would have been in a worse position, I'm not necessarily a big supporter of Obama, but I think we would have been in a lot worse had the stimulus money not flow in or the liquidity money not flown into the system. Terry Dennison: Well the liquidity was necessary, the liquidity was absolutely necessary because as I said before, when I think the historian write the history of what happened in the 3 quarter of 2008, it will be like the Cuban missile crisis, we don't know how close we got to the end of the world. If you read some of those stories what it's like trying to make those decisions, they weren't even sure what they were doing was legal, but they said, let's just do it anyway, because the alternative is unimaginable. It's easy to say, they shouldn't have done this, they shouldn't have done that, well they could have done it a better way, well they didn't have time. Basically if they didn't do something to deal with liquidity in the system, virtually every money market fund was going to fail the next morning and yes, they weren't sure the Federal Reserve could bail out a non-bank... Gerry Cruz: They didn't have time to think during those times. AIG was about to lose its shirt and when AIG goes, so does everybody else. But to the point, I think we're still, in part of our history where we haven't seen the end of the stimulus, haven't seen the end of all this and so we're still going through... I don't know that we ever came out of a recession necessarily, by the numbers perhaps, but by the feel and by the reality of what people were going through, I think we're still in a recession, just less of a recession. For a while we were talking about the second derivative, we're not falling quite as fast, we're not losing quite as much, but I don't know that we've really necessarily touched bottom, I think we're squirming around the bottom and looking for some way to get out. Terry Dennison: I'm still confident that we'll deal with this. I think we're in for not another quarter or 2... Doris Flores-Brooks: Debt or dealing... Terry Dennison: Dealing with all of this, dealing with the debt, dealing with the slow level of demand, all of these problems.

I think back to something Winston Churchill said in 1940, "this isn't the end or even the beginning of the end, if we're lucky it may be the ending of the beginning." I think we'll get out of this, but I think we'll get out of this looking a little bit different from what we use to look like. Gerry Cruz: No question, but so will a lot of things, the housing market is certainly not going to look the same, the GSE's are certainly not going to look the same and corporate debt, there still is a lot of gun powder on the sidelines, a lot of companies just not hiring, not spending, banks not lending, but the money still is there waiting for some... Terry Dennison: That's what's amazing, it's not an illiquidity issue, it's a lack of demand issue, lack of supply of money and lack of demand for finished goods. Gerry Cruz: And the Government in my own humble opinion I think is going at this wrong, I mean you can't jump start an economy by pulling the lever of rates, because lower rates if people aren't working they're not going to borrow, they won't qualify, so I think that's a wrong lever that they're pulling. Terry Dennison: Well it's the traditional lever, it's the easy lever. Other levers are

more difficult. Gerry Cruz: And they're piling on reform and reform adds to the cost of doing business. Terry Dennison: As does the uncertainty. They pass bare bones legislation and say, well the appropriate agencies will write the regulations, some time. Gerry Cruz: Right. So there are some new cost factors with no revenue potential to associate with them. I think we're just trying to struggle to find out where we are with regards to, with the economy in terms of our new, how we look, how we're suppose to operate. Terry Dennison: We'll do the best we can because that's all we can do. We do have to do something.

Antolina Leon Guerrero: Gerry, what's GSE? Terry Dennison: Government Sponsored Enterprise, that's the sort of generic name for things like Fannie Mae and Freddie Mac. They're kind of funny hybrids, they're not part of the Government or they weren't part of the Government, but now are sort of under Government conservators, they're now adopted that's the phraseology we're talking about.

Page 25 again credit spreads widening, again measures of risk. International fixed income fell again, I mean again, sovereign debt worries and interest rate volatility in Europe, no place to hide. High yield which had been a huge performer, if you looked at the performance of high yield coming out of the recession where the bonds that looked dead and were then thought to only be -- go up only 80 or 90%, well risk concerns are now back and high yield market has cooled off a lot, you're not seeing the big gains. There's also been a huge increase in supply, because as spreads got very tight again, high yield debt was pretty cheap and a lot of corporations further liquefied their balance sheets by issuing high yield debt. If we do slow down, if the economy does slow down, we're now going to see a lot more of this high yield get very dodgy again.

On the stable value front and this is relevant for the DC Plan, one of the things about stable value is to get the stable value part to work, there's what's called a rap agreement where an insurance company agrees to basically in exchange for a fee guarantee that the participants nominal balances never go down and there was a period because of the financial crisis where rap capacity was very tight. Literally everybody wanted to go into stable value, but stable value funds were effectively capped, because you couldn't get the rap capacity. That's freed up some now, so there's a sense that there's much more of a balance, money has been flowing out of stable value and you're going to see the yields of stable value drop to next to nothing as rates stay this low. Stable value is generally priced around 3 year corporate rates, but because they roll over one contract every month for 36 months, the rates fall slowly. So you're beginning to see the stable value rates begin to drop as long decline in interest rates continue.

Money market yields of course are next to nothing, literally like 10 basis points, money has been flowing out of them.

Real estate securities, let's talk a little bit about page 30 because this is an area where you are invested in. A portion of the REIT rally was attributable to less than premier properties which obviously with depressed prices have a potential for rallying on a percentage basis. We're now seeing the market move toward more quality product, but even at that, literally REITs are often selling for less than the replacement value of the property they own, so they're still cheap really, because if you can buy a REIT that owns property and you can pay less for the REIT than the properties worth to replicate, that's a pretty decent investment

from a valuation perspective. Gerry Cruz: And they are now? Terry Dennison: They are now, they're still cheap.

Let's go to talk about the Fund. On page 45 we're going to drill down into this deeper, 2<sup>nd</sup> quarter changes, there were some changes to the portfolio, THB was terminated and yes the assets are parked temporarily until Eaton Vance and Numeric are funded that's an agenda item for later today. AXA was terminated, it was only a very small allocation, the money was just sucked into cash and there's still an open search for the international large cap equity. The recommendations regarding --- managers with the exception obviously of Eaton Vance and Numeric which are awaiting funding is retained.

If we turn to page 46 looking at asset allocation, obviously this is partly the result of taking money and partly the result of market action. We are getting a little light on U.S. small cap. I'm going to talk about small cap in the second half, in the afternoon session as an asset allocation opportunity, as part of a whole lengthy discussion about asset allocation, but at some point that probably needs some attention. Now if we're drawing money we can adjust that by simply taking money from other places and sort of narrowing in on that. Historically small cap has been a more attractive asset class for investing than large cap, but it's not absolutely guaranteed to go that way. If we do have another difficult economic period, small cap companies tend not to have secure financing, they're more financially brittle, they don't have access to the bond market, they may not have strong banking connections, so there is some higher level of risk in small cap stocks in very difficult economic times. So when we talk about re-allocation of assets, we maybe need to talk about do we want to hold back some of filling in this hole simply till we get some more clarity about the economy.

(We're going to jump around here) and take you to page 50. There is a note here about Winslow Capital Management that starts on page 51. They have dealt with some of their financial operations regarding New York Life, it's not a material thing. There is a concern on page 52 of issues to watch, Patrick Burton who we know well and believe is highly qualified, we'll have to see how he fits in with the team and every time there's senior level changes in investment teams, there's something we want to monitor, but we do that for you on an ongoing basis. Patrick Burton is a research analyst, he's new to Winslow, he's assisting Justin Kelly with technology and Bart with consumer staples. We're also monitoring how Clark Winslow makes his exit, this is now something that's now very common as the founders of many of the investment management firms started in the late 70's early 80's reach retirement. Often these firms are vastly more valuable than the second generation can afford to pay and you do run into a question of how this transition works and there is one with this. We don't expect him to leave the firm any time soon, but we all leave the scene at some point or another.

If we turn to page 56 there is a discussion here about DFA and DFA is not only a manager for the DB Plan, it's a candidate for the DC Plan. If you turn to page 57, they've made a couple of changes to the investment process, which are more important than the comings and goings of people. Incidentally, they moved their headquarters from Santa Monica to Austin, Texas, probably for tax reasons, Texas is a low tax state, California is a very high tax state. They made 2 investment changes, they introduced sector constraints to the value portfolios. Previously sectors are, and sectors are things like healthcare, technology, energy, previously were really unconstrained, they allowed them to be as big as they needed to be or as small as they needed to be and they're now capping the sector exposures to be no more than 10%

above the index weight, this is an attempt to moderate volatility a little bit. Unconstrained and we'll see some mentions of unconstrained strategies when we do the emerging market search for DC, the concern for unconstrained strategies is if they get it wrong, they can really get it quite wrong. The nice thing about constraints is you avoid things like the tech bubble that we saw in 1999. The danger of unconstrained is where a particular type of stock like the tech stocks or the energy stocks are seen as being so desirable that they start to dominate the portfolio and when they go out of favor the losses are large too, so we think that's good. They also made a change to the definition of value in each country. There are some countries and if you think about for example, Finland where there's basically one stock, Nokia, as that stock moves in and out of the value space, it can cause a lot of strange behavior in the portfolio. So they change the definition of value to avoid this issue where a single stock moves in and out of the value and they're making very large changes in the portfolio. There was a period where Northern Telecom was bigger than the next 3 stocks in the Toronto Stock Exchange, so it's not just small emerging markets where this single stock can be an issue, so we also think that this is a good change.

Gerry Cruz: DFA we have trading for us in the international small cap? Terry Dennison: Right. Gerry Cruz: These guys I recall their methodology, there were more like index fund... Terry Dennison: Right, they hold a huge number of securities. It's a quantitative strategy, I should talk a little bit about the strategy when we do the search. Gerry Cruz: Should these 2 changes, the first one I'm not really concerned about, the second one I am because I remember their pitch was they buy at the end of the lowest level of the value, of the pricing and buy a lot of it in hopes that it's going to... that's their methodology. So this change, the change in number 2, how do you see the impact of this, does it put a ring around risk or is it meant to increase returns? Terry Dennison: I think it reduces risk in an indirect sense that if you have a company, because remember they have a value screen, they're looking at value companies and if you have one company in a small market that moves in and out of value, when it's in they have to own it, when it's out, they need to get rid of it and then if it goes back in again, they need to own it again. So, it probably reduces the return by generating excessive trading and it also increases risk which they are now correcting, because it's too much exposure to a single name. The problem with huge concentrations to a particular stock is if something goes wrong with that stock, you've got a large loss so basically they were previously in effect required to own it because it met the value test and it fell into the bottom 3 deciles of the value space, in fact it occupied the 3 bottom deciles because it was so large. So I think it both reduces risk in terms of reducing exposure to stock specific risk and it probably enhances return slightly by eliminating the need for just pointless trading. Gerry Cruz: And then in this top one, let me just ask question too, so what they're going to do is they're going to cap their sector exposure at 10% above the index weight. Terry Dennison: Right. Gerry Cruz: If they are an index fund by the fact that they buy a huge portion and now they're going to cap their concentration so that it looks a little more like the index, are we going to be over paying for what is going to look more like an ETF, I mean, are they going to become an index fund? Terry Dennison: Well they're an enhanced index fund now. They hold an enormous number of securities. It's clearly not an active strategy in the sense that they identify out of a universe of 1,000, the top 60, out of a universe of 1,000, they might hold 600. They make money by avoiding losers. The ones they don't hold are the ones they deem to be undesirable, they just don't have a view about the ones they think are good. The other thing they do as you suggested Gerry, they make money with trading. They basically are a supplier of liquidity, if you absolutely, positively want to buy it today and don't care what you pay for it, they're a seller. If you absolutely, positively want to sell it today and

don't care what you get, they're a buyer, because they don't actually have a view about the stocks as long as it meets a number of different tests. I think for the emerging market there's like 30 different tests that it has to meet and after that they basically say, we accept the markets valuation, we've eliminated all the stuff we think is bad, but we're not going to try to pick winners, but they also do this for a low fee and a very low turn over. In the emerging markets the turn over is 10%. There's some other funds we look at where the turn over is above 100% and in emerging markets you have to wonder whether or not you can actually make enough money if you're turning over the portfolio every year, you can actually make enough money to make that worth while, but that doesn't really cause us an issue.

Go to page 64 and go to the last 3 columns, 2009, 2008, 2007, because the last 3 columns basically explain a lot of what we're seeing. We do well when the market is up. In 2009 the index was up 21.8, we were up 26.2, now this is ending June 30<sup>th</sup>, so it's not calendar 2009, this would be July 1, 2008 through June 30, 2009. When the market is up we do very well. When the market is down, we do less well. In the year ended June 30, 2008 the market was down 21, we were down 24.7. Similarly in 2007 the market was up and we out performed. If we look at us for 3 years where basically it was pretty much a recovering market, we did a little bit better than the index but placed in the 12<sup>th</sup> percentile of other public funds, but we were down in the quarter. Index was down 5.5, this is blend of strategic asset allocations, the indices for strategic asset allocations, we were down 6.2%, that put us in the 71<sup>st</sup> percentile, but if you look at our percentile rankings, we had a bad quarter, but even year to date we're in the 46<sup>th</sup>, we're 60 basis points ahead of our benchmark, for 3 years we beat the benchmark by about 10 basis points, but in the 12<sup>th</sup> percentile. So we don't do as well when the market is down.

Now when we do the attribution, we'll get to the attribution, a lot of the issues in fixed income, fixed income is a very treacherous place to be right now, because unless you are staying with the index weight in treasuries, remember I talked about the risk of treasuries, because the yields are so low we start to see either a reduction in concern about risk or a pick up in inflation and start to see yields rise. You're going to see the same kind of crushing of treasuries that you saw with the bubble in housing and finance stocks in 2007 and technology stocks in 2000 and 2002. So unless you are as a fixed income manager willing to hold index weights in treasury securities, which you could argue is not a good risk, it's a poor investment choice because the balance of risk is very negative, interest rates can't go much lower, they're approaching zero. The balance of risk is negative because it's much more likely that rates are going to increase than they are going to decrease. So we were hurt in fixed income and we'll look at that in an attribution sense.

If we look at page 67 we're looking at fund returns versus benchmarks. Basically you can see if the market, if the green arrow is up, we out performed the benchmark. We were really hurt in 2008 where the benchmark was down 21, we were down nearly 25, but in every other period of up markets we out performed. Actually on a year to date basis, we actually out performed by losing less money than the benchmark, but generally when the markets are down we do relatively more poorly.

If you look at page 67, the --- here is and this is looking at 5 years ending June 30<sup>th</sup> and we're seeing quarter by quarter for those 5 years or 20 quarters for those 5 years. The green quarters are quarters where the market was up, the red quarters are quarters where the market was down, if we're above the line we did better than the benchmark, if we're below



the line, we did worse. You can see generally we do better in up markets, but the important thing is the rolling one year excess return, that line, we're still in the first quartile, that rolling one year basis. Even having lost some ground, we're still in that first quartile.

