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**Quarter Ended 12/31/10 Performance Meetings  
 & Annual Manager Reviews**  
 March 24, 2011  
 Retirement Fund Conference Room

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- Gerard A. Cruz, Member
- Wilfred Aflague, Member
- Antolina S. Leon Guerrero, Member
- George A. Santos, Member

**Staff Present:**

- Paula M. Blas, Director
- Diana Bernardo, Controller
- Rosalia Bordallo, General Accounting Supervisor

**Other Present:**

- Terry Dennison, Mercer Investment Consulting

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

Terry Dennison: We'll start with the top of the agenda which is the economic and capital market development. You have a number of books in front of you, most of this morning is going to be in this

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book, it has the clear binding and it says "Retirement Fund 401a and 457 Plans." What we have done is summarized the material so that we don't have to plow through the big book. I try when I talk about the economy to have both positives and negatives. There are a lot of negatives about the future, both short term and long term, but I probably should start with some positives. I'm going to start on page 2, but what I'm talking about is not actually on page 2.

The U.S. is recovering, industrial production has increased dramatically, in fact a lot of companies are basically running flat out. Now that has not had much of a positive impact on unemployment which has now fallen below the 9% level, but just barely. Literally if you look at manufacturing surveys whether they be the Empire State survey in New York or the Chicago Federal Reserve survey, industrial activity is at a very high rate. But obviously there's service economy and particularly anything related to housing is still very much struggling.

GDP for the 4<sup>th</sup> quarter is probably around 3.2%, we're going to get the final number this week. That's a healthy number, but compared to other recessions coming out of recession, the total recovery we've had has not been that striking. In fact if you look on page 2 in the upper left hand corner you can see the quarterly GDP graph and when we first produced this book the estimate was 2.8, now the thinking is probably more like 3.2. We'll talk a little bit about the nature of that, it's strongly impacted by exports, exports are a dollar for dollar improvement in GDP and with the weak dollar and strong economic activity, industrial activity, there's a strong GDP positive from exports, but we've just not seen the recovery that we would typically get given the depth of the decline. One worrisome factor is, we keep talking about the recovery, the recovery, the recovery and I think 2011 is probably going to continue to be a good year. I talked to our chief economist and his sense is that 2011 looks pretty good for the U.S. and moderately good in other places, but clearly in the U.S. Joe T. San Agustin: If it's going to be that good, how come the housing and the Government is going to go down? Terry Dennison: Well, we say pretty good, 3%, we're just not going to get the 4 and 5%, we'll talk a little bit about that in the future. Our chief economist's concern is 2012 that we could be heading into another recession in 2012 because of a bunch of things. We've just done the good part now comes all the bad parts. Three short term problems, oil and trouble in the Middle East.

One thing that's interesting is all of a sudden there's been a lot of interest in the part of economists about what their relationship is between the price of oil and its impact on GDP growth and if you go on the internet and Google it you will get all kinds of answers, but probably a half way decent answer is for every \$10 oil rises it cuts GDP about 25 basis points, \$40 increase will cut it a percent. We've seen a significant rise in oil prices, I saw in the (Guam) PDN this morning that gasoline on the island has hit an all time record. I suspect you will look fondly back on how low, how cheap gasoline was today. Clearly there is a wild card factor here, Libya which has now stopped exporting which is less of an issue for North America and for Asia, they primarily to Europe and in fact you

can see a huge divergence in the price of oil, there's multiple prices of oil, we talk about the price of oil. In North America we tend to use what's called the West Texas Intermediate which is a price for domestically produced oil, that's about \$105 a barrel. In Europe they tend to use Brent Crude, Brent is actually an oil field in the North Sea, that's over \$115. In Asia the number is largely based on what OPEC is charging out of the Middle East and that's part of the reason you've seen a run up in prices here because of the Middle East as opposed to the Mediterranean area. If we start to see a really sharp price of oil and I saw one of the talking heads a couple of weeks ago on CNBC said if 200 people show up ---. One of the problems with where the oil is in Saudi Arabia, Saudi Arabia is primarily a Sunni country, one of the branches of Islam, the oil regrettably happens to be in one of the Eastern provinces which are largely Shiites and of course Iran which is just interested in chaos everywhere is Shiites, there's now in Bahrain where it's getting really ugly because the poor people who are rioting are all Shiites and there's some risk that Iran is going to go after and help their co-religionists, the Saudis have been contributing to military forces to the Government of Bahrain which is Sunni, so you've not only just got the Arab street, but you've now literally got the ancient, more than 1,500 year old or 1,400 year old branches of Islam fighting each other so it could get very messy.

The second big problem is Europe and the Euro and European debt. We're heading into the next couple of days, European summit, supposedly there's a grand bargain which seems to be unraveling every time you look at it. This morning the Portuguese Government collapsed and they're probably now going to have to go for a bail out, which they said they didn't need and didn't want, but they're now pretty much stuck. The German tax payers are now rebelling against further German contributions against these bail outs. They will try to paper this over and the phrase of the hour is "kick the can down the road," but at some point they're not going to be able to continue to kick the can down the road. This matters a lot because it could collapse the banking system in Europe. I don't think the Germans care about what goes on in Greece and in Italy, Ireland or Portugal; the problem is their banks own an enormous amount of the Sovereign Debt, so they're not bailing out, the Greeks are bailing out their banks. So if they start to default and certainly in the case of Greece, the situation is basically hopeless, either somebody's going to give them money or they're going to go bankrupt, because they're basically going to go bankrupt. Now you're going to see just widespread collapse of the financial system in Europe.