Page 68 is interesting, again we spend a lot of time on return because it's return that pays benefits but we also have to focus on risk because it's risk that keeps us from being able to pay benefits. So what we're doing here is looking at risk and return. And this is the standard, I make this speech all the time, two dimensional presentation, the horizontal axis is risk, higher risk and there's terms of standard deviation to the right and the vertical axis is returns, higher returns go to the up. In our economic system in the long term you would expect the line that fits through those dots and those dots are individual pension funds performance, public funds like you. Those are individual performance you would expect the line, the least square regression line you would expect to be pointing upward to the right, because if you have more risk you should get more return. It's called in the technical speak, the market line. Here because of the huge losses in these periods, in the 2007 and 2008 periods, the market line is actually pointing the opposite direction. You got less return for taking more risk and more return for taking less risk. This is not a common phenomena, because it just flies in the face of the way our economic system is suppose to work, but if you look at where you are, you're the red box, ideally we would like to be on the upper left hand corner, that is truly the free lunch, low risk, high return very hard to achieve. We want to avoid being in the southeast corner of high risk low return, where we are is probably a pretty fair trade off between risk and return, we're certainly sort of in the cloud, we're getting a pretty good trade off between risk and return. The point is it's a very unusual period, that relationship is the exact reverse of what you'd expect to see.

Page 69 is looking not a return, but at asset allocation, how do we invest our assets versus other public funds. A couple of things become apparent and they impart explain a relatively higher volatility, why we do badly in falling markets. In terms of U.S. equities, we're right about the median, the median public funds is at 38.9% U.S. equity, we're 35 and a half, we're right at the median. We're a little above the median in non-U.S. equities and we'll talk this afternoon about why we think that's desirable. U.S. fixed, we're dead on the median, the median is 31.3%, we're at 31.5%. We don't have any non-U.S. fixed and to give you a sense of how well that's done when we look at the DC report, because it's very unusual that you offer your DC participants a non-U.S. fixed income fund and the median pension fund has got 4.4% of their money invested in non-U.S. fixed income. We're over weighted in real estate at 11.4 versus the median of 5.6 in part because it's the only alternative like asset class we can invest in.

One of the things we did when we started looking at the asset allocation 7 or 8 years ago was try to diversify away from bonds and stocks, because bonds and stocks have a very high correlation to economic activity, we wanted to get away from owning just bonds and stocks. Well for a lot of reasons there's been a reluctance to do things like hedge funds and private equity and other forms of alternative investments. The one alternative we could buy and we're actually buying real estate in securitized form and that's the REITs, so in a sense if you combine alternatives and real estate together, the median of alternatives is 10.2 and the median of real estate is 5.6. So the median public fund has got 15.8% in the sum of real estate and alternatives, we have 11.4 all in real estate. So part of the reason why other public funds have done better than we have is they have yet a more diverse asset mix than we do and we'll talk about that when we talk about asset allocation policies. When we talk

about asset allocation we have to recognize we're not as diverse as other pension plans are. In terms of where we get our returns, returns by asset class in U.S. equity we are literally top of the pile, 1<sup>st</sup> percentile simply by losing less money. Although in reality unless you are clever enough to make violent changes in your asset allocation or have long short hedge funds, if you're long only and aren't doing dynamic asset allocation which is very tricky to get right, the asset allocation you have to add to 100, so other pension funds were down 9.5% for 3 years in U.S. equity, we were down 4.7, 1<sup>st</sup> percentile, number one. Non-U.S. above, into the first quartile we were down 9.4, it does give you a sense of how difficult the last 3 years were.

Again, we were hurt in fixed income. Part of this is our guidelines don't allow us to invest in high yield. A lot of people made a lot of money in high yield. There was a period from mid 2008 to mid 2009 where high yield was up over 50%. So when we look at why we're under performing, we're under performing because other pension plans went places we chose not to go. Non-U.S. fixed and real estate, there's not enough history for real estate to show 3 years.

I mentioned on page 71 how since the beginning of 2006 we have been having a much more diverse asset allocation, but again when we talk about options for asset allocation policy, we're locking ourselves out of a lot of options, but it's a heck of a lot better than it was in 2003 and 2004 where basically we only had 2 kinds of things. Gerry Cruz: Should we be looking at other options? Terry Dennison: We'll talk about that this afternoon.

Page 72 where we are, we already looked at the ranges; again we're really almost to the floor of the range for small cap. The range is 5-15, we're at 7, other than staying true to policy, there's nothing, bell's aren't going to ring or lights flash if you drop below 5, but the reality is we think there's a lot of opportunity there. We have a whole presentation and we'll talk about that this afternoon on why we think small cap is an attractive asset class that's probably worthy of looking at.

If we go to page 74 this is the attribution that I talked about. What we do with attribution is to go beyond the question of what happened to get to the question of why something happened. It's a fairly simple process looking at what our return was versus the return of the benchmark and what our weight was versus the weight of the benchmark. You can see that the total fund attribution, there was a huge negative contribution from asset allocation, actually our managers added value, our managers did a decent job, it's just we were over weight in an asset class and produced an aggregate underperformance. We were over weight 31.5 versus 30 and our performance was below the benchmark. The target return was 3.5, the actual return was 2.9 so the whole under performance is attributable to poor performance in fixed income, being over weight in an asset class that did badly and under performing in that asset class. Actually the total equity as we've seen now for a number of times the managers did great, they contributed a lot of value.

Go to page 77, there's a lot of numbers on page 77, 78, 79, and 80, basically the key things to look at are Winslow is off to a relatively tough start, we've only got one year's worth of performance from them, they are lagging, it's a quality stock manager, you've heard this before, while we're disturbed at the poor performance that's continuing as long as it is, basically quality has not had a strong a performance as lower quality. They are lagging the performance on a relative basis is well into the 4<sup>th</sup> quartile pretty much across the board

except the one year and they've lagged the benchmark for every single quarter, every single period we're showing.

Now having said that, looking down at the next manager, INTECH, Intech is a quantitative manager, they basically are doing a very sophisticated process, it's an enhanced index fund actually that is basically re-weighting the index to maximize the benefit of volatility and look at their performance, for the one year they're 350 basis points ahead of the benchmark, 17<sup>th</sup> percentile, for fiscal year to date they're 310 basis points ahead of the benchmark, they were up nearly 3 the benchmark was below zero, 9<sup>th</sup> percentile for the fiscal year to date, calendar date 10<sup>th</sup> percentile, 3 month 11<sup>th</sup> percentile, all hugely above the benchmark. Now if we would have looked at this 6 months ago, they stunk, I mean I was sitting here cocked pistol. Gerry Cruz: Did they change their process at all? Terry Dennison: Little tweaks. So the point is, yes Winslow if off to a poor start, so is Intech. There is a bargain, these managers are not just pulled out of a hat, these managers are selected to have a diversity of style, diversity of process. The central bargain with diversification that you have to keep in mind is in exchange for avoiding the circumstance where everything is bad, you give up the circumstance where everything is good. In fact I would argue with you that if you don't have a manager doing relatively poorly for reasons we understand, there's something wrong with your portfolio, because when the market psychology changes and what was in favor goes out of favor and what was out of favor goes into favor, all your managers are going to begin to do badly. You need to look at this as a portfolio, a lot of plan sponsors, we've written some papers and I'm working on another one now that really talks about the agency affect, the effect that literally the decision making process that bodies like this have on reduction and results. Many times committees are too quick on the draw, 3 bad quarters, out they go and the reality is market psychology changes and once in a while there are managers whose process breaks or maybe was broken, look at AXA, look at the mess they've made of their process, but the reality is that market psychology changes, quality goes out of favor, quality goes back into favor, low volatility goes out of favor, low volatility goes into favor. Basically if you want to moderate volatility, all volatility is, is the rates bouncing off, you want to moderate volatility, you want to have lots of different ways about thinking about investing. If you put all your eggs in one basket and something goes wrong with that basket, you just got a horrible looking return. The trickiest thing in the world is to look at this as a portfolio and just say, yes we're going to look at what's inside the box, but we're not going to obsess about what's inside the box, we're going to focus on how the box behaves. If you look at domestic equity, look at large cap domestic equity, performance has been pretty good.

Gerry Cruz: Intech does typically well in periods of high volatility. Terry Dennison: Yes. Rosalie Bordallo: Okay, having said all this, how long do you wait? Yes I understand you're going to go a cycle to see if they don't pull out, now if the cycle lasts 5 years and everybody else is doing fine, except for him, do I wait 5 years to can him? Terry Dennison: It's not the passage of time, each one of these managers has a style and one of the things we look at is in fact in our data base, we ask our researchers to describe the kind of market environment where they'll do well... Rosalie Bordallo: Right and I think that's why I said a cycle, I didn't say time in a sense, I said if the cycle lasts 5 years, then am I going to wait 5 years... I'm talking if there's a market cycle and if this is the market cycle where they're suppose to do well and they don't do well, then is that... Terry Dennison: Then out they go. If they're in a period, when we do the search you'll see, they'll be --- in markets with strong momentum meaning the same stocks are doing well time after time after time, this manager will under perform, they don't do well in momentum markets or they don't do well in low quality

markets. Basically the psychology, they don't last more than 18 months or 2 years, the market is pretty fickle, we've had periods where it was 4 markets in a week; quality is in favor, quality is out of favor, risk is in favor, risk is out of favor. So 5 years, what I'm saying is, these guys haven't been around that long (since January 2009).

Gerry Cruz: I think the other issue was in changing our managers, we went through this when we changed out Oppenheimier where we just fell, we didn't believe in the process by which they were picking stocks, they were deep value and they were buying... Rosalie Bordallo: Well there was also that they were quacking like a duck, but they were saying they were not a duck. Gerry Cruz: That was part of it, but I just didn't like how they managed.

Terry Dennison: Now the last one on that page is interesting. Metropolitan West, these guys are creepy good. In those periods there are a lot of different market cycles, there's a lot of different psychology, there's a lot of different ways of thinking about it and I'm sure you all saw the movie The Matrix? There was a scene in The Matrix where Mr. Smith was starting to shoot at Neo and he would just bob back and forth, that's what these guys are. If you look at their performance, they're adding huge value. Look at calendar year to date, down 0.9, market down 5.1, the one year up 19.1, market up 16.9, relative returns, not just 1<sup>st</sup> quartile, mostly 1<sup>st</sup> decile, these guys are really good. They are probably, not just in terms of performance, but in terms of ability to be consistent in the top 5% of managers. It's almost too where nobody should be as good as they are, this is such a hard game to win, it is such a hard game to be consistent, to add significant value regardless of the market psychology. Yes they bought Apple and Apple has done very well, but the reality is, they didn't do this all with Apple, they didn't do it by these stocks they bought during the small period where they can buy what they wanted to. This is a very hard game to win, performance consistency is very tough and there's always somebody who is magical and these guys are almost magical.

Let's look at page 78 and quickly go through the international managers. Fisher who has had their ups and down, is in the down swing, the good performance they racked up a couple of quarters ago now has slipped and again a quarter does not or even a couple of quarters make a long record, they can reverse that, but clearly they're lagging a little bit, they only missed the benchmark by 50 basis points, but that put them in the 88th percentile for the quarter. If you look at them for one year and 3 years, they're still doing very well, their one year they almost doubled the benchmark 44<sup>th</sup> percentile.

Dimensional, we've talked about them in the past, they're never going to be spectacular, very rarely be spectacularly good, nor be spectacularly bad. If you hold, even if you don't weight them exactly index like, if you hold 70 or 80% of what's in the index, you can't get too far from the index, but they add value pretty consistently across the board, they're a solid contributor.

In the emerging market space, Capital Research, we saw what happened with emerging markets, we broke the chain of them just minting money, but they did protect us a little bit, the index was down 8.4, they were down 7.5, that put them in the top 3<sup>rd</sup>. If we look at them for longer periods, for one year they almost matched the benchmark, the numbers read, but they missed it by 30 basis points on a base of 2,000 basis points, 68<sup>th</sup> percentile, 3 years saved us money, reduced our losses, 28<sup>th</sup> percentile. Since we hired them in August 2006, they're 310 basis points in front of the benchmark. Gerry Cruz: I know initially how much money we funded them with, but how much extra money did we give them? Terry Dennison:

A couple of quarters ago we pushed that up. Gerry Cruz: Do you remember the dollar amount? Rosalie Bordallo: I think it was 10... Gerry Cruz: So they're still in the money. Terry Dennison: Yes they're in the money. If you think about it, since inception they're 310 basis points ahead of the benchmark.

Fixed income basically lagging, again I think in no small part of this is 2 factors, one the fact that even though these are aggregate mandates, many people with aggregate mandates couldn't go up to 10 or 20% high yield and those managers who could and took that high yield route, they're skewing the distributions, so when we see rankings like Franklin in the 79<sup>th</sup> for the quarter, 94<sup>th</sup> year to date and Davis Hamilton Jackson 81<sup>st</sup> for the 3 months and 82<sup>nd</sup> year to date and poor performance for even longer periods, a good part of this is that high yield effect. Now of course if we go into another decline, high yield is going to become toxic if you still held it, it's going to become bad again and as we saw in 2007 and 2008 where high yield probably lost 50, 60% of it's value in a couple of quarters. Gerry Cruz: Should we change, is it time to take a look at changing the complexion of our fixed income managers, because we have them all basically trading the same style... at one point we did. Terry Dennison: We're kind of locked in by the statute, basically there has to be investment grade, the interest coverage factors pretty much lock you into investment grade relatively high quality. Doris Flores-Brooks: Are you advocating a change in law? Terry Dennison: Well the answer is simple in my mind, the more flexibility we have, the more opportunities we have to avoid risk by diversifying enhanced 146 returns, you can swim with one hand tied behind your back. From a simple opportunity perspective, the more opportunities we have, the more levers we can pull, the more dials we can set, the more options we have, the higher the probability of success.

The last thing we're going to look at is bottom page 79, real estate; again this is our one major diversifier, the one thing that takes us away from bonds and stocks. You can see, obviously we had a tremendous rebound from the depression period, if you look at the one year return, even with the small negative returns in 3<sup>rd</sup> quarter, the one returns are near 60%. Both the managers we have are doing frankly very well. Security Capital in particular is doing extraordinarily well if you look at them on a relative basis they slipped out of the first decile, but they're still in the 1<sup>st</sup> quartile and adding value in up markets and down markets and of course in a down market you add value by losing less. Gerry Cruz: They don't take any physical, they just trade off. Terry Dennison: These are securities, they don't have any buildings, they basically buy real estate investment trusts which are securitized real estate and frankly that's the way to do it. There are a lot of pension plans got heavily into the separate account real estate and you read about all of these deals, PERS wrote off a couple of billion dollars that they had invested in an apartment complex in New York, there were pension fund money in this giant development in Las Vegas, it's just sitting there in the city, it was suppose to cost \$2.3 billion dollars and they stopped construction on it, it's just sitting there rotting in the sun. Separate account real estate is, you can make a lot of money and you can lose a lot of money, it deteriorates, it's a physical asset, you have to keep it up, it's illiquid, when you have to get out of it it's hard because other people have to get out of it, there's a cue to get out of it, the fees are high, the headaches are large. This is the place to be, you could get out of the securities and get your money in 3 days, you could be out of them tomorrow afternoon and have your money in 3 days and you're still benefiting from real estate, that's the way to do it.

We're now seeing an article in Wall Street Journal that you've heard about what are called strategic defaults where homeowners whose house is worth less than their mortgage is you just mail in the keys, you know see it in a commercial real estate and it's much more logical in commercial real estate because it's not your home, you don't live there. If you own an office building and its worth less than the mortgage and its cash flow negative, just walk away. So I don't even think we've seen the worst of, it's called commercial backed securities, CMBS crash. We've pretty much seen the worst of the residential mortgage backed securities, but I don't think we've seen the worst yet with the commercial mortgage backed security problems. This year and the rest of 2011 you're going to see a lot of CNBC have to be rolled over and a lot of these deals are just completely un-bankable, there's no way to roll these deals over.

(End of DB Plan Quarterly Performance)

## **Defined Contribution Plan**

### **11:00am-11:45am DC Plan – Quarterly Performance**

#### **1. Quarterly Performance**

Terry Dennison: Go to page 8, it's under tab 2, this is under the DC Plan performance report. Not surprisingly with the market behaving the way it did, the assets fell. This is the first quarter, we've got a good fix on the participation in the life cycle funds and I would say, obviously this is partly of the way your funds were mapped, but in terms of what the general belief is about how investors should invest in these sorts of plans, you go straight to the top of the class. The sense is that life cycle funds, where there is professional management of the asset allocation and the asset allocation becomes more conservative as you approach retirement is far superior than the average participant trying to make their own investment decisions and partly again because of the mapping. If you look at the top 5 funds in terms of asset size, it's the second bullet under the 401(a), huge allocations to the appropriate life cycle funds. So what this has done is it has moved participants out of trying to be their own chief investment officer and I think nobody can for-tell what the market is going to look like, but I think your participants now are much better invested than before we made this move.

There's only one recommendation on page 10 and that is to eliminate the balance fund, which is the same as terminating the Dodge and Cox Balance Fund. The point is, we're not suggesting getting another balance fund. The balance fund was there to provide a multi-asset class fund, it's now completely redundant, its role has been taken by the life cycle funds now. The life cycle funds are much better because the asset allocation for the life cycle funds is based on age, it's rolling down the glide path as you approach retirement it has got multiple different types of assets in the fund. The balance fund is somebody's idea today of what the right mix is between bonds and stocks. We needed to have it when we had the old target risk funds, but now as we state here, this is completely superfluous, now there's a fair amount of assets in it, if you look at it, about \$10 million. Rosalie Bordallo: But here is my question, an employee still has the right to allocate his own assets, it's not like you're required to go into a life cycle fund even though they're best for you, you still have that option. Gerry Cruz: It's a default option now and members have the ability to go in and make changes as they see fit. Rosalie Bordallo: So if you're removing out funds as an option, is that fair to them, to those people that don't want to go into a life cycle fund? Gerry

Cruz: But the Dodge and Cox is a replica of one of the life cycles, it's redundant to the life cycle. Rosalie Bordallo: Right, but what I'm saying is if I'm not in the life cycle fund and I choose to do my own allocation, there's no redundancy because I'm not in the life cycle fund. Gerry Cruz: But you could put the portion of the balance funds into a life cycle fund. Rosalie Bordallo: You're saying there's a redundancy because you're in the life cycle, but you would have to be in the life cycle to have the redundancy, if you're not in the life cycle funds, then there is no redundancy for you. Gerry Cruz: There is, there still is that redundancy. In other words, if you want to get that same kind of exposure and return profile as you would with the Dodge and Cox, you would move that money, that allocation, not your whole allocation, but what you have in the balance fund into a life cycle fund, which is better managed. Rosalie Bordallo: But again, what I'm saying is, you do have people who do not want to do that and you take away that option. Gerry Cruz: So the point then is, in the process of removing this option, those assets need to be moved into a like investment which would be the redundant fund, that life cycle fund. Antolina Leon Guerrero: You're right Rosalie (Bordallo) that those that are in this Dodge and Cox Balance Fund would no longer have that option, but they would have something that's equivalent or better and you would give them the choice and tell that that, we're eliminating this option, but here's another option that's equivalent or better, or you can always move it somewhere else. Gerry Cruz: But what I think I'm hearing from Terry (Dennison) is that it was good at the time, before we had the life cycle funds, but the life cycle funds now provides just as good diversification, but is enhanced because it changes over the life of the fund. It's an enhanced balance fund. Terry Dennison: It's a multi-asset class fund where the asset allocation evolves as you approach retirement. The usual procedure and this happens all the time, you go to the participants, you say, we're eliminating this effective December 31<sup>st</sup> and you have until December 31<sup>st</sup> to reallocate your money, any money left after December 31<sup>st</sup> will be mapped into the age appropriate life cycle fund. You don't want to be giving them investment advice, you don't want to be saying, you ought to go to the life cycle fund because it's better, that's giving investment advice. The investor education is really the responsibility of Great West, you don't want to be in the investment advice business, because with that comes liability. As far as the appropriateness of taking it away, it's the responsibility of this Committee to present to the participants options which are in the Committee's view, fiduciarily appropriate and give them the best opportunity to create wealth. Yes you are making a decision on behalf of the participants by not making this fund available, but you made a decision to make emerging markets fund available and you made a decision really quite unusual to make a non-dollar debt fund available, you make decisions all the time. If you believe, it's your responsibility, your fiduciary responsibility to believe you're making the right decision, if you think the right decision is, participants are better served with life cycle funds than the availability of a balanced fund, you should take out the balanced fund. You have an option that's messy, but doable, which is basically you can say, you can't put any more money into it and just leave it there and over time the balances will decline, but that's neither fish or foul, what do you believe, do you believe that it's in the participants interest to have a static allocation or a very minor change, it's usually 60/40 bonds or stocks and bonds. If this isn't a good fund now that you have better options for multi-asset class funds, leaving it there but not letting people add is a very funny fiduciary decision. We're saying, well we don't want to let people put more money into it, but we don't want to make people get out of it, but you want to give participants a window Rosalie Bordallo: You can't transfer it, you would have to give the participant an option and that becomes tricky, because you can't tell them where to transfer to. Antolina Leon Guerrero: I think the answer is, give them the option and if they don't choose by a certain date then it will automatically go to the default. Doris Flores-

Brooks: Isn't that what you've done in the past? Terry Dennison: If it's truly like for like, if we got rid of the large cap value fund, Winslow and put in another large cap value fund, there's no fiduciary issue, no DOL SEC issue for mapping like for like, but this isn't like for like. If we got rid of Dodge and Cox because their performance is no good and hired another balance fund, that's like for like, you would just give them notice so they can change if they want, you never do something without giving them an option, 6 weeks, 2 months, whatever, you can say, if you don't do something, it's just going to get mapped. This is not like for like, this would put you in a not good fiduciary position. Gerry Cruz: Could you transfer them into what we established as the default? Terry Dennison: But that's the age appropriate. That's what happens at the end of, when the clock runs down to zero, you have to do something, when an option is gone, the money has to be zero, but you don't just do it automatically, you give them the option to make the change. At this point I think from a fiduciary perspective, one, it's not a very good fund in performance, they've been on watch, the irony is Dodge and Cox is a great manager, we love Dodge and Cox, they're just not very good at doing this. Joe T. San Agustin: You just don't want to put them in the investment menu, you're just taking them off the menu, but it's still up to the individual participant to decide where they want to put those assets. Terry Dennison: So that is going to be an action item.

On page 12, Pioneer Emerging Markets, just for the record, we recommend terminating them, there's already a search which will be the next agenda item, but this is an action item. Joe T. San Agustin: Didn't you fire them already? Terry Dennison: We did a search and we're going to pick a replacement. This is formally we're terminating them to be replaced by whomever we choose with the next agenda item.

Page 19 looking at the compliance table, basically the worst of course if Pioneer, we're getting rid of them, the second worst is Dodge and Cox, we're getting rid of them, there isn't anything else that has got a bad history. The American Funds have under performed the index, but often by tiny amounts and they're still meeting the target for median performance so we're not terribly concerned about that. I think that's all we really need to talk about. One of the funds we just brought on the Champlain Small Cap Advisor Fund on page 23, really doing very well, starting off with some really decent numbers.

Okay, that's the key stuff you need to know.  
(End of DC Plan Quarterly Performance)

## **2. Emerging Markets Search Report (Replacement of Thornburg International Value Fund)**

Let's look at page 3, we're in the search report, the emerging market search, this is to replace Pioneer. We have identified a number of candidates, we did include Pioneer, the now terminated incumbent. Joe T. San Agustin: Looking at the expense ratio, of course Pioneer was very high and both Pioneer and Thornburg are the one's you want to get rid of? Terry Dennison: We want to go to a cheaper share class with Thornburg. There are 2 cheaper share classes, we are now in the R3 shares, there's an R4 and a R5 and the reason I asked if Alice (Tajeron) could come is, part of the reason they're cheaper is they provide less revenue sharing. Right now we're in an asset class that provides a lot of revenue sharing. Revenue sharing is a compensation from the Fund to Great West to pay for the revenue sharing to pay for the record keeping and there's a commercial decision here of Great West of how much



revenue sharing do they need. Gerry Cruz: Those are the 12B 1 fees, we get 100%. Rosalie Bordallo: No, I think it's a percentage, it's always going to be a percentage. Terry Dennison: The expense ratio that we show is for the share class that you're in which includes the level of revenue sharing that you're getting.

On this issue of share class let's use Thornburg as an example. Right now you're in the R3 share class which has an expense ratio of 1.45% and gives 70 basis points of revenue sharing. There's an R4 share class with 1.25 expense ratio, 125 basis points, so 60 basis points. R4 for Thornburg, I think actually this is in your book, go to your black binder, is her (Alice Tajeron) letter in there? So right now we're in the R3 share class, 145 basis points expense ratio, 70 basis points revenue sharing. There are 2 cheaper ones; R4 is 125, reducing the cost of participants by 20 basis points which is a pure increase of value to the participants. It reduces a revenue share in 10 basis points and then the R5 which has got a 99 basis points expense ratio, but only provides 20 basis points of revenue sharing. Again, there's a commercial issue here of how much revenue sharing is either Great West need or if the plumbing is more complicated where part of this is coming back to the Fund, do we blow up the commercial deal that we have here. Gerry Cruz: Our compensation to Great West is a percent of assets. Joe T. San Agustin: Which is what? Gerry Cruz: 20 I think, basis points, .24, so 24 basis points and we get 100% of the 12B 1's, that's my understanding, 100% comes back to us. Joe T. San Agustin: Isn't that part of the administrative expense? Rosalie Bordallo: I don't think so. I don't think it's ever been 100%, it's always been a percentage of the 12B 1's, a higher percentage comes back to us... Gerry Cruz: That's not what we negotiated. Rosalie Bordallo: Well then the dollar amount should be going up and not down, yes there's a fluctuation so we would have to see, but it does fluctuate, but the concern here is, you cut the amount coming to us, it becomes an out of pocket expense for the Fund, because the 12B 1's are what we're using right now to pay Great West. They actually send me a bill and we actually cut a check. Gerry Cruz: That's correct. I mean, the map was by design, the TPA Contract was suppose to be simple and it was a percent of assets as what we pay and we get 100% of the 12B 1's. Now you can net the 12B 1's against what we pay to come up with the net amount that we pay Great West, that's just accounting. Rosalie Bordallo: But how can you get 100% of 12B 1's when Great West is not the collector of all these mutual funds, 12B 1's? Paula Blas: No, I mean it's participant's share of the 12B 1's that comes back to our... whatever assets that we have... Rosalie Bordallo: Yes, but what I'm saying is, can they collect from Black Rock, the 12B 1's or Pioneer or Thornburg. Paula Blas: They get one big aggregate amount that they show on their clients, I guess, on the assets... Terry Dennison: Technically only Great West can get the 12B 1 fee, you can't, you can contract with Great West to have them simply give you the money they have, but you can't get it directly, because regulation 12B 1 basically said it's compensation for record keeping. So the Fund can't legally pay the Plan Sponsor, they can only legally pay Great West. You can contract with Great West to have them give you the money and send you a bill so the money just sort of goes back and forth, it goes to them then to you, then back to them. The net result here is somebody is going to lose money if we go, either the Fund or Great West, probably the Fund. Gerry Cruz: It's going to be the Fund. Terry Dennison: If you've got a fixed cost deal with Great West, if you go to R4, you are cutting your income from this, your transfer payment 10 basis points. Gerry Cruz: We increase the amount to Great West, we increase the amount that it's going to cost the Fund. Antolina Leon Guerrero: How about the expense ratio, that doesn't say that... Gerry Cruz: The expense ratio is a benefit to the member. Terry Dennison: Cutting the expense ratio is a benefit to the participant, which just to remind everybody what you already know is, you have a

fiduciary responsibility to get the best deal possible for the participants. You also do not have a responsibility to run this thing for nothing, so you are entitled to get enough money to run the program.

Great West has to get the revenue share (from 12B 1). Gerry Cruz: The mutual fund cuts the check to Great West, Great West then by our contract with them remits 100%, my understanding, I'm just going to use that as a basis, because that's my understanding, remits 100% of what they receive to us and then at the end of the month or at the end of the year, they will send us a bill for what we agreed to pay them. Rosalie Bordallo: They bill us quarterly. Gerry Cruz: Okay quarterly. We net the amount we receive... Joe T. San Agustin: It could be more than your 12B 1. Gerry Cruz: It typically could be, but the 12B 1 offsets... Joe T. San Agustin: Who pays the 12B 1 (the difference)? Paula Blas: We do. So far it's been sufficient enough to cover. Joe T. San Agustin: What about in the event it is more? Gerry Cruz: Then we pay, the Fund pays, the Plan Sponsor. Joe T. San Agustin: But where are you going to get the money? Gerry Cruz: Operations. Joe T. San Agustin: From what, what money? Rosalie Bordallo: I think he's (Joe T. San Agustin) just looking ahead, he's saying, in the event that you don't have money, your money is depleted that's in the DC Plan right now, what is your contingent plan to pay for the bill. Antolina Leon Guerrero: I guess the question is, where is the money going to come from? Gerry Cruz: Every year we allocate a budget for Plan Sponsor expenses. Paula Blas: Now you also have the forfeiture money. Gerry Cruz: The forfeiture money, all that stuff, 12B 1, forfeiture, rebates, refunds, revenue sharing, that's all offsets to what we pay Great West, we the Fund. If none of that came in, the Fund has to pay the TPA for doing their job. Joe T. San Agustin: Well we advanced it. Gerry Cruz: Exactly. We advanced it, but that money had to come from somewhere and that's the same kind of money, assuming all the other ones, the 12B 1's don't have... Paula Blas: It's more than sufficient. Gerry Cruz: It's smaller now, I can tell you than what it was before. Rosalie Bordallo: That's not the question in play here, the question in play here is, what is your contingent plan in the event there is zero dollars. Antolina Leon Guerrero: So where does the budget for the DC Plan administration come from? Paula Blas: It's charged to DC, it's charged to the DC Plan as an expense. That's all part of where that forfeiture money comes from, the revenues, all the expenses for the plan has been charged against that. Gerry Cruz: Yes, but that's all netted against, I mean presuming that nobody forfeits... I can just say this, before this new contract, we were paying \$1 million, we are now paying \$370,000, \$395,000 to be exact. Joe T. San Agustin: But where is it coming from? Gerry Cruz: Now it's coming from the operations of the DC Plan, because forfeitures and 12B 1's are sufficient to cover it. Before it was also coming from DC, but I bet you there could have been a period of time before when we out of operations had to cover it, because we were paying \$1 million.