The third problem is Japan and Japan produces 2 problems. One is long term and one is short term. There was an interesting article, I was looking at the Wall Street Journal, about half of the world auto production has been shut down because Hitachi makes about a \$90 part in a factory about 100 miles north of Tokyo that was damaged in the earthquake, it actually is an air sensor, it's part of the pollution system that senses the volume of air going into the car, they're running out. Many of the companies have like a 10 day supply of this

part and basically the auto plants all over the world are shutting down because of this \$90 part they can't get. Hitachi thinks they may be able to start production early next week, maybe they can, they're not sure of the volume, but now we're starting to see because of the relationship of the supply chains around the world and next in time inventory, they used to fly these parts around the world and no part, no cars.

Clearly the economic impact on Japan and it just seems to go from bad to worse, now they have some radio activity issues in the drinking water in Tokyo as we saw in the papers this morning, but realistically I think most peoples belief is the economic issues for Japan are going to be pretty modest, not to diminish the human suffering and the physical destruction, but the Japanese are the most disciplined and productive people in the world and they will get over this, they will take care of it and it's going to cause some disruptions and among them, they're probably going to have to sell some of their securities including U.S. Treasury securities to get money to pay for this. That is going to drive up U.S. interest rates, because if they have to sell bonds, that's going to depress the price and raise interest rates, so it's going to hurt the U.S. economy, which is just exactly what we don't need. You really have a sense of how inter-connected the world is and here's this one factory that makes a part that shuts down half of the car manufacturing in the world. Those are just the short term problems.

Longer term problems, clearly the issue of debt in the U.S. The Governments solution to an economic slowdown is just print money. There are some interesting statistics about the total public debt and public debt is defined for the U.S. to be Federal plus State in order to make it comparable with other countries. Most countries do not have sub-entities within it that issue their own bonds. For example in the U.K. the counties and the cities don't issue their own bonds, all the financing is done at the national level, same with France, same with Germany. So in order to put it on a comparable basis, public debt in the U.S. is Federal plus State and the usual comparison is versus GDP because it's a measure of how much debt there is to the size of the economy.

In 2007 before the crisis, the total debt was 57% of GDP, this year it will be about 94% of GDP, next year it will become larger than GDP. Economists have studied this and there's a very interesting paper that was written by 2 economists that basically postulated looking at history that when public debt gets above 90% of GDP it starts to negatively impact growth. So what happens now is growth in the economy is negatively impacted by the amount of debt. Now this is in order again to be comparable, this is balance sheet debt, this is treasury coupon securities and state bonds. Also in the U.S. obviously, we have many unfunded entitlement programs like Social Security and Medicare and the like. Anybody care to guess if you add that to the total debt which is not on the balance sheet, it's off the balance sheet, it's just promises that have been made of what percentage of GDP you would get if you add unfunded

entitlement? The number is 840%, that is about \$100 trillion dollars because GDP is about \$14 billion. So, just to put that into perspective, if every person in the world worked for 3 years to do nothing but to pay the promises that have been made in the U.S., they can about pay it off, that's about 3 years worth of global GDP. So debt is going to be a problem. The Congressional Budget Office, which is not a group of loony politicians of either party, it's a pretty analytical, a political organization and it's basically the analytical part of Congress, they did an analysis of what's called "debt service" which is how much the Federal Government pays to pay for this debt, they borrowed money, they're paying interest costs. The interest costs in 2010 was about \$185 billion dollars, but obviously the debt is escalating rapidly and of course just like home owners or in a person, if you don't make your debt payments, you just borrow more to make that month's debt payments, so this debt is escalating with the enormous deficits we have. They forecast that simply because of economic growth plus the pressure of the rising indebtedness that Treasury securities will be yielding 4-5% up from 1.5% by 2015, which is going to run the debt service, the annual charge for interest to \$554 billion dollars. So, about 20% of every tax dollar is going to go to pay for debt. Basically it will wipe out the discretionary Federal budget. Obviously they're going to have to raise taxes or something else. So, we're dealing with a difficult situation.