(Break - end of 1<sup>st</sup> recording)

(End of discussion for DC Plan Quarterly Performance)

**1:15pm-3:00pm DB Plan Other**

- 1. Funding of New Managers**
  - a. Numeric Investors LLC**
  - b. Eaton Vance Management**

Terry Dennison: (On page 72), the target allocation, the range is between 5 to 15, the target is 10, we're at 5.7, so if we put all the money that's in the ETF into these 2 managers, we'd still be significantly under weighted. (There's a little easier to read table that's at the beginning, page 46 has the same information in the table form.) And again, the small cap long term should have a higher return partly from the illiquidity premium, partly from a higher risk premium, the issue is if we are and this is a tactic issue, if we are heading into tough economic times, small caps don't have as strong a financial base, they tend not to have a large group of credit banks, they probably don't have access to the bond market, they're probably not as well capitalized, so there's some risk there simply because of our present economic circumstances. Gerry Cruz: But currently we're 4.3% under our target. Terry Dennison: Right. Gerry Cruz: So if we just moved what is in that existing mandate and funded managers just purely based on what we have in that existing mandate in the ETF's, we would still be under weight by 4.3%. Terry Dennison: Yes. Gerry Cruz: So it would give us exposure and... Terry Dennison: You're getting exposure now, what it would give you is active management which we think is more appropriated in small cap space, so we're expecting the managers to add value so we should get a better return than the index. We're still under weight, but you're still within the target range given the uncertainty of the economy. Joe T. San Agustin: You may want to be under weight. Terry Dennison: Yes, we may want to be under weight, you're really under weight, I don't think I would want to throw much, I wouldn't go to target, I mean, if you wanted to move it from 4.5 to 6.5 taking money from some place else that's over allocated like large cap or fixed income, but as far as, I wouldn't go up to target, because I'm concerned about the state of the economy. Gerry Cruz: Okay let's just address that one first. So the question is, on the table, is whether to just continue our current under weight position in the U.S. small cap equity space and simply fund our new managers using the funds that are in that mandate which as of now... Terry Dennison: The Russell 2000 ETF. Gerry Cruz: Right. It's any where between \$64 and \$66 million I guess, depending on the day. Joe T. San Agustin: You want the entire \$64 million? Gerry Cruz: Yes, because we have 2 managers, Numeric Investors LLC and Eaton Vance Management. Paula Blas: Equally? Terry Dennison: I can't differentiate, this is not like what we had with the REITs, where there was one aggressive and one more conservative, we didn't give the aggressive one quite as much money, I can't differentiate between these 2. Paula Blas: You were recommending to just leave it at the current funding structure? Terry Dennison: Yes, I mean, if you wanted to bump it up percent, but it doesn't really do much, I'd just do this. Gerry Cruz: Let's just go ahead and to this. Joe T. San Agustin: Did you want to leave something --- at ETF? Terry Dennison: No because there's really convincing evidence that even in the intermediate term active management is better than passive in this space. The other thing is if we're really headed into difficult times, active management can avoid losers, so you can make an argument that passive in very bad times in rougher neighborhoods, passive is a really bad thing, because if the market says, we're going to hold this much and it's a crummy company and everybody knows it's a crummy company and it's not going to survive, the index fund is going to hold them. The active manager can say, that's a crappy company, it's going to go down, they get out of it, they can preserve value by avoiding losers as much as picking winners. Gerry Cruz: That's true. I think my opinion on passive management is it makes sense as an investment when there isn't much differentiation between an active and a passive manager, there's very little room for an active manager to add value, then you're just looking for lower cost. Okay, so we'll go ahead and do that. We will fund them using 50/50 out of ETF's into the 2 managers. Paula Blas: So full liquidation of ETF's and to fund the 2 new managers, Numeric Investors LLC and Eaton

Vance Management. Gerry Cruz: That's correct. The next item is, as far as funding of the new managers, that's it.

Relative to rebalancing, just to get it on record, we are under weight on some of the other mandates, in particular, the developed international small cap equity and also emerging markets, slightly in the emerging markets, not too much, still within the range, but under target. Terry Dennison: There's a small amount though, those numbers will change any given day by one percent. So we will just go ahead and keep them as is.  
(End of discussion of funding of new managers)

## **2. Revisit Asset Allocation Policy, and 3. Revisit Actuarial Rate of Return**

Terry Dennison: Item number 2 and item number 3 are inter-related. As I mentioned before, our sense is that and the idea was really --- by Pimco, Mohamed El-Erian who is their Co-CEO, of the idea of the new normal, that we're going to have a non-cyclical, a secular change to the lower return environment because of 3 factors, de-globalization, de-leveraging, and re-regulation and we've certainly seen the re-regulation. The de-leveraging is obviously happening both at the personal level and the corporate level, the only people that are leveraging up are the Government. So the sense is and one of the things that we do is look at forecasted future returns because when we do asset allocation, one of the key things what do we expect the various asset classes to do. I went through this morning a sort of thought process that has led us to begin to reduce our assumed future returns for domestic equity which had been about 8%, 8 for all cap and 8.2 for small cap, we're down to about 7.75 and I think when we're done, we'll probably get down to about 6.50.

It is very hard, if you remember how returns are built up and not every quarter, not every year, not even necessarily every 2 years, but long term equity returns have to be tied to corporate profitability, growth and profits. Corporates tend to be a fairly stable proportion of GDP's so you could use GDP growth as a surrogate for looking at corporate profitability increase. GDP growth which historically was in the 3's now is probably in the high 1's to low 2's on a going forward basis.

Inflation and I have a question for you, are your benefits indexed to inflation? Paula Blas: Yes. Terry Dennison: Okay, so you actually have an advantage, because if we had say, 5% inflation, remember the 4 things that go into equity returns, inflation, corporate profitability, dividends, PE change. If you had 5% inflation, it would be easy to get 10% returns on stocks, your total fund return would be easily 8, 9, 10, 11% a year. Now of course the money you pay out to the beneficiaries wouldn't be worth anything, but as far as actually being well funded, you would be in fine shape. So our problem, now it's different if like many public funds you're benefits are indexed to inflation, if there's a CPI adjustment in your benefits, then you are running on a treadmill, because yes inflation is increasing your nominal return, but your liabilities are increasing at the same time. In this case inflation can be very good for you. Now the problem is, we don't see any inflation, not for a while at least. So, if we're looking at nominal returns not adjusted for inflation, maybe you're going to see 6, 7, 8%, but on a real return basis you're not going to make your actuarial assumption. So, one of the questions is, what options do we have for looking at additional asset classes. If domestic equities are 6, 7 and international equities not much more than that and emerging markets may be 8 or 9 because they have higher growth, maybe as much as 10 because they have

higher growth, unless you are in a position to reduce your actuarial rate of returns significantly, we're going to have to go out and find some places that have got some significant return potential and some of them are going to be kind of on the wild side.

Gerry Cruz: There are a lot of options out there and maybe Terry (Dennison) can go into some of them. We should at least begin to explore, because I think Terry (Dennison) is right, we're going to be up against very limited options if we're going to stick to what we're doing now. I think we've pushed the envelope on what we can invest in. Joe T. San Agustin: That's the question that's going to be imposed on the public hearing tomorrow night. That question is going to come up, how are you going to keep with your benefits when your rate of return is like that, at what risk factor in the whole Fund would you be willing to, say 10% avoidable, you can lose, you can win... Gerry Cruz: Well I think at some point we're going to have to look at investments that we never considered, like that pass thru that we were talking about, the participation certificate, that's an option. Or, there was an opportunity that we had just within the last 18-24 months to invest in distressed debt... Terry Dennison: Distressed debt would be the archetypal example of a really good once in a long opportunity. Gerry Cruz: And we missed. Joe T. San Agustin: But we didn't have the authorization to do that. Gerry Cruz: No we don't. Joe T. San Agustin: That's what I'm saying. By definition, these opportunist strategies cannot be anticipated, so basically we can't plan for it.

Rosalie Bordallo: You know Terry (Dennison), right now there's no restriction against going into foreign debt, which is one of the things you were mentioning even on a small piece right now. Paula Blas: I think it's in the law. Rosalie Bordallo: Yes, it's already allowed. Gerry Cruz: I think in the larger scheme of things... Rosalie Bordallo: Yes, we understand, but right now anything we can pick up is better than waiting 2, 3 years down the line. Gerry Cruz: Sure. Terry Dennison: We could come up with multiple different scenarios, but they would almost all include asset classes that right now you are precluded from using.

Mr. Chairman, if it were possible to draft something that anticipated every opportunity, you just can't. Some of the issues are the issue specific requirements and we've got work arounds with basket clauses, part of the thing is we now have work arounds on work arounds to try to get some flexibility. We have much more flexibility, you saw in that chart how much more, not just sophisticated for the point of being sophisticated, but in terms of return generation and risk production, the asset allocation that it was in 2006. In 4 years we've gone from basically owning 2 kinds of things and being completely dependent on the behavior of those 2 kinds of things to being able to diversify into asset classes that don't go up and down like everything else, but I think the opportunistic investments, some of these could involve the "H" (hedge) word. The reality is, if you look at hedge fund performance in 2007 and 2008, hedge funds lost money in 2007 and 2008, they lost half as much money as equities did.

I'm going to talk a little bit about, there's 2 presentations in here, one called "Defensive Equity Strategies," which is to really address your concern that you expressed in an email to the Board and to me, (it looks like everything is going to hell, what should we do) that's paraphrasing what you wrote. But clearly if you believe that the market is going to go down, if you give the manager the ability not only to reduce their allocation to equities, but actually take a short position versus equities, you can reduce the losses significantly. People do it all the time as an excuse used by teenagers and others to justify bad behavior. The reason why

I wanted to have this discussion or I think it's appropriate to have this discussion is, we can figure out if we should re-weight or change the weights in the existing structure and there's another presentation in here, the one "Constructing Global Equity Portfolios," which going to argue for, moving away from allocations to U.S. and non-U.S. towards global allocations where you've given the manager the ability to go out of the U.S. into international or vice versa depending on where the opportunities are and a larger allocation to emerging markets. That's what constructing a global equity portfolio comes from. This is a result from an effort that we've been working on globally which is the reason why I was in London for 2 weeks, called, "Best of Mercer," where basically we got a group of people together from all over the world and sat in a room for a week and a half and talked about what is our absolute best idea and that uses things you can do today, you could do global equity portfolios, you could do increased emerging markets, you could do global small cap, there's nothing to be problematic.

Gerry Cruz: Could we peel away a portion of our existing allocation and just dedicate it towards that? Terry Dennison: Yes. In a perfect world, what I'm suppose to say is, you should put all of your equity money into global equity allocation and do away with U.S. and non-U.S., that distinction doesn't have much meaning anymore. The world is very globalized, if you look at industries, General Electric competes with Siemens in Germany, it's a global world. Gerry Cruz: That's true. So you have several different managers... Terry Dennison: You'd have multiple managers, but you could simply give them a global mandate, you can invest anywhere in the global world. Gerry Cruz: So you just have a handful of managers and say... Terry Dennison: Sure. That you could do today. Joe T. San Agustin: Are we authorized to do that? Terry Dennison: Yes you are. Joe T. San Agustin: So it's just a matter of changing the tactic? Terry Dennison: Yes, you're just changing the tactic, you're basically saying, rather than the mandate is invest in U.S. equities and other managers have mandates to invest in the non-U.S. equities, the mandate is any place in the world. They still have to meet all the tests that you have in the law. Rosalie Bordallo: Yes, but can we do that legally because you have a contract that specifically states that the mandate is U.S. large cap growth... Terry Dennison: New mandates, potentially new managers. Rosalie Bordallo: But what I'm saying it's within the contract...

Gerry Cruz: What I'm hearing, we may not be able to use the line up of our existing... Rosalie Bordallo: Right, so we would have to put out a RFP's. Terry Dennison: Yes. The index you'd probably use is called ACWI, All Country World Index and ACWI, just to make sure you don't think we're investing in all sorts of crazy places, is about 45% U.S., because it's capitalization weighted and the U.S. market represents about 45% of the developed world. So the ACWI is basically 45% U.S. and 55% Europe, Japan, Australia, Canada. Gerry Cruz: And this is equities only? Terry Dennison: It's all equities. Gerry Cruz: So you just have one benchmark and so when we're doing evaluations, performances, and so forth of performance, we're comparing them all. Terry Dennison: They all can go wherever they think the opportunities are. If you look at the performance, right now partly because and I think it's a good restriction that we tell the managers, in fact we had an interesting fight, that's about the word, with Eaton Vance about the proportion they can go to cash. Right now we ask our managers to be 95 or more percent invested. Suppose you have a U.S. mandate and you think the U.S. market is going to hell, what are you going to do. If you knew for example that Japan was going to be terrific, would it make sense to allow people to go to where the opportunities are and avoid the places where the opportunities aren't. Right now you are basically asking these managers to find the least bad place to invest.

We talked about information ratio, which is basically the ratio of 2 numbers. There's another way you can look at it and it has embedded in something called "breadth" and breadth is the number of decisions you allow the manager to have and you add value by having as many decisions as possible and adding value with each one of them. So, the more levers you let them pull and the biggest lever of all is U.S. and non-U.S., if you tear down that wall and let them go where they think the opportunities are, now if they get it wrong, they get it wrong, but the reality is right now if the U.S. market for its own reasons, too much debt, political mess, whatever, does poorly relative to Europe, we have twice as much money, three times as much money in the U.S. than we have in Europe and the U.S. managers will do the best they can, they will try to beat the benchmark, they will be down 18 when the benchmark is down 20, well why not some place that's down 10 or zero or up 10. That you could do today. That's not going to get you from 6 to 8.

You don't have to be doctrinaire about it. Met West is obviously brilliant, you just have a little, it's called a side car. You have a big global equity allocation and you have got Met West because they're terrific, why fire a manager who's always in the first decile and adds value all the time. But, if you look at the Fisher's and the Atalanta Sosnoff's, they muddle along, sometimes they add value, sometimes they don't. They only people getting rich are them.

This you could do without having going back to our friends down the road and change anything, because this is completely within your, this is just a change of mindset. Wilfred Aflague: Could this be accomplished not through an RFP, but through an amendment to a present contract? Terry Dennison: The problem would be that the managers who have skilled domestically, now there's 3 sets of skills, right now if you're a domestic manager, you're Atalanta Sosnoff and you know everything about the domestic market and you have skill at that, now you need to have skill of managing stocks of other places and most importantly, deciding is this place more attractive than that place. So it's unlikely, I haven't looked, I'm not even sure Metropolitan West even has a global product, Fisher may... typically the international managers have global products because it's easier to add the U.S. piece to an international capability than it is to add an international piece to a U.S. capability.