Adding to the problems and I said nothing but problems, the part of the Treasury, called the Office of Public Debt, which are the people in the Treasury who manage the debt portfolio have been taking advantage of the very low interest rates and have been reducing the maturity of the bond portfolio of the Treasury. Basically if you can borrow at 1% for 2 years and 2% for 30 years, why would you pay that, you would just reduce the maturity of the debt. So between now and 2016, \$4.5 trillion dollars, about 63% of the total indebtedness has to be refinanced. So not only do they have these huge deficits, they have shortened the maturities, so bonds are having to be refinanced and that's putting upward pressure on interest rates and in fact we'll see at the bottom of page 2, the bottom right hand side we'll look at the yield curves and yield curve is what the Treasury is paying in interest. Look at the September 2010 yield curve particularly at the 4 year end because that's the average maturity now of the Federal debt, the interest rate for the average maturity has gone from about 75 basis points almost double to about 150 basis points for 4 years, so literally you saw the yield curve rise. The interesting thing was the whole idea behind QE2, the Federal Reserve's program of quantitative easing 2 was to lower interest rates; interest rates rose, because everybody understood that you can't fix a debt problem by borrowing more money. So we're not seeing it more difficult for the Treasury to sell bonds because people are demanding more and more interest. Now if the Japanese start to have to sell bonds in order to finance their reconstruction which some of the discussions would suggest is comparable to the World War II damage, you're going to have more upward pressure on interest rates, so all of these problems are going to happen quicker.

Pimpcos which is a very big bond manager and very highly thought of for their analytical ability made a lot of press a few weeks ago by basically saying we don't hold anymore treasury securities, we don't want anymore Government debt. Part of that is valuation, rates are low, interest rates are almost certain to rise, they just don't want to hold bonds that are going to lose value, but you know see more than just fluke circumstances where corporations are borrowing more cheaply than the Federal Government. There was an interesting circumstance where a company probably 6 months ago was able to borrow on the market more cheaply than the Federal Government, but now it's becoming more and more routine. Basically the risk free rate is going to end up being Microsoft. Gerry Cruz: So there's a negative risk premium? Terry Dennison: Yes. This is not terribly common, but you are now seeing some distortions in the market. So that's kind of a quick review.

I was just thinking about it this morning and we as Americans tend to be very optimistic, it's a "we'll conquer the frontier" mentality we all have. And I think there's a belief out there, "we'll figure out a way to take care of this. You can get in a jam so bad that there's no way out of it. Obviously there's been a lot of discussion of what can Europe do and basically there's 3 choices, you can default, just say, remember those promises, forget about it, you can print money or you can get somebody to bail you out. One problem with being the biggest economy in the world is there's no somebody out there. Of these 3 choices, bail out is not an option, there's nobody to bail us out. Default seems like a remote option, so I think what you're going to see is you're going to see them print money. Joe T. San Agustin: So they're just going to dump that all in the market? Terry Dennison: Yes, they're just going to inflate the currency. Most of the Government's promises are in nominal dollars, TIPS and to some degree, Social Security is real, but most of the debt is nominal, we'll pay you so many dollars without regard to what happens to value of the dollar, but you're just going to see the money become worthless or rapidly declining in value.

The long term stuff is not with us right now, the U.S. debt is nowhere as near as current a problem as European debt. There's actually one more Japan issue that I didn't talk about and that's having to do with nuclear. I asked one of my colleagues to write a little paper, if the world turns against nuclear power, what does that do? Most people want to have the lights go on, you flip the switch, energy is necessary. If you turn off the nuclear plants in France, you've knocked out about 80% of their electricity generation and that's going to be a problem. Germany, it's about 40%. U.S. because we use a lot of gas and a lot of coals, it's about 20%. So basically you shut down all the nuclear plants, you're going to see a tremendous increase in the use of oil, gas and coal, which is further going to cause oil prices to rise because there is a fixed amount of it. In fact, we're probably past what's called "peak oil," we've probably extracted more than half of the oil that's really extractable in the world, so you're going to start to see oil prices go through the roof, that's why I said you will look fondly back at \$4.50 a gallon gas. I think the nuclear one is the big wild card because, obviously that has major climate change issues, because either you're going to

have no electricity or we're all going to have to forget about all the carbon dioxide stuff because you're going to be using coal and gas and oil as fast as you can and realistically the cheap fuel is coal, which is the dirtiest. The Chinese have lots of it, everybody has lots of it relative to oil and it's all in places where people don't hate you as oppose to oil where it's mostly in places where people hate you. So I think realistically we've seen, we're done with cheap gas, it just goes up from here.

I keep saying remember how wonderful these numbers are because it won't happen again, well, it happened again and in fact they're even more wonderful than before. You guys are doing fabulously. On page 2 we looked at the GDP, if you look at the purchasing manager's index on the top right of page 2, you really get a sense of how strong manufacturing is, that is just really rolling along, U.S. manufacturing. Page 3, some improvement on unemployment, until housing gets better we're not going to see much movement on unemployment.

If we think we have a bad housing problem, Ireland's is unbelievable. At the peak one out of 5 people were working on building houses. I think this was in the Economist, the airport parking lot in Dublin was full of cars, nobody was on airplanes, but it was full of cars. The parking lot people went around and said, it's the same cars all the time. They did a little investigating and found that the cars had been bought by Polish construction workers for nothing down who all just went back home and abandoned the cars in the parking lot at the airport. Gerry Cruz: Same as Dubai, because in Dubai I understand, if you miss a loan payment, it's a jailable offense, so all the xpats were just parking their cars as close to the airport as they could and walking the rest of the way, so the banks would come and pick up streams of Range Rovers, Mercedes, it's crazy.