Gerry Cruz: Is there information about how this model has worked, is it in here? Terry Dennison: There's material in here. Let's go quickly through the global equity presentation and I then want to go through the defensive equity presentation, because I think that would be of particular interest to the Chairman because I included this in response to an email that I alluded to earlier.

Turn to page 3, the reason we got together to think about this and again this is called "The Best of Mercer," it's a group of about 15 people around the world that think big thoughts. Right now investors have different approaches, they have domestic and non-domestic, which is what you have. They have regional and global, they might have U.S. or North America and Europe or they have different indices, capitalization weighted indices where the proportion of one country versus another changes based on the market capitalization where they have fixed weights, where some percent of the monies regardless where the market return is, they re-balance to keep that fixed weight and we wanted to think about what we know in terms of best practices, how do we improve this process.

I'm going to skip through some of these pages, but one of the questions is partly involving, how do we make this accessible to all of our clients that have different asset sizes and different governance capability. So what this presentation is going to do and some of this gets pretty technical, but we'll try to ease the technical piece of it. If we turn to page 5, first of all we think and can demonstrate, we expect higher returns from 2 places that are generally under weighted in most client portfolios, emerging markets and small cap. In fact I would say as I looked at your portfolio, that you're further along in this line of thinking than many other institutional funds are. You've got international small cap, you've got emerging markets, so you actually have been moving over time in this direction. Obviously the more attractive higher return strategies, emerging market and small cap can be volatile. Remember emerging markets would sometimes go up 50% and then down 50% the next year. Had you been able to get in there a year earlier, you would have doubled your money.

One of the issues is if we simply add high expected returns and some more risky asset classes, do we have too much overall risk in the portfolio. So we wanted to look at adding low volatility or defensive components, which is what the presentation is all about, to reduce the overall portfolio volatility, to reduce the risk. We'll talk about what those are, some of those are investing in quality stocks. Quality stocks are brand names, General Electric, Microsoft, quality companies and excluding, basically recognizing you're not going to get as high return on the upside, but you're also not going to lose as much on the downside. Investing in more dividend paying stocks, because dividends are more positive money before the gain even starts. Something called minimum variance, which is a mathematical technique to structure portfolio to produce the minimum possible amount of volatility. What's called various bias long short, which okay, they're hedge funds. Basically what they do is they have variable allocation to equities. All of your strategies right now are between 95 and 100% equity. That's a requirement, they're all fully invested. A variable bias means if the manager thinks that equities are going to go down or not be as attractive, they might cut that allocation to effectively 50% equities or 40% equities, take some of the equity risk off the table and they do this by going short the market. So what they'll have is 100% long and then add another component that's 60% short. Gerry Cruz: Same manager? Terry Dennison: Same manager. So basically their net exposure to the market is 40%, so if the market goes down 10, they're down 4. Absolute return strategies basically say, we're not interested in beating a benchmark, we don't want to be down 18 when the market is down 20, that's not success for us, success is not losing money. So instead of a benchmark that goes up and down, the benchmark is zero. We want a return higher than zero, we want to minimize the possibility of a return less than zero. Now what that means is, you're not going to be up 27% in a year, you can't get that, but if you could be up 7 or 8% every year, you'd trade for, you wouldn't trade that to be up 30% in one year and down 20% the next year. So an absolute return strategy is basically one that's constructed to minimize the possibility of losing money. Joe T. San Agustin: At the same time getting a return to meet your benefits. Terry Dennison: Yes.

Then looking at more active use of, we already do this of course using active management and inefficient markets that's why we went to active and small cap, we've already used dynamic asset allocation, we made the decision about funding REITs, remember we held back funding the REITs because we thought they were over valued, reserving capital and then putting the money in. We've got this graph on page 6 where basically we say, we want to balance the additional risk and return of small cap and emerging markets by having a defensive component. We'll talk about how that defensive component works.



We've actually have 2 views of what we think people should do. The first is the Mercer view and these again are the best of Mercer, it's our best ideas, which is intended for the average client, the one who's not a sovereign well fund, one that doesn't have liquidity issues, or one that has liquidity issues, ones that have to live in the real world. Then there's one that's called "the Mercer frontier view," which is for people who have already gone part way, further than you have and don't have liquidity issues, like a sovereign well fund that isn't paying benefits and is much more aggressive. So if we look at the sample Mercer view, this is just a sample, basically if you look at the MSCI World Index, which is like the ACWI Index, it's a measure of the world, that index on a capitalization weighted basis is 53% North America which is U.S. and Canada and we think that number should be below that, it should be like 42.5. Emerged Europe, this is Germany, France, the UK, Switzerland, the Netherlands, the like, right now represents 31% of the market index, we think it should be lower, 25. Similarly Japan should be below, Japan would be reduced. What you see is, emerging markets ought to be 15% of total equity. You're not that far from that, not total fund, total equity and an allocation to small cap, so you've come part way with this, but this is an allocation of where the dollars are. We think it should be much more looking at these global mandates where you basically don't have whole market and non-whole market. The generic way of talking about U.S. and non-U.S. is whole market and non-whole market. So the Mercer frontier is even more aggressive, you can see it's got half the allocation to North America and half the allocation of emerging Europe and a much higher allocation to emerging markets and small cap and the volatility is balanced by having 20% allocation to low volatility strategies.

Gerry Cruz: Low volatility strategies, what are some examples of that? Terry Dennison: Let's interrupt this and go to the other presentation. I think this is important to think about. If we go to page 3 on the other presentation, it makes the obvious statement, "even a diversified exposure to growth orientated strategies is likely to disappoint in some periods," like 2007 and 2008. We can, by including a defensive oriented strategy, we can mitigate that risk of under performance. What we're looking for in our defensive strategies is beta; beta is a statistic that is a measure of the degree to which a portfolio reacts to the market. A beta of one, 1.0 means that if the market is up 10, it's up 10, if the market's down 10, it's down 10. A beta of .5 means if the market's up 10, it's up 5, if the market is down 10, it's down 5.

So I'll use the phrase "beta one" and basically what that means is it works just like the market. Systematic low betas, so basically not having beta one, but having beta of like .7, so it isn't, it's simply constructed of stocks that aren't as volatile as the market. So that's where you've got quality, that's where you've got high dividend payers, you're not looking at momentum stocks, you're looking at consistency of growth, you're looking at the consistency of earnings. There's some statistics we'll get to here that shows how attractive looking at stocks that have got consistent earnings growth actually is. Not only is it a strategy that's less volatile than the market, it's actually inversely correlated with emerging markets, it tends to go up when emerging markets go down, which is a very attractive characteristic. Obviously we're going to give up something here, we will under perform in up markets, but we should do better in down markets, we will still lose money. The only way to avoid losing money is somebody going short, a hedge fund or basically you are holding negative market.

There are ways to do this without having to go all the way to the hedge funds. You've seen the chart on page 4; page 5 is what I wanted to show you. This basically is a map of where

strategies live. Equity market beta again, one behaves just like the market. A beta of zero means the return is completely independent of the equity market. There are actually not many asset classes that are completely independent of equity return as people discovered. To get negative beta, means you are short biased, you've got negative market position, now you're talking hedge fund... but there's a space we call low beta, it's in the dotted box. Basically what you're looking at there is stable quality, quality companies. So you're avoiding the growth ones, you're avoiding the ones with the fancy names, you're looking at consumer products, Gillette, Procter & Gamble, very stable earnings, very stable growth in earnings, strong franchises, good balance sheets, they're not going to be superstars, but they're not going to go broke, people still shave, people still eat, most people still wash their clothes. Basically these do not have the level of economic exposure. Now you're also not going to have them double, they don't double, but they don't fall by half either.

Yield strategies, again if you buy companies that pay high dividends, utilities, other companies that basically... and companies try to sell themselves to the market, this is sort of classic thinking, they want to be attractive to the market, because that increases the stock prices, it makes the share holders happy, it makes the management happy. They can do it 2 ways, they can either grow so that their earnings are attractive or they can pay high dividends. If you can't grow, if you're in a business that just... I'll use Gillette, basically Gillette, they compete with Schick and other razor makers, but basically it's the number of faces, arms and legs in the world that determine how much they can sell. So that's a lot more stable, so they're not going to grow very fast, so they tend to pay high dividends, because that would make them attractive to investors. Now collaterally, high dividends are good for you, you need cash flow really bad, so not only does this have the benefit of having... and these are household names that are not going to be doubled, they don't do fantastic things, but they pay their dividends, they generate their earnings growth, the stocks are much more stable, they tend to go up like this instead of going up like that, but they also don't go down like that. So that's where yield strategies and quality growth strategies fit. Now at the high end you got small cap, tech stocks, private equity, emerging markets, so the object is to have a balance. If you want to have small caps and emerging markets where we think the growth opportunities are, we think there's much more growth opportunity in small cap and emerging markets than in the developed world. The developed world is a pretty sick place. You've got this incredible irony that frankly India and Russia and China run their economies better than the U.S. and France and the UK. They have very little debt, they basically are exporters to world, capital is flowing into them, they have much more stable currencies than the rest of the world has got. You've got the irony that these countries were 15 years ago, you didn't want to drink the water, now run their affairs better than most of the developed world.

So the idea behind the defensive strategy is to be largely in that square box. Now you could do quantitative minimum variance under your rules, you can do yield strategies under your rules, in fact the dividend requirement that you have is directly focused on the yield strategy. Yield strategies are hyper conforming to your dividend requirement. Quality stable is no problem; long only absolute return is no problem. Variable beta long short is tricky, because that's a hedge fund, they're shorting the market which I don't think you can do. You can do much of what's in that box. Now the trick is it's really hard to write an RFP for these things, because these aren't products like large cap growth. There are some products that are explicitly minimum variance, but it will be challenging in your acquisition rules to do these, because you're not looking at a simple name like we're searching for an international value

fund, you're looking for a fund with a particular style with investment and a particular characteristics and the problem you're going to get is, everybody's going to say, oh yes, that's us. So it's going to be very hard to not be flooded with people who aren't the right... Joe T. San Agustin: --- concentrate on results ---, how do you measure that? Terry Dennison: This one is going to be a lot more judgmental, it's going to be, yes these people are doing this and no these people are pretending they're doing it, they're telling you they're doing it because they want to be in the search, everybody wants to be in every search, but if we're going out and looking for a minimum variance manager, they're probably 15 products in the world that are true minimum variance strategies. Joe T. San Agustin: This is based on past results. Terry Dennison: Yes, but it's more than past results; it's how they manage the assets, what their thought process is. Minimum variance is, and we'll get further into what that means, but it's not just 2 words strung together, it's a whole way of thinking about how to invest. So that's kind of what we're looking at.

Page 6 is interesting, basically the 3 different kinds of low volatility products, a philosophy such as, focus on quality stocks, dividend paying stocks, structured approaches that are minimum variance, which is a mathematical technique, it's a little like Intech in that there's actually a formulated process that they go through (and you'll have to smile at this) partially invested equity strategies, otherwise known as balance funds, but not balanced funds that are 60/40, but one's that actually take up a more dynamic debt. If they don't think the equity market is attractive, they'll buy bonds. If they don't think the equity market or the bonds are attractive, they'll do cash.

Gerry Cruz: Just on a bigger picture, if you get several managers who invest in global asset allocation, how do we avoid having a portfolio whose complexion is all the same, if they're all measured by the same benchmark? Terry Dennison: They all arrive there by different paths, one manager will do top down country versus bottom up stock, one of them will be growth and the other one will be value, they might break down cap size differently, one more focused on large and another small and just because you have the same benchmark doesn't require you do it the same way. It's going to become, here are 5 managers that's not going to be, who has the best numbers, it's going to be which 3 managers played well together. Gerry Cruz: So is there a line up of managers that do this? It's substantial, just tweaked their product to look like they do it or are there managers who said, this is what we want to do and focused on that? Terry Dennison: Yes. Typically they're quantitative, very mathematically oriented type managers and this is something we're spending a lot of time with because we think there's a real need for these minimum volatility strategies. The world is getting too dangerous to just invest the old way, you can get hurt too bad and if you get hurt too often or too big, you're out of the game. If you don't have great funding and you have a 20% loss, you may not ever be able to recover that. To try to earn your way out of that kind of hole will take you forever. We're putting a lot of analytical work, not just in the U.S., but around the world on this whole issue.

Let's turn to page 8 and look at why we think that some of these factors are valuable. Notice the scale on the left hand side, which is beta and remember 100% of one means it behaves just like the market, 180 means it's 1.8 times as volatile as the market, 20 means it's only 20%.

Now turn the page this way, what we did here is look at a number of factors we have and you saw the factors in those charts we looked at in the search where we have those bars, some

value, some growth. These are the factors from style research and you can see that for example if you use high debt to equity as a factor to manage your assets, at the low end you're maybe down to a beta of .8, but at the high end, you're a beta of 1.35. The one's we circled particularly and we'll spend some time with this, earnings growth stability, if you buy companies that have good score on earnings growth stability, you can't even get to a beta of 1. This is a very, very low volatility strategy and think about earnings growth stability, what that means is, the companies earnings are just growing at a pretty consistent rate across time and if you had that kind of score, you just couldn't get a volatile portfolio, it is almost absolutely a minimum variance strategy and in fact at the low end, you're at about a beta of .6, so if the market is down 20, you're only down 12.

Some other scores that work well, return on equity, only at the very top end of that score you get to a beta of one, at the low end, you're down to a beta of .5 and dividend yield and return on equity, the combination of those 2 factors and dividend yield plus earnings growth stability, also very attractive. So what we'll be looking for is strategies that are basically looking at factors that produce low volatility portfolios, portfolios whose volatility is significantly less than market volatility. The object is to get good upside return, not full market return, but not have big negative returns when the market goes down. The object here is to balance the increased risk of allocations to emerging market and small cap; it's a way of managing total portfolio risk. You can see these factors, if you're looking at, IBES stands for Institutional Brokers Estimate Service, that's forecasted earnings growth. If you are building your portfolio based on a forecasted earnings growth, you're going to have a real volatile portfolio, because if they make the earnings, they're going to go up a lot, if they don't make the earnings, they're going to go down a lot. So that first factor, IBES earnings growth is going to get you a portfolio that's 20-30% more volatile than the market and the object is, we're looking at a portfolio that's 20 or 30% less volatile than the market. So that's the theory behind the factor based minimum volatility portfolio.

There's some interesting couple of graphs on page 9. One of the factors is high levels of earnings growth, meaning the earnings are up 20% a year and what this bar shows is in any given period, "t" say 35% of the companies are exhibiting this factor, 20% earnings growth. The next year, "t+1," more than half of those companies aren't doing it anymore, they're not growing at 20% a year. In "t+2" the 3<sup>rd</sup> year, half again of those companies aren't producing that level of earnings growth and by the time you get to "t+10," 10 years out, almost none of those companies are growing.