Terry Dennison: One of the things that is worrisome even though we've seen some improvement in unemployment is that purple line at the top, it's called participation rate. It's the percentage of people of working age which is 18 to 64 who are actually in the labor force and that number has been steadily declining, fewer and fewer people in this country are working. Obviously we're starting to see the baby boomers retiring and one way long term of thinking about GDP is productivity growth plus labor force growth. If the labor force shrinks and we've gotten what productivity gains we can from intelligent use of computers and other strategies, it's going to have a depressive effect on GDP growth, one more negative.

Inflation expectations on the bottom of page 3 have increased and in fact actual inflation is starting to increase. Headline inflation which excludes food and energy is still fairly low, but we're starting to see increasing rents because of scarcity of apartments which is beginning to put upward pressure on GDP. Headline GDP which includes food and energy is obviously important because we all eat and we all drive and realistically that is having a significant impact on people's ability to spend. One of the paradox's in the upper right hand where you have consumer confidence, very low and obviously the kinds of gas prices



and obviously it's an issue everywhere and I'm sympathetic to the expense of gas on the island here, but my commute one way is from the top of the island to the bottom of the island, so you guys don't drive very far compared to how much people in the mainland drive. The thing that's interesting about that chart in the upper right is retail sales are doing very well and consumer confidence is very poor. The reason is consumer sales are largely to the upper economic groups that have not been so hurt, so we see this paradox where more expensive goods are actually selling fairly well but everybody else is cut way back and that can't continue.

The chart we added here is kind of an interesting one that looks at the components of GDP. GDP is made up of 5 things, personal consumption expenditure, that's what we spend as consumers and historically that's been about two thirds of GDP. Private inventories and inventories go up and down, if things aren't selling but manufactories are still making, inventories rise and because it's production based, that actually helps GDP, but at some point people stop making until the inventories go down. Government expenditures, net private investments, which is largely real estate and net exports and you can see that sort of purplish component has become a very large part of GDP lately and that's certainly been helped by the declining value of the dollar which has made our goods cheaper. There was a lot of speculation that as Japan has to import construction equipment to do their reconstruction that's going to be good for companies like John Deere and Caterpillar that make that kind of construction equipment.

Page 5 looking at the U.S. dollar, which continues to decline, it even declines against the Euro which is itself becoming a bit of a mess. Obviously we've seen this tremendous rise in the value of the Yen and one would wonder, the country has suffered a significant economic loss, why is the Yen becoming more valuable, it has to do with them repatriating their investments and basically selling things denominated in dollars and buying things denominated in Yen, putting upward pressure on the Yen. In fact the World Central Banks are trying to restrain the value of the Yen which has risen to an all time high, about 80 to the dollar.

Page 6 looking at real estate which continues to be bad, we show under key indicators here that in December existing home sales rose 12.3% and in February they fell 9.3%. New home sales are still extremely depressed, if you look at things like housing starts or even building permits which is really the start of the building process, all that is very depressed, there's an enormous overhang of bank owned real estate, real estate where basically the homeowners are hanging on, if prices rise just a little bit, you're going to see huge supply. It's going to be years before we get out of the housing concerns.

If we turn to page 8 looking at the returns in the markets, 4<sup>th</sup> quarter was great, pretty much double digits across the board even getting up to the high double digits in Small Cap Growth, up 17%. When we look at the performance in the

pension fund we'll see that very positively impacting. One year returns in the 20's, except for the Large Cap which is just in the teens. Much of the return in the 4<sup>th</sup> quarter came in December; December was a fabulous period for the market. You can see how the rebound or modest rebound we've had still has not been enough to get the 3 year returns into the positive category for Large Cap. Large Cap returns for 3 years are still negative so despite the rebound we had in the market, you're still behind and you're not ahead much in the other ones, a couple of percent.

Looking at the bottom, we're now starting to see Small Cap stocks start to take market leadership although it's not much of a factor. The thing that is surprising is on the right hand chart on the bottom where growth continues to lead the market versus value. If you look at that chart, if the blue area is above the center line, growth is doing better than value, if it's below value is doing better than growth. A couple of things leap out at you and that's a pretty long history there and it's rolling 3 year periods, value out performs growth most of the time and if you look at the area of the blue, you get much more value, much more return in value than you do in growth. Occasionally growth does well, you can before the last big value surge that huge mound of positive growth, that's the dot com boom. We're not getting to about the average age of the growth stock out performance.

Page 9 domestic, you can see the Large Cap tends to have not performed as well as the Small Cap. The Russell 2000 Growth, the small rapidly growing companies for the year up 30%, for the quarter up 17%. Small Cap had a very good year not just in the U.S. but on a global basis also.

Let's go to page 13, some interesting things here. You can see how globally coordinated things are, if you look at the growth and value chart on the top of page 13 in contrast with what we saw in the U.S., the areas are different, but the timing is generally similar. Basically when growth stocks out perform in the U.S. they out perform internationally. The other thing that's striking is how even more value is the place to be internationally that it out performs vastly more in terms of time and vastly more in terms of amount and growth. The bottom of page 13 is the most striking, we're looking here at developed market stocks versus emerging markets. The thing that's interesting here is there doesn't seem to be a cyclical trend anymore, that basically emerging markets are out performing the developed world pretty much all the time now. If you think about the economics of the developing world with their growing middle classes, their rapid industrialization, the tremendous infrastructure investments being made, the relative youth of their work forces, the significant value added that they add to manufacture versus the old developed world with aging populations, enormous social costs, their pension plans which are in as bad a shape as ours, it's pretty much unfunded, it's pay as you go, they have haven't accumulated money like you have. The developed world outside the U.S. is in a very sad state and you can see that's reflected in the markets.

Emerging markets, it isn't even a cyclical thing anymore, the emerging markets for the last 11 years have been the place to be.

Page 14 looking at the developed countries, there are some that are doing well. Again Small Cap which is an asset class that has just been added to the Fund did extremely well; for the year it was up 22%, for the quarter it was up 11%, almost 12%, actually it out performed emerging markets, so the International Small Cap actually did better than the markets on an index basis.

Page 15 is interesting because we all tend to think of China as the engine of the world. China has got some problems, it's actually one of the poorest performing stock markets both for the quarter and for the year. There's clearly a bubble in real estate, there is a question of whether or not they can continue to grow their infrastructure at the rate they're trying to grow it, inflation is becoming a real concern and actually if we looked at the same chart a year ago, China would not look very good even a year ago. While China is seen on everybody's lists as the place to invest, it actually isn't. The real place to go are non-China Asia and in some places in Central and South America.

Fixed income has been struggling in part lately because of rising interest rates; again as interest raise, bond prices fall. If you look at the high yield bars they look very different than anything else. High yield bonds, junk bonds basically trade like equities because if the company stays alive, you get paid, if they don't you don't and so high yield debt basically behaves much more like common stock than it does bonds.

Let's go quickly to public real estate securities on page 21. The sector continues to do extremely well, both your managers were up over 30% for the year. They are up 7.4%. Interestingly, public real estate, REITs is significantly out performing private real estate. It's better to own stock in a company that owns real estate than to own real estate. Real estate itself is not doing well because much of real estate is dependant on consumer spending. If you think of sectors of real estate a big one is retail which is obviously in significant distress. Office which is suffering due to cut backs in companies, manufacturing is hurting because companies are making more efficient use of the real estate. The only sector of real estate that's doing well is multi-family because so many people voluntarily or involuntarily have left the single family housing market and moved into apartments. So other than multi-family real estate and one other sector that's flat is hospitality, hotel businesses are lousy too. Multi-family is the only one doing well, but REITs, public real estate has done extremely well.

Commodities which is something you don't have, obviously oil, gas, coal all of those have done well as has precious metals which are used like copper and led and the like have also done well. Agriculture has done extraordinarily well because on top of all our other problems, we're running out of food. Realistically climate change, cost of fuel and fertilizer which are petroleum

based is having a very negative impact on availability of food and food prices are rising. Also contributing to that obviously is diversion in North America of corn for fuel which on any number of dimension I think is a foolish idea, but you're seeing food prices and this is part of what's contributing to the trouble in the Middle East because people are starting to get hungry, this is going to become an issue in Asia before very long.

Hedge funds did very well on page 23 except for the short bias ones. If you bet that the market was going to go down, you go hurt bad, but pretty much all the other hedge fund asset classes did very well for the period.

(That's it for that. I do want to get into the pension fund because I want you to savor just how well you have done). Any questions on the economy? Gerry Cruz: Just a quick one regarding hedge funds, have there been sufficient changes and regulatory changes that would make this hedge fund industry a little more transparent than it was before the bust? Terry Dennison: Not really. The problem with hedge funds is 80% of them are no good, they're not crooks, they're just dumb. It's only about 20% of them that are good, but the ones that are good are really, really good, but obviously nobody wants to be regulated and the hedge funds are bobbing and weaving to try to avoid being negatively impacted by the regulation. The other factor that's impacting hedge funds is the banks which use to be pretty heavy in the hedge fund business, their proprietary trading desks were basically hedge funds have now been exiting that because of the Dodd Frank Bill there having to get out of that and that's caused some upset in the hedge fund space. We still think positively, if you are comfortable with the concept of hedge funds, not as a return enhancer, but as a risk reducer because while they strictly don't hedge other than the long short ones, they do tend to have less volatility than equities and obviously now with the stocks doing well, hedge funds have not kept up with the S&P 500, but if we have another decline which we will, the hedge funds are going to do pretty good. (End of discussion for Economic & Capital Market Environment)