So this factor doesn't make you money, in fact if you look at page 11, it shows for February 1989 to December 2008 the sort of inverse of the rapidly growing companies, the earnings growth stability, the companies that just grow a little bit every year. If you look on the lower left hand side, again, this is a long period, this is February 1989 to December 2008, so this is about 5 market cycles, the earnings growth stability is the factor that we think is the most valuable. Percentage of up-markets with positive excess performance, only about 50% or 40%, so it under performs in big up markets, but in down-markets, it has positive excess performance, meaning it's beating the benchmark 80% of the time, that's a pretty good trade off, we don't give up much. On the right hand side, this is percentage of the time when it happens, if you look at the right hand side, excess return in down-markets, we lose a little, the blue bar is down, but look how much we gain in the up-markets, I'll take that trade any day, give me 4 times the protection on the down side than what I give up on the up side, that's a really attractive trade. This is simply buying stocks that exhibit this characteristic of

earnings growth stability, meaning that frankly, if we get back to nursery rhymes, these are the turtles. You can see that 3<sup>rd</sup> set of bars, that 2<sup>nd</sup> one from the right hand side, the trade off, I'll give up that little blue loss in order to get that big red benefit any time.

Another interesting factor, remember the whole object behind the minimum variance is to balance the risk (go to page 10) of emerging markets and small cap. What we're doing here is we're looking at the behavior of earnings growth versus emerging markets and notice it looks like a dot and we drew a line through the dots, that's a mathematically fitted line and notice it leans backwards. What that means is, when emerging markets are down, earnings growth stability is up. So it literally has got a negative correlation with the --- of emerging markets and if the object is to minimize the volatility of the portfolio, having this characteristic is fantastic, because basically when one under performs, the other one over performs.

If you look on page 13, this is a summary of quality. Quality stocks have exhibited greater stability, and/or higher profitability. Quality signals, in particular the most defensive signals, such as earnings growth stability, have historically exhibited lower beta, just what we're looking for. They have also offered offsetting characteristics with emerging markets, in terms of relative performance against the broad developed markets; they actually give you a benefit versus emerging markets, which is the perfect thing we are looking for.

The next section here is minimum variance. If you look at page 15, these are strategies that target returns similar to the market index, but with less volatility. They're fully invested, so they're like what you have now, they're long only, they don't use leverage, they don't short securities, they're not hedge funds, they're nothing that would cause you a problem with your existing laws. They target low beta stocks and biases toward low risk segments such as healthcare in Japan, so again, they're global strategies. Healthcare is a relatively stable sector, Japan is a relatively stable country and they employ, when they say sophisticated, it's really sophisticated diversification techniques to help reduce the volatility over time. What we show there the theory is and that little envelop, that blue funny shaped envelop is a whole series of possible portfolios and one of them is capitalization weighted and it looks like the index. The idea behind the minimum variance is a portfolio with the same level of return, but with lower risk. It is simply constructed of different things a different way, nothing you can't own, but it's constructed using techniques most people don't use.

If we turn to page 16, minimum variance portfolios use quality stocks and yield stocks. They allocate to companies with large allocations of cash on their balance sheets. They have much more defensive characteristics, the economy goes bad, they don't run out of money and they also represent takeover targets. Takeover targets are almost free money, because if a company gets taken over, typically the stock goes up 40 or 50%. They avoid high volatility stocks because they're subject to blow ups. The thing we want to avoid most of all is a blow up, a company that is doing well and all of a sudden they report down earnings and the value falls in half. The way to avoid them is to stay out of high volatility stocks. They have a very low risk appetite, they look at relative returns when volatility is the highest, when the market is going crazy, they don't get crazy.

If you look at the third sub bullet under minimum variance, they actually did a study based on some data from a study that went from 1968-2005 and actually Bill Haugen is my graduate advisor when I got my MBA, it was --- in 1972. Basically they constructed minimum variance portfolios and what they got was return of 6.5% over the risk free rate

with a volatility of 11.7% versus what you would get in the market which is less return and much more risk. So if you use these minimum variance tools, you actually get more return and less risk than what the market got and that's a pretty long period to having achieved this.

We graph that on page 18. The market portfolio is what was returned in this study, 1968-2005, again a 5.6% return with a risk of 15.4%, that's an information ratio of about .3, not terribly attractive. If we can constrain it to produce the same return, 5.6%, the volatility drops to 11.9% so we're basically getting the same return for less risk. Or we find the absolute minimum variance portfolio, it's got more return and substantially less risk. You wouldn't want to do this for the whole portfolio, because we're taking a return that doesn't really represent everything the market could do, but as a counter balance to riskier strategies, this looks pretty attractive.

The other presentation is really making the argument that you already heard for emerging markets and small cap. Again you are actually quite a ways towards what we think a best of Mercer global equity portfolio should look like, but we really think that we should look at these minimum variance strategies, because what it will allow us to do because again, this is all focused on getting your actuarial assumption, allow us to dial up the risk with small cap and emerging markets and maintain the same level of portfolio risk. (Remember the little teeter-totter?) We're going to put more money in small cap and emerging markets, but we're going to control the total portfolio risk by allocation to minimum variance.

The actuarial rate of assumption was not my idea (Mr. Chairman), obviously somebody was asking a question about that. Joe T. San Agustin: We need to talk about the actuarial assumption, a figure that is targeted just to figure what is going to be the contribution rates. Paula Blas: It's usually linked to somewhat to what are investments expected rate of return is going to be. I believe the last time we changed or revisited the actuarial rate which is now 7, (remember when Rich came in) we were looking at what the expected rate of return would be, at the time it was around 6 and we were at 7 and a half, so the Board decided to roll it back to 7 at that time. So based on what we expect our rate of return to be over a period of time is what we're going to determine the actuarial rate to be. Joe T. San Agustin: Over the years the actuarial rate of return, assumption of the rate of return is really tied into making that minimum return to meet your benefits because you don't have – principle and what's happening is, you're moving that actuarial rate of assumption based on what you think we should get and what we should be getting to make your payments. Terry Dennison: 7% is pretty conservative, that's not a bad number. Joe T. San Agustin: But 7% of returns are not enough to meet the benefit payments. Terry Dennison: Because you are under funded. You're applying the 7% to half as much money as you should have. Joe T. San Agustin: What I'm saying is, because we're under funded, we need to strive to get funded, otherwise you jack up the rate of return, which you can't. Terry Dennison: You can only take what the market gives you. Joe T. San Agustin: But then you have to make it up by the contribution rate. What is the unfunded ratio? Paula Blas: Our security ratio is about 49. Joe T. San Agustin: So that's why that keeps, if it goes up to 60%, that could in effect could reduce the contribution rate. That's why people are saying you have a more beneficial retirement structure than any other retirement, very generous, really when you look at the benefit structure that we have.

Paula Blas: A couple of things that we didn't address on the action items that I just wanted to make sure that we did, one of them was when do we want to fund these new managers. Do you want to do it before September 30 or after the fiscal year ends? Rosalie Bordallo: Can we request that it be done at the beginning of the fiscal year? If we fund them now, it will take a couple of weeks, so then you're going to have them come in September and then you're going to go into closing, but their activity is going to have to be part of the fiscal year versus doing a clean, from an audit stand point, Diane and I have discussed it and we would prefer October 1. Terry Dennison: For administrative convenience I think it makes sense to do it October 1. Paula Blas: Your operations, you're asking for \$5 million for payroll? Rosalie Bordallo: Usually when we liquidate, we always take advantage and hold back a couple of million more. We don't need the \$5 million now, but usually when we do a big liquidation, we like to reserve and that will reduce our need to try to liquidate further out. Terry Dennison: The problem is we're right at the floor with small cap, it's under weighted. I understand staff's need to have money to pay benefits, I'm not arguing that point, but I think it would be better to maybe pull it out of some other places that are over weighted. Rosalie Bordallo: Okay, no problem. We would probably pull it from the large cap equity area. (End of discussion)

### **3. Revisit Investment Statues - Amendment to Section 8150**

(This item was deferred for discussion at the August 27, 2010 Board Meeting.)

(End of DB Plan Other Discussion)

### **3:15pm-4:15pm DB Plan - Northern Trust Presentation**

Robert Ernst: If I may, what I thought I'd like to do is spend a few minutes talking about the Northern Trust. As you know we started as your Custodian in October 2008, which was a very interesting time in the financial markets. We have been serving as your Custodian for almost 2 years now so I thought what I'd like to do is give the group a quick update on the Northern Trust and an overview of who we are, but then from there what we'd like to do is spend a bulk of the time talking about securities lending, which I know is something the Fund had done previously and was something that was intended to use when they first transitioned the assets to us, but obviously with the market conditions at that time, I think it was a good opportunity to step back and wait for the markets to settle. So really what we would like to do is spend the bulk of our time taking about securities lending and present to you a proposal that we feel mitigates the potential risk to the greatest extent possible, while still allowing the Fund to enjoy financial benefits of participating in securities lending.

So with that, I turn your attention to the first set of slides that we have here, referenced the Northern Trust overview, as I said I'd like to spend a few minutes talking about the Northern Trust. If you turn to page 2, what this slide is intended to represent is the fact that Northern Trust has a very focused business model, we essentially have 2 businesses that we're in. The first business is providing custody and investment related services to corporate and institutional investors, funds like yourselves on a worldwide basis and our second line of business is providing personal financial services to wealthy individuals, mostly in the mainland of the United States. Related to both of those 2 activities, we have asset servicing which we do for you and we also have asset management capabilities. The bulk of what I

want to focus on today is related to the asset servicing, but you could consider securities lending kind of crossing over the lines of asset servicing and asset management and we'll certainly get into greater detail there. You can see that we have \$3.6 trillion in assets under custody and just over \$6 billion in assets under management. So we certainly are a global player, we're one of the main global custodians in the market today.

Turning to the next page you'll see the scale of different services that we provide to our corporate and institutional clients. If we start at the bottom of the pyramid, the asset processing, that's essentially the custody and safe keeping of your assets and that's what we've been doing for you for the last, almost 2 years, so it relates to safe keeping of your assets. We work very closely with the investment managers that you hire to settle their trades, we collect the income, post corporate action, so do all of the custody related matters that the Fund needs or that the investment manager needs in order to manage the assets on your behalf.

Moving up the spectrum, I'll skip over asset administration, but when we get to asset reporting, this is the asset investment accounting, performance analytics and other reporting capabilities that we're currently providing the Fund. We do that through an online application that we refer to as Passport, which is a web based application that is used here by staff and it offers quite a bit of flexibility in terms of accessing the information about your portfolios and about the Fund itself. Joe T. San Agustin: Is that the only way we can access, through the Passport? Robert Ernst: We also send hard copy reports, but our preference for the most part for our clients to want to access the information online, that tends to be what most clients enjoy. While some still like hard copy, we're still equipped to provide monthly hard copy statements, both investment accounting as well as performance measurement report related, that we continue to do for you as well. Joe T. San Agustin: Do you have any hard copies Rosalie (Bordallo)? Rosalie Bordallo: Yes I do, I get them monthly. Joe T. San Agustin: The reason why I'm asking is because I've never seen it. There should be some sort of overall reporting, not necessarily the detailed accounting transaction. Rosalie Bordallo: We could provide you and we can show it to you.

Robert Ernst: Moving up the spectrum, we have asset enhancement capabilities, which we'll talk about shortly, which mostly relate to, in your case, securities lending activities, which is an opportunity for the Fund to lend it's assets and take on some incremental revenue that you wouldn't normally have otherwise. We also provide cash management capabilities, we are managing in U.S. dollars, cash that's held across your various portfolios, currently that's registered in a U.S. registered mutual fund that is managed by the Northern Trust.

On the top of the pyramid we have our asset management capabilities which include the wide range of investment management capabilities, again, not a topic for today, but it's important I think for you to understand that we can offer those capabilities and frequently do for our clients.

If we flip over to the 4<sup>th</sup> page, you see that we really have a global footprint. We operate in the 3 main regions of the world, in North America, head quartered out of Chicago of course. Moving eastward, we have a large presence in London, we also have client servicing offices in Stockholm, Amsterdam and Dublin and various other activities across the continental Europe. Moving further east, we get into Asia Pacific where you see we have offices across the region. Bangalore serves as a 3<sup>rd</sup> operating center for the Northern Trust, so we are



essentially operating on a single operating platform 24 hours a day and we essentially pass the book across the regions, if you will. What we don't get done in Chicago or what doesn't get done in Chicago gets passed to Asia then it gets passed to London and that's true across a broad spectrum of the activities that we provide to our clients.

Moving on, I think the next couple of slides talk about the Northern Trust financial strength and I think it's important for everyone to understand that the organization is a very conservatively managed organization. We have continued to perform very well financially, although of course with the financial difficulties over the last 12 months, we haven't been immune to the difficulties, but we weathered the period quite well. So again, you just have some basic information about our performance.

On the 6<sup>th</sup> page you can see our credit history really is unsurpassed and the long term credit ratings that we have been able to achieve and maintain, so I think again it's important to recognize that we are a very stable organization, very conservatively managed and we continue to perform well in these market conditions.

The 7<sup>th</sup> page really speaks to our global operating model which I referred to a few moments ago, where we can pass the book around the globe and take advantage of the different time zones. We have clients worldwide, all operating on a single operating platform, so the system that we use to support our clients in North America is the same system that we use to support our clients in the Asia Pacific region, yourselves included and it's the same platform that we use for our clients in the Middle East and in Europe.

The next few slides really just talk about the importance of information and our ability to deliver information to you. Again, mostly online through our system called Passport, but its information that really gives the staff here whatever information they may need on a day to day basis. The information is updated nightly so when they come in the next morning they have current information as of the previous business day. We can certainly at whatever point, provide additional training to any of you if any of you are interested in using our systems we could make it available to you as we do the staff here.

The last page is trying to get across the point about giving you the tools to help you manage and monitor your risk. We have the technology to deliver that information to you and we have the talent around the world to be innovative and to support you as your needs may change and that's true across all of our corporate and institutional clients.

So that's just a real quick overview on the Northern Trust. This other document that you have in your package is just this 2 page document that talks a little bit about the Northern Trust from a slightly different perspective. We grade ourselves in a number of ways and one way in which we grade ourselves is what the industry and our peers are saying about us. You can see a number of the recent awards that we have received again on a global nature. The second way that we grade ourselves is on what our clients tell us and if you turn over to the 2<sup>nd</sup> page you can see that in our last client survey that was done in the early part of 2009, 94% of our clients tell us that we are meeting or exceeding their expectations. We believe that's a very important measure in judging how well we're servicing our clients, how good of a job we are doing in protecting our clients assets and giving you the information that you need on a day to day basis.

The other fact that I will currently draw your attention to is the fact that we're working with 31% of the top U.S. public funds. I work within the public funds group in Chicago, so my other clients are U.S. public funds and that is the group from which you are being serviced, so you are able to take advantage of the developments that we make available to this very important client base in terms of regulatory reporting, accounting reporting and other innovations that we roll out to the market place. So again, just a few quick highlights about who we are as an organization and the work that we provide to the Fund as your Custodian. If there are any questions on that, I'm happy to entertain those now, otherwise I would suggest that we move straight into the presentation on securities lending.