### **Defined Benefit Plan**

#### **9:45am-10:30am DB Plan - Quarterly Performance**

If we go to page 34, let's just luxuriate in these numbers. The Fund is up to \$1.3 billion dollars, for 3 months it was up 6.9% putting you just shy of the 4th quartile. You did better than 73% of funds, only 27% of funds did better than you did. For the calendar year the Fund was up 15.8% putting you in the 9th percentile, only 9% of funds did better than you. You beat your blended index by 400 basis points and you'll see in a little while how we did that, simply stated, we did everything right. For 3 years you're in the 8th percentile. Now 3.3% does not look great compared to your assumption, but that includes a hideous period in the market place. The public fund median for 3 years was up 50 basis points, so relative to the median, you did 2.8%, 280 basis points better than the typical public fund. The typical public fund has just barely gotten to

zero; 3.3 isn't great, but you're a heck of a lot better than everybody else. Five years, now this comprehends the crazy run up to the crash, the crash and the modest recovery from the crash, you're up 6.3% per year, 4<sup>th</sup> percentile, only 4% of the funds did better than you did. You beat your benchmark by 130 basis points and you beat the median public fund by 190 basis points, 1.9%. If we look at how you did it, it's both asset allocation and managers. Basically the managers with a couple of exceptions have done pretty well. Atalanta Sosnoff continues to struggle, they're about a third of the way down on page 34. Their returns are positive it's just there no where near as strong as other funds or even other investing in the index. Similarly Metropolitan West seems to what use to be super naturally good and obviously one of their key people left, there's a note in the front of the book about it and it would be easy to attribute that, but the decay started earlier, but clearly the bloom is off of that rose, but if you look at them for one year, they were up 21%, 2<sup>nd</sup> percentile, almost nobody beat that number. They were about 700 basis points ahead of the index and 800 basis points ahead of the median manager, just stellar performance, but now they're lagging seriously. It's still a fairly short period, but the combination of the turnover and the recent poor performance after a history of stellar performance, it's disquieting and that's something that probably needs attending to.

Robeco is not doing particularly great either, but they're not dreadful. INTECH previously doing poorly has certainly rebounded now; their since inception return is still lagging history a bit, but certainly for the last year they look terrific. Gerry Cruz: Any particular reason why, is it just their model started to... Terry Dennison: Their model depends on market conditions. If you're going to optimize the return for volatility, you need a certain volatility environment and they went from having a very good environment to a very bad environment and now the volatility environment has come back more to normal. Unlike a manager which can lose people or just whatever it is they were investing in just doesn't work anymore or they just got stupid, INTECH is a different thing, it's a mathematical quantitative model, but it's good seeing them back to doing what they use to be able to do. Gerry Cruz: They lost some money there for a while. Terry Dennison: Oh yes, they certainly lost some assets because a lot of people basically gave up on them and they weren't around to get the recovery. That's what makes it so difficult. It's easy to say after 2 bad quarters, off with their heads, but often they rebound. Gerry Cruz: I have one more question regarding INTECH, it's more a regulatory issue, Janus had been asked some questions by SEC? Terry Dennison: Is this about the network expert? Gerry Cruz: That's correct. Terry Dennison: They basically threw a very wide net and virtually all of the big managers have gotten inquiries from the SEC, but it's only a handful of hedge funds where it's clear they are a target of investigation. I think what the SEC was trying to do and this has to do with these expert networks, basically inside information trading. These experts whether they were going through people's garbage or taking people out to dinner or whatever, seemingly had information that wasn't in the public domain and it's illegal to trade in the U.S. on inside information and certainly the hedge

funds which have done very well were big consumers and users of these expert networks. What the SEC was trying to do was get a sense of how broadly they are used, but virtually all of the big money manager, Cap Guardian, all of them got an inquiry, up to what degree do you use these expert networks or spies or whatever you want to call them.

Wilfred Leon Guerrero: Getting back to Metropolitan West, what you have here are the figures before they made the announcement that they're leaving, it's not reflecting anything at this point in time. Terry Dennison: Well if we go back to the note, there's a note in the front here, our note which would have been very current, it's on page 31, was dated December 1, 2010. Now he had left earlier. Howard clearly was the key guy in this product, although it is a team effort, the question is, are we literally seeing instantaneously, he leaves and the performance goes to hell. Typically you just don't decide to get up and go, you've been thinking about this for a while and one of the concerns is a zipper effect where basically other people for whom he is their mentor, for whom he is their leader, these organizations are tribes, if more people start to leave and we're not seeing more people start to leave yet, but if more people start to leave, then it's time to make a hasty exit. But clearly something has gone wrong at Metropolitan West.

Wilfred Leon Guerrero: My point is that on page 34 that is the figure for December 31<sup>st</sup> and they made the announcement on December 1<sup>st</sup>. Terry Dennison: No, he said where he went, he left earlier than that. (The note is in the big book) It's worth paying attention to because obviously the object is... it's not an issue of loyalty, it's not an issue of... we're in business, it's not personal, it's business and if it's time to exit them regardless of presence on the island and all this other stuff, it's time to exit them.

On page 35 on the top are 2 managers, Eaton Vance and Numeric both off to a very good start, ahead of the benchmark and 1<sup>st</sup> quartile performance. In the same sense that we would not criticize a manager for having a bad quarter, one quarter does not make a success, but it's better to start off ahead of the game than behind the game. It looks like at least for the current market environment Eaton and Numeric which are performing very much alike are off to a very good start. International, Fisher who will be with us this afternoon, these guys have been all over the lot, we were sort of at a cocked pistol level about 3 years ago with these guys, we were disturbed about them fooling around with the publishing business and they gave that up, but it does show one of the tough calls is whether to stick around or whether to bail and obviously we got paid for sticking around. The thing that's interesting is if you look at their since inception number, they've been with us since January 2006, so we're coming up on 5 years with them, they have about doubled the benchmark, they have done very, very well for us. Basically for the last quarter, 10% return for the quarter, 9<sup>th</sup> percentile performance.

Dimensional typically will not do extraordinarily well or extraordinarily badly on a relative basis because they own so many stocks. The number that leaps out at you is their one year performance of 24.5%. Investing in International Small Cap again a relatively new allocation has definitely been good for us. Emerging markets, Cap Guardian which has been a bit of a lagger, in fact we have and I know you have to go through a process to replace a manager in the DB Plan, for the fun of it let's see what options are out there for DB. You couldn't actually act on this because of your procurement rules. Cap Guardian clearly emerging markets have been a great place to be, they've just not been able to capture all of what the market would give us. In a place where active management should add value they're slightly lagging the index. Gerry Cruz: They're just getting too big. Terry Dennison: That's always been the issue with Cap Guardian, it's always been the criticism that they let the assets grow to where it's very unlikely at some point that they're going to be able to add value and that's the issue with a lot of the Cap Guardian funds.

Fixed income which is obviously an asset class that's not going to yield the returns that you typically get. Gerry Cruz: What's the expected return for fixed income going forward? Terry Dennison: Five, but obviously at the low rates that we're at now and very narrow spreads, probably if you would ask me what the number would be for the next couple of years, I'd say more like three because spreads are going to widen as the economy slows down and rates are going to rise as inflation becomes more of an issue. Gerry Cruz: This composes about, we have about... Terry Dennison: 27.4%, pretty much split evenly amongst the 3 managers. Davis Hamilton Jackson which is obviously is a fairly new allocation for them, they're an old time manager really has done very well. You have to bear in mind that it hasn't been easy for your fixed income managers because your investment guidelines restrict them from the places of the market that have been the most productive. No sub-prime, requirements on interest coverage, the kind of returns you're seeing here given what your restrictions are pretty darn good.

Real estate again, these guys are doing extremely well, 31.7% for the asset class, Cornerstone up 30, Security Capital up 33%. Security Capital they're shooting out the lights on a long term basis.

If we look at page 37, where you rank against other public funds, you are the circle, the simple answer is, the top.

Page 38 looking at asset allocation, it's getting a little extreme driven largely by market performance. Your Small Cap is a little at the low end. Strategically we think that Small Cap is a very desirable place to invest. There's a lot of concern though that Small Cap has done so well that it's getting over valued. One thing you have to think about as an investor is there are things that are really good places to invest but if they cost too much, temporarily they are not. You can say given a strategic thought that we like being over weighted in Small Cap, we're near the bottom shouldn't we --- Small Cap. Our concern there would be

the valuations are pretty rich that it might be worth while to see if the profitability comes through that the market is expecting going forward. I don't think I would be too quick to throw more money at that because I think the balance of risk might be a little bit negative.

As you know we have acquired Hammond Associates which is a firm that deals mostly with endowments, foundations, healthcare, high net worth individuals and they have an even more extreme view of Small Cap than we do, they think it should be significantly under weighted. We're not quite in the same place, in fact one of my day jobs is working with them, I go to St. Louis fairly often working with them and our team on a global basis to come up with a consolidated view, but our dynamic asset allocation which is the tool we use for example to stay out of REITs when we thought they were very over valued, is basically suggesting Small Cap might be just a little rich at this point so I'm not sure I would act on that under weight.

The developed markets are at or above the range. Clearly we strategically have a view that that is a less attractive place to be. Conversely we think Small Cap, International which is under weighted and Emerging Markets which is about equal weighted is a better place to be. Now I think we put some more money in Emerging Markets at the meeting or one ago or 2 ago, so I don't think there's a lot of action needed there.

Fixed Income is very low, it is near the floor. We think the balance of risk there is very negative. We don't necessarily think that being out of treasuries which is what Pimco did is the right place to be, but with rates rising, inflation increasing and Fixed Income yields at typically very low levels we think the balance of risk there is negative. The managers seem to be pretty good getting pretty healthy returns from an asset class even despite our stringent guidelines, but we don't think it would really be appropriate to put more money in Fixed Income, I think you would be basically, have a real potential of losing money that you would put in.

The last one there is Real Estate. This is largely due to outrageous performance. Realistically it's at the top, I think it started out at the target so everything you're looking at there is relative performance. What's happened is, the whole portfolio rose in value, but they rose in value at a much greater rate, you saw the 30% return. I don't think I would cut it back, I think it might be interesting to look at it next quarter and see if it shoots out the top or if we know where they are versus the target as of this because this is as of 12/31, but I don't think I would put anymore money into it, but I think you have done very well with what you have.

I don't see anything here immediately that I would do in terms of asset allocation shift.



If you look at page 39 this is attribution. The gray bar is the contribution of the manager's skill, the green bar is the asset allocation which is basically this committee and basically you can't get better than this. The total fund, the asset allocation is fantastic, the managers contributed solidly. Versus a passive implementation, you just put your target allocation in index funds, you beat that by almost 2%. Now 2% doesn't sound like a lot, but 2% times \$1.3 billion dollars is a lot of money, so you did very well. This is even better than last year because everything clicked this time. The total equity, the managers did well, the asset allocation was good.

If you look at page 40 it would be easy to say we're doing great because we're taking a lot of risk, we aren't. If you look at and you have to see what I do here, you have a little cloud of green dots and you draw a line through the little cloud and basically it's called a market line, it reflects the relationship between the risk and return. Basically you are getting much more return for the same level of risk that other people are getting. So you're not doing this by taking a lot of risk, throwing the dice and being lucky, you can't be lucky as often as you've been lucky. If you look at where you are and you are the red box there versus this cloud of green dots here, the green dots are other public funds, these are not just things we made up, these are other funds, your return versus other people's returns adjusted for risk is outstanding.

There's a book in here called "Manager's Search Report Government of Guam Emerging Market Equity." Again you have a procurement process you need to go through but I just wanted to give you some analysis of what's out there if you decided Cap Guardian for whatever reason... Standard Mercer search book, we did include Cap Guardian in the performance section, but we didn't provide the narrative because we figured it would add clutter to this. Again there are 2 search books, one is labeled Defined Contribution Search Report, it's not that one, it's the other one. It's just called "Manager's Search Report, Government of Guam Emerging Market Equity." What we did is we just looked at 4 A rated managers, managers who we thought had the best opportunities for adding value. Artisan is a very well known manager in the U.S. They have a lot of DC and DB portfolios. DFA you already use, in fact you actually use them now in the DC Plan for this particular role. Unfortunately you don't get a quantity discount, I don't believe you can get one, you can always ask, but they can always say no. You may be less familiar with Genesis and Schroder, both of these are actually UK companies, they are SEC registered, they have U.S. presence and actually Genesis is owned by a U.S. company called AMG, Affiliated Managers Group. We included them because they are often managed outside the U.S., particularly in London. The sense being that London is the financial hub of the world really and also many of the emerging markets are ex-British colonies or areas of influence. So the sense being that the British had been international a lot longer than the U.S. was. Think of the British Far East, their efforts in Asia, they've just been more international than the U.S. has been for many years. So we included both Genesis and Schroder.

If we turn to page 9, these are all big organizations, particularly Schroder and DFA. Schroder is an enormous manager in the UK, it's one of the biggest managers in the UK so their assets are going to be very large. Looking at the strategy assets, all of these are pretty small, Genesis is by far the largest, in fact there's a concern expressed in the book about whether or not it's getting too big. DFA is a nice size at \$4.3 billion dollars. Gerry Cruz: How big is Capital? Terry Dennison: It's large, it could be somewhere in the order of the magnitude of Genesis, but it is certainly larger than the other three.

The thing that's interesting indeed in DFA's case, again it's a typical DFA product where they hold an enormous number of stocks, in this case they own 2,700 to 3,200 stocks, this is not a research driven product, basically they pretty much hold everything. You wonder how you can add value to this, well clearly we've seen how they've added value in the DC Plan. Their idea is basically they exclude things that we don't understand, often they'll exclude financial stocks, because their balance sheets as we saw recently are very hard to figure out and they make their money by trading. Since they don't have a view about any stock, if you absolutely, positively have to have it and you're willing to pay up for it they're a seller. If you absolutely hate it and want to get rid of it right away and don't care what you get paid for it, they're a buyer. Basically they take advantage of the psychology of active managers who want to get out of something right away or get into something right away and they make money slowly. I use to work for somebody who was otherwise not a nice person who did have an interesting view of the markets; he said he wants to get very rich slowly because that is a much surer way. They also don't get hurt because owning this many stocks, they're not going to be killed by one or 2 bad ideas. If a manager with 100 stocks gets China wrong or gets India wrong or gets Brazil wrong or gets Malaysia wrong, they're going to get hurt. There's no overarching idea here that influences most of the portfolio. So DFA in one sense is a much safer strategy.

The other thing that's attractive is if you look over to the average turnover column, they're turnover on an annual basis is over the last 5 years, but on an annual basis is 6%. The portfolio is extremely stable. Contrast that with Schroder where the average stock has held about 14 months, they turn over 90% of the portfolio every year. This matters because it cost money to trade, there's commissions, there's market effect, there's all sorts of costs of trading which have to be made up if you're going to be successful. If you don't trade very much and this is a consistent DFA characteristic, they don't trade very much, they own a lot of stocks and don't trade very much, they don't have to be as right in every single trade for you to make money. So those are the key differences.

Going to page 14, it's interesting where they invest regionally. Emerging markets if you divide the world into 2 things it would be Asia and Latin America. If you divide it into 3 you would also add other emerging markets and these are Eastern Europe, Poland and the former Warsaw Pact countries, some

countries in Africa particularly Israel which at least geographically is in Africa. Some of the African countries are doing extremely well, obviously many of them are a ridiculous mess, but some of them are doing well. Emerging markets in other places, even some of the Asian frontier markets, there's money to be made there. The thing that's interesting is Genesis, where the other managers