Joining us on the phone is Justin Miller. Justin Miller works for Sunil Daswani who I think some of you have met; I believe Sunil Daswani was here for one of the presentations that we made for evaluating our services. Both Sunil (Daswani) and Justin (Miller) work from our London office. I have Justin (Miller) on the phone to talk us through our presentation booklet that we prepared for you, we're certainly happy to entertain questions as we go through and if we need to go faster or slower, we're happy to do so. If we're ready to get into the securities lending presentation, I'll turn it over to Justin (Miller).

Justin Miller (via conference call): Thank you all for agreeing to talk to us today. Before I begin, Sunil (Daswani) did want me to pass his apologies for not being able to be present today. A little introduction of who you are talking with, as Bob (Earnst) said, my name is Justin Miller and I've been with Northern Trust now for 8 years. I started in Chicago by working in various operational roles, I moved to Hong Kong where I was a securities lending trader on our equity desk there and I recently moved to London in the relationship management working within the securities lending business. Today what I thought we would do, on slide number 2, the table of contents, just look at securities lending on an overall view, just to make sure that everyone in the room is up to speed on what securities lending actually is, what our program looks like, we'll talk about a tailored solution that we've designed for you, look at our reporting briefly and then summarize the conversation. As Bob (Earnst) said, please feel free to interrupt me throughout the call and ask any questions that you have and I'll go from there.

Turning to slide number 4, securities lending defined, what is it, what are we doing here and most general terms is, securities lending is where you as institutional holders agree to lend your securities to borrowers such as Goldman Sachs, Morgan Stanley, Merrill Lynch and it is a temporary transfer of your securities for a fee and against collateral. That is the most general term. Looking at the parties to the loan, obviously you, Northern Trust as the lending agent and the borrower, there is a re-investment manager placed for clients who elect to take cash collateral; however as we go through the presentation, we put together the proposal where you won't pay cash collateral, so that party will not be involved in the loan. As I said, it's a temporary transfer, it's a full transfer of title so you do lose your right to vote in any of the proxy votes; however at the same time you do maintain all economic benefits, whether it's dividends, a stock split, any other corporate action, the borrower's obliged to manufacture all of those economic benefits back to you. You or the investment manager may sell a security at any time and at which point we will recall the securities and likewise the borrower can return the security at any time. Are there any questions about that? Robert Ernst: No, carry on.

Justin Miller: Moving on to slide 5 just looking at how things work. On the left hand side we have Government of Guam Retirement Fund and all of our other clients, we currently have 467 clients in the program; Northern Trust sits in the middle and then on the right side is the borrower. Overriding all of our relationships we have different legal agreements in place, with our clients we have securities lending authorization agreements where you authorize us to lend your securities and with all of the borrowers we have borrowing agreements where we've laid out the terms of how we lend to the borrowers, what they are obliged to do. On a day to day basis our traders around the globe will be talking with our borrowers either on the phone, with Bloomberg or we have automatic links to the borrowers where the borrowers will come in and look for securities or we'll go out to a borrower and say we have this security available for loan, we'll negotiate terms of the loan including collateral we'll accept, the date that it's going to settle, whether or not it's going to be some sort of term in element to the trade, for example, does the trade have to be up for 14 days or more often than not, it's on an open basis and by open I mean a borrower can return at any one time and you can recall it at any one time. Once we have agreed to terms we will move the collateral or the borrower will move the collateral to us and then we will move the securities, so at any one time you're always collateralized through this one transaction. On a daily basis we have teams around the globe that are looking at the value of the loan outstanding versus the value of the collateral that we have against that borrower and marking to market so that you are, as I said, always collateralized with the transaction. At the end of the loan either through a sale or the borrower no longer needing to borrow that security, they return the security and we return the collateral.

In the middle, Northern Trust --- we are looking at a custom Fund for you where we're only going to take in non-cash collateral. So, the re-investment manager at the bottom of this slide wouldn't really apply, we would take in the non-cash and just hold it in our custody, we don't --- it out, we just hold it until the loan is finished. Rosalie Bordallo: Could you give an example of a non-cash collateral? Justin Miller: Non-cash collateral is what we're proposing, it would be what we see the Triple A rated Government debt, so we're looking at the Government debt, the U.S. treasuries, the UK, Austria, Finland, Germany, France and the Netherlands. That's all we're looking to do initially. We understand what risk profile you have and we didn't think that adding cash at this time really made sense given the portfolio you had. More often than not you would be taking in U.S. treasuries. Robert Ernst: I think the other thing that I'll add to that is the issues that you would have undoubtedly read about over the last 18 months, essentially since the collapse of Lehman Brothers, most of those issues related around the re-investment of cash collateral. So our proposal to you is to take that risk and Justin (Miller) will get into this in a minute, but our proposal to you is to take that risk off the table and only by accepting non-cash collateral, we further reduce your risk exposure and I think make it a program that I think you would be more comfortable in participating in, but again, I'll let Justin (Miller) get into the further details in the presentation.

Justin Miller: Any other questions or are we ready to move on? Robert Ernst: Go ahead. Justin Miller: Moving on to slide 6, I just wanted to give you an overall highlight of our program. As I mentioned before, we have 467 clients participating around the globe, these could be U.S. public funds or Commonwealth funds or central banks and those clients represent approximately \$630 billion of lendable securities. As of the end of June, we had just under \$106 billion out on loan. On average we will have anywhere from 15-25% out on loan at any one time across the book. We lend in 49 different markets worldwide, that's

equity and fixed, we do have a 24 hour trading platform, where our day starts in Hong Kong, we have spoke to London then in turn passes it to Toronto and Chicago. We're working with 40 approved counter parties at this point and you will see the further details on these counter parties alone, 38% of which have the double A minus rating or higher as rated by S&P, 57% are single A or higher and 5% have a triple B plus or higher and that 5% really is Numera and they are primarily in the program because of their demand for Japanese equities. All of our top 10 borrowers have a single A rating or higher, they are very large organizations around the world, our top 10 are Morgan Stanley, Goldman Sachs, Royal Bank of Scotland, Barclays, you can see the whole list there, we are lending to those large institutions. We are not currently lending to hedge funds, that's not something that we've done in the past, not to say that we won't do it in the future, but that's not part of our program right now.

Through our program clients have the ability to restrict borrowers or put a cap on the borrowers. For example if you have significant exposure to one of the borrowers in our program and you just didn't want to add exposure, you don't have to lend to them and you can just restrict them at any time or if you want to limit their program or their ability to borrow from you, you just put a cap in place.

Just finishing off here, our collateral structure as you would expect, we did have more collateral than we had out on loan and that was because these products that we carry have a margin of either 2 or 5% on all of our loans. So if there aren't any questions, I will move on to the tailored solutions. Robert Ernst: I think we're good, carry on.

Justin Miller: Slide number 8, this is an investment product, there are risks involved, but you take a number of different steps to mitigate those risks. Looking at the slide, there are 4 key risks involved in a lending program, the first 2 being borrower risk and trade settlement risk apply to all clients regardless of the type of collateral they take. The bottom 2 risks, cash collateral and interest rate risk only apply to those clients that take cash collateral. Now as Bob (Ernst) was saying earlier, this is where you would have heard a lot of noise over the past 2 years; however the proposal that we're putting forward today is to eliminate those risks. We're really not going to highlight them or talk about them other than to say that they are there should you ever in the future look to take cash collateral. Looking specifically at the borrower risk, this is the risk that there will be a simultaneous default of the borrower and the collateral that they have pledge. Now in your case, this would be in the proposal that we're putting forward, this would involve the default of one of the OECD triple A rated Government and the borrower at the same time. While that's a fairly far fetched idea, it's not possible that one of the Governments could default and of course that's what we saw with Lehman Brothers, it's not possible for a borrower to default; however there are numerous different steps that we take to mitigate that risk. The first step starts with the approval process of the borrower. We have to go through, review the borrower on a very granular basis and make sure that the bank is comfortable including that borrower in the program. On a daily basis, we monitor the borrower, on a quarterly basis we make a presentation to our senior credit committee and then again on an annual basis we're presenting the borrowers in the program to the senior credit committee to make sure that we remain comfortable with the borrower and remain comfortable with the limit that we have set to those borrowers. On a daily basis as I mentioned, we are marking to market all of the loans that we have out to each borrower. We do have borrower default ---, so if a borrower goes into default, we have laid out in our securities lending agreement what we will do to make ---.

In your case I looked at the authorization agreement that we signed and it indicates that if a borrower defaults or a borrower filing, we will replace securities for you.

The risk analysis we are measuring what the borrower is borrowing against the collateral that we are holding. I'll go into a case study about the borrower here in a minute, but I also wanted to touch on trade settlement risk. This is effectively if we have a loan out on a security and your investment manager decides to sell, there's always a chance that sale could fail if we cannot allocate the loan to a different client or if the borrower cannot return it in time to settle your sale. Now historically speaking, 97% of all loans just reallocate to other clients, the 3% that we do recall we found that just about 2001, so a long history, under 5.1% of loans actually fail due to securities lending, so there's a very low probability; however it's still important to know that there is this risk associated with participating in a lending program.

We do offer trade settlement protection where by we will compensate you for the interest on the proceeds of the sale at your short term, your stiff rate from settlement date until the trade actually settled. Those funds are credited on a monthly basis. We do have a number of risk mitigating factors in place that will help mitigate your risk. If there aren't any questions, if not I'll just talk about what happened with Lehman Brothers.

This is on slide 9, when Lehman Brothers was raising difficulties back in the end of August 2008, to the beginning of September 2008, our senior credit committee along with our credit analysts had highlighted the issue. What we did was we reduced credit limits to Lehman Brothers. They've cut them from the program, but what we did was look at our exposure and reduced the limit to them. At the same time we spoke to Lehman Brothers and Lehman Brothers Inc. in the U.S. and Lehman Brothers International in Europe had said that all loans regardless of what the market standard is, we want 108% collateral, so 102 went up to 108 and 105 went up to 108, Lehman Brothers agreed to this so we were happy keeping them in the program. The last thing we did was impose trading limits for our traders, so if Lehman Brothers came to us and said, we need to borrow \$300 million, \$500 million, whatever it is a very large amount of securities in one day, we would have said, hold on, we would have been concerned with that it could have been a leading indicator that someone else had cut them from their program, but we wanted to ensure that weren't taking on additional loans while other people were cutting out Lehman Brothers. We all know Lehman Brothers International Europe was placed into administration on the 15<sup>th</sup> of September, which was a Monday morning, we immediately liquidated collateral that we held on behalf of Lehman Brothers International Europe and began the replacement process for all of our clients. 95% of those securities were replaced within 2-5 days, the other 5% took a little bit longer and in some cases we did credit our clients back with cash. Lehman Brothers Inc. at the same time was not placed into default or did not go into default, but what we did was we recalled all securities from Lehman Brothers Inc. This was on a Monday, by Thursday, the 18<sup>th</sup> of that week, Lehman Brothers Inc. had stopped turning securities, so we at that point called them into default. Now over 70% of our loans to Lehman Brothers Inc. had been returned already and we just started the process of liquidating collateral and replacing our client's securities. None of our clients lost any money as a result of the Lehman Brothers borrower default and so the risk mitigating steps that we took in the beginning of increasing our collateral margins, reducing our credit limits and imposing trading limits proved to all be very successful in that our clients remained whole and we actually had to return collateral to

the administrators of Lehman Brothers International in Europe. Any questions about the case study? Robert Ernst: No.

Justin Miller: I want to move on to talk about Northern Trusts overall non-cash collateral program. In our program we take in OECD Government debt and their agencies, selected number of equities and as well as certificates of deposit. We collateralize the loans at 102 and 105% and we offer clients a variety of different collateral options, whether it be a collateral pool or custom fund, we have the ability to accommodate all requests. So what we're proposing today and I'll get to this in a minute, is we'd like to operate a non-cash collateral custom fund for you, where by even though we accept the OECD Government debt, we're just going to look at the OECD triple A rated Government debt, so if you imagine a risk, our view at the far left hand side, the lowest risk of this type program, there's no risk involved, but still it's at the lowest risk program. We have programs that our system will monitor collateral daily to ensure that the collateral that you set up in the legal agreement should you agree will still meet your requirements of being triple A rated. I mentioned before, but just so you are aware the countries involved at this point and the list can always change, but it is Austria, Finland, France, Germany, Netherlands, the UK and the U.S.

Moving on to slide 11, lending for Government Retirement Funds, now Government Retirement Funds include all clients that are similar to yourselves, in the UK pension funds or local Government or in the U.S., other U.S. style public funds. What we would like to do, this is more sharing knowledge of what we've already seen for clients similar, is focus on the intrinsic value of the portfolio, so by eliminating or not accepting cash collateral, we're just going to look at which securities are going to generate the most return for you and not be chasing yield on the cash collateral side. We'd be looking at a custom fund, but you have the ability to look at the collateral that you're going to accept and customize it. All of our exclusions, obviously as I mentioned before, all of our clients can include borrowers or put caps in place for those borrowers and then just look at other various different collateral options. In the future maybe we'll look at accepting equities or other OECD countries, but at least in the beginning we thought, let's go on the most conservative side and only take in the OECD Triple A rated debt.

What we're proposing here is really what we've seen from clients over the past couple of years where they've reviewed their program, they made changes to what they're accepting, maybe in the past they accepted the full set of OECD countries or they accepted equities, but they reduced their risk profile and that's what we're trying to share today, this is what they've done and this is how we're moving forward.

If we flip to slide 12, we've completed a revenue analysis for you based on holdings that were given to us in Q2 and we estimate that based on your total portfolio of \$1.2 billion, \$920 million would be lendable. Gross revenue we projected \$860,000 U.S. dollars and annually. Your net revenue is \$600,000 based on the 70/30 fee split that we agreed to in the past, which translates into a gross basis point return of just over 9.34 basis points. The non-cash collateral would be the triple A rated OECD Government debt and based on your portfolio, it's going to be mostly treasuries for the U.S. equities and then for the global portfolio it would be a mixture of the non-U.S. countries that I talked about before. We're suggesting that you put on a total portfolio cap, so your lendable base being \$920 million, we're saying, let's put a total cap on the portfolio of \$300 million so you know that at any one time the most that could be out on loan is \$300 million. If you were to look at the gross basis point in

a slightly different way, the gross basis point return of the lendable securities or the securities to be made available to lend would all of a sudden go from 9 basis points all the way up to about 27 basis points, so there's significant amount of return that could be generated from participating in the program. If we take it even one step further, we're saying, let's put a borrower cap in place so no borrower entity could take more than \$50 million of securities from you. While we are comfortable with all of our borrowers, this is what we've seen some of our similar clients doing over the past 2 years and we thought, we'll still be able to maximize the return of the portfolio, but we're going to be minimizing exposure to anyone not ---, so that's where the \$50 million comes from. The total net revenue from all of this, what we project based on the portfolio would be just over \$600,000 per annum. The risk involved, the borrower going into default, we put an indemnity in place for you and the trade settlement, we would be reallocating approximately 97% of all sales. The collateral is highly liquid, the most liquid collateral or liquid market in the world being the U.S. treasury market, that would be a majority of your collateral. We would do a custom fund as I mentioned, whereby your deciding what goes into or what we accept as collateral and there's in our view, meaningful returns based on our evaluation.

Are there any questions here? Gerry Cruz: I do have some questions. The \$600,000, the total net revenue, is that based on the total suggested portfolio cap at \$300 million? Justin Miller: Yes that's correct. Gerry Cruz: Just so I understand correctly, you're suggesting or this suggestion is that the total amount of lendable securities would be capped at \$300 million? Justin Miller: Yes. Gerry Cruz: And that the further condition is a maximum of \$50 million to any one borrower also becomes a cap? Justin Miller: Yes, that's correct. So your total lendable that would be in the program would be \$920 million, roughly speaking, but we could only lend up to \$300 million at any one time. Now we think that generally speaking, that's going to be in Q2 right around April, May, June period, right around when the global portfolio will be more in use, which corresponds with what the European dividend --- is. We think the \$300 million would allow for the maximization of return to the portfolio. Gerry Cruz: That's based on our portfolio complexion as of August 10? Justin Miller: Early August.

Robert Ernst: Now we do understand that you do have a couple of changes coming up, which could potentially have an impact, but once we know exactly what you are going to do, we could certainly do a re-evaluation if that was something that you would be interested in. Gerry Cruz: The change I think would only increase the size of lendable securities, because it would be taking it out of ETFs into actual managers. Robert Ernst: The ETFs are lendable. Gerry Cruz: Okay, then I suppose we will need to do an evaluation. Could you speak more about the indemnity agreement that you brought up? Justin Miller: I think it's important to highlight, we could do another evaluation, however regardless of the changes you make, it's hard to project exactly what securities are going to trade special in a market at any one time, so we make a projection based on the current holding, but over the course of 12 months, different securities could trade special.

Gerry Cruz: But we're just on a queue Justin Miller: Yes, you would be placed in a queue whereby all of our assets, all of our client assets are brought into what is called one big lendable space, \$630 billion and then the queue takes over so where you're participating in loans, you get points which will determine the --- that's running the queue will determine when you get placed in the next loan and the next loan and so forth. The indemnity to answer your question there, it basically says if and when a borrower goes into a default, we

will take the collateral, or when the borrower files for default, we will take the collateral, we will liquidate it and replace the securities that were out on loan. If there was a shortfall, if the collateral moves in the wrong way, the loan that you had out is more valuable and the collateral becomes less valuable, that is Northern Trust's risk. In all likelihood, by taking in treasuries and lending our equities, if a borrower goes into default, the equity markets are more than likely going to decrease and the treasury market or the Government fixed income market is going to increase. We would be in a position or we expect to be in a position where we have excess collateral and that's what we saw with the Lehman Brothers default. Did that answer your question? Gerry Cruz: Yes. Joe T. San Agustin: I just want clarification, securities that are lent out to the borrower in the case of default, you are saying that you would recall that security and you would replace it with your own to secure that outstanding debt?

Justin Miller: If a borrower goes into default, we will take the collateral that that borrower has pledged to us and use it to repurchase securities that were not out on loan. Joe T. San Agustin: In other words, we will redeem our securities back. Justin Miller: You will get the securities back, yes. Joe T. San Agustin: Redeem back and you will replace it with another security to sustain, to support the defaulty loan. Robert Ernst: If you had 1,000 shares on IBM out on loan, we're going to replace in your portfolio 1,000 shares back. Joe T. San Agustin: Basically we will redeem it in the event of default, is that the indemnification there, is that part of the agreement? Robert Ernst: We did execute a lending agreement at the time that you executed your custody agreement with us and we've had up until now set it aside, but it is ready to go at whatever point you make a decision to go.

Joe T. San Agustin: The thing I'm not comfortable with is the redemption of securities on a borrowed default. Rosalie Bordallo: Can I ask a question, when you lent out my 100 shares of IBM, I received collateral of say, 100 shares of Exxon, could that happen? Or in this case it would be a U.S. security bond. Justin Miller: It would be a U.S. treasury of the value of the loan, so that 100 shares of IBM let's say is worth \$1,000, we take in \$1,000 of U.S. treasuries. Rosalie Bordallo: Okay and so now the borrower goes into default and can't give me back my IBM shares, you're going to take that treasury that you took on my behalf and sell it and then turn around and buy somewhere my IBM shares and put it back into my portfolio. Joe T. San Agustin: That's what I mean, it's redeemed. Justin Miller: Exactly. Rosalie Bordallo: The redeem is U.S. Treasury note or the collateral to get the money and buy the same item that I had lent. Joe T. San Agustin: Who picks up the collateral: Rosalie Bordallo: The borrower, you, you lent him the share, he gave me... Joe T. San Agustin: Actually the borrower used me as a security for his loan. Rosalie Bordallo: No, he gave me U.S. treasuries in exchange to borrow shares.

Robert Ernst: Justin could you maybe give a brief explanation of why borrowers borrow securities? Justin Miller: There are a variety of different reasons, but one of them would be, they might have a proprietary trading --- that sold too many shares in the market and they need to borrow securities to settle that sale, so if they don't have that excess securities in their account, they go to the lending community, Northern Trust, borrow the security and then before their sale is due to settle, use the securities that they borrowed, settle their sale and in some cases they'll return the security and they will just hold on securities. Now I failed to mention, as part of this, the borrower agrees to pay you a fee. Joe T. San Agustin: Which Northern and us share on a 70/30 basis. Justin Miller: Yes. You receive 70% of the revenue and Northern Trust receives 30% of the revenue. Other reasons that borrowers look



to borrow is, they hedge or they have clients that have hedge funds who want to borrow securities for hedging purposes. They may want to --- a security because they're going --- a different security, there could be a convertible bond arbitrage or a dividend arbitrage that's available in the market and therefore they need to borrow a security. So there are a variety of different reasons, but a majority of them are really focused on the arbitrage opportunities and settlements of sales that they've placed or their clients have placed.

Gerry Cruz: We initially chose a collateral option, I forget what it was, it was so long ago, but I think it was the most secure option. In any rate, it's not an option anymore, so my question is, how does this compare to what our initial collateral option was? Robert Ernst: The original proposal did include a cash collateral option, but what we have seen over the last 18-24 months is a lot of concern amongst are clients about the re-investment risk and if you look at the issues the lenders such as yourself faced over the last year and a half, aside from the Lehman bankruptcy, as Justin (Miller) was trying to explain, we covered our clients, everyone was whole and no one lost money in that scenario, apart from that where the risk had been over the last 18 months was with the re-investment of the cash collateral. So our view is to take that risk off the table and give you a more less risky program by only taking on cash collateral. Yes, we could take cash collateral, that would be another option. Potentially might increase your opportunity for revenue, but I think that we thought that at least initially, structuring the program this way gave you the least amount of risk possible while still enjoying the financial benefits of being in a lending program. Justin (Miller) would you add anything to that? Justin Miller: In the collateral section that you chose was the core collateral section, it did accept the dollars or Euros and it does accept the OECD Government debt that we're talking about, but as Bob (Ernst) mentioned, we've been looking at eliminating the cash collateral element from the program.

Gerry Cruz: The collateral is going to come from which countries again? Justin Miller: The list that we're proposing, it could change, but it's going to be a sub set of the OECD, which is triple A rating, it's Austria, Finland, France, Germany, the Netherlands, the United Kingdom and the United States. Based on your portfolio with a weighting towards U.S. equities, more often than not it's going to be U.S. treasuries. Gerry Cruz: And you lend at 100+ percent of the loan? Robert Ernst: Collateralized. Justin, the collateral levels again. Justin Miller: For same courtesy loans it would be 102%, for cross courtesy loans where the loan could be priced at dollars, the collateral could be priced in Euros, we would need 105% and the extra 3% is there for currency movement. Gerry Cruz: Let's say treasuries just, something happens and it blows up for whatever reason or maybe not blows up, but just goes upside down, do you cover that as well and the borrower is not able to liquidate or the borrower goes bad, your indemnity, your agreement protects us from that scenario as well? Justin Miller: Yes it does. It's a highly unlikely event, but as we saw over the last 2 years, not impossible. Gerry Cruz: I think that's our biggest apprehension, is that what has been historically unlikely for the last 24 months has turned out to be reality; it turns out to be true. If we were to get into the program in 2007, we would be here wondering if we should still get into the securities lending program, but because 2008 happened, we're now at a point... and certain things that we didn't see as possibilities, certain risks that we didn't expect to be actual risk, but more just theoretical and so that's the reason why we're asking these questions now.

Robert Ernst: It makes sense to do this level of due diligence, it's important to understand your risk and I think that the way that we have tried to structure the program for you initially is to take as much risk off the table as we possibly can. Gerry Cruz: So what is our risk, what risk do we have, because so far it sounds good? I see what you spelled out here, but if I understand correctly, your indemnity agreement covers it. Justin Miller: That's correct. That is covered in section 16 of the agreement and if you don't have a copy, I'll be happy to send you a copy and you can review it after the meeting. If the borrower has filed for bankruptcy and we're holding U.S. treasuries, our first objective is to replace your securities, so we would liquidate that day or as quickly as we can to re-purchase the equities or whatever securities were out on loan. One thing that we're always monitoring is we're marking to market every day, so if the value of treasuries goes down today and the borrower of the equity goes up, we're going to call the borrower and say, you need to give us more treasuries to cover the value of that equity. So every day we're marking to market so that you're at 102-105% with a minimum amount of the minimum that's in place.

Gerry Cruz: What if we held treasury securities and we lent out Fannie Mae and we don't want the Fannie Mae back, would your indemnity certificate cover that? Justin Miller: It's actually an interesting question, because in the indemnity agreement, you'll see it's 16.2. Our first objective is always to replace the securities and that's what we're obliged to do; however, there can be instances where if we can't re-purchase something, we give you cash based on the value of the loan as of the time of filing or the value of the loan plus 5 days of the time of filing. So there is a chance that you would get cash, but our first priority and objective is to replace with a security that was out on loan.

Terry Dennison: I have a question about this triggering event around indemnification. Let me give you a little scenario, again the 100 shares of IBM worth \$1,000, we take in \$1,020 of U.S. treasury securities, the IBM increases in value, the treasury securities fall in value, you go to the borrower and ask for more collateral and the borrower says no, but does not file for bankruptcy, what triggers the indemnification? Justin Miller: What triggers it at that point? The borrower says no, they are in breach of our agreement that we have with them, we can call them into default, which would have an effect on their entire business, which they're not looking to do or at least we wouldn't expect them to want that. We would liquidate collateral that day or as quickly as possible to replace your securities and if there is a shortfall, that's Northern's risk. Terry Dennison: Okay, so the triggering event is a failure to satisfy the terms of the lending agreement and not a formal filing of bankruptcy? Justin Miller: There are a number of different triggers, but you're absolutely correct and I would direct you to look at the agreement with legal counsel, but if the borrower failed, they are in default --- of our agreement with them. If they filed for bankruptcy, then that is a trigger for your indemnity as well. If you would be more comfortable, I'm happy to set up a call between your legal counsel and my internal counsel to review the indemnity, to talk about the triggers if you want.

Gerry Cruz: I think that would be helpful, at least we can work with, maybe with Management. Justin Miller: I think Bob (Ernst) could set that up once he's back in the states. Robert Ernst: Yes. The only other thing that I would like to add and it's probably not a very nice way to end the conversation, but what I would like to do is remind the Trustees of our original custody fee proposal that we submitted to the Fund and we've been operating under since October 2008. We offered a heavily discounted custody fee in consideration that at that time we had expected you to go into the lending program and it is quite customary,

particularly in the U.S. as well as around the world, is that clients have used securities lending to significantly offset and be able to enjoy lower custody fees. We have continued to honor our fee arrangements largely in light of the fact that the market has been so unsettled over the last 18 months and I think we wanted to give the Trustees and staff time to get comfortable with lending. We believe that with current market conditions, the time now would be appropriate for serious consideration in the program. If however, for whatever reason you decide that you don't have the appetite to get into lending, at some point in the near future we would have to revisit those fees, as I said they are being heavily discounted from what we charge clients today for just pure custody.

Joe T. San Agustin: There were circumstances that that particular program that made the Trustee exercise their fiduciary account in that manner, I think its Northern Trust that needs to prove itself because they're not immune to several law suits and I don't know what the status of those law suits, that's our concern. Knowing that exists, we're going blind folded in, not knowing... Robert Ernst: Well absolutely and we whole heartedly understand your need and your requirements as the fiduciaries of the Fund to understand your risk. Justin (Miller) do you have any comments regarding the law suits? We as well as other lending agents over the last 18 months have faced law suits, I think our marching orders from the various highest of the organization have always been that we treat all of our clients fairly and equitably and we believe that we have done that over the course of the last 18 months. To date I'm not aware of any of those law suits going adversely against the Northern Trust. Joe T. San Agustin: Has it been settled at cost?

Robert Ernst: I believe most of them have, although I'd have to go back and do some homework on that. Joe T. San Agustin: I think that's what we need is probably some kind of letter of comfort that it has been settled and there are no pending issues of the same nature. There has to be some letter of comfort that you have actually settled those things. Terry Dennison: Particularly Chicago Teachers. Robert Ernst: Now there were a handful of clients in the U.S. that elected to engage in a collateral re-investment program that was far riskier than what some of our other typical clients engaged in. I'm not familiar with that situation, but I believe that they elected to use a collateral investment program that was far more riskier than what our traditional clients use. Terry Dennison: Okay, but we'll want to hear about the Chicago Teacher's law suit.

Joe T. San Agustin: I think before we proceed, we need that kind of letter of comfort. Robert Ernst: We could certainly work on that for you. Gerry Cruz: And a legal understanding of the indemnity agreement, what the triggers are. Justin Miller: We can have that conference call with our legal counsel and your legal counsel. Joe T. San Agustin: I think what the Board needs is a letter of comfort, all that consideration, valuation of agreement, whatever you brought up here, you need to be more transparent before we even get to the next step. We went into this custodial... to participate and the fee structure is such a way that we would be a part of that particular...but it doesn't mean that we are going in necessarily blind folded. Robert Ernst: Absolutely. We understand and even today there are some clients who don't have the appetite to be in a lending program.

Joe T. San Agustin: No, it's not... what precluded from getting... you folks --- in the industry, this particular program and that kind of put a break on us. It's not a matter of us ---, it's a matter of knowing that you folks were in the middle of a settlement litigation and it would be very imprudent for us to go in knowing that situation exists and that's the situation we're in

now. Robert Ernst: Well we can certainly get you further information on that topic. As I mentioned our intent from the very beginning and throughout this entire period is that we treat our clients fairly and equitably and some clients have taken a different view of that, but I believe that significant progress has been made mostly in favor of Northern Trust, but we can get you more official language around that. Joe T. San Agustin: (Anyone else?) Thank you very much. Robert Ernst: Thank you.  
(End of presentation by Northern Trust)

**4:15pm - Other** There were no other discussions.

**Respectfully submitted,**



**STEPHANIE A. HERRERA**  
**Recording Secretary**

**Affirmed:**



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**Gerald A. Cruz,**  
**Acting Investment Committee Chairman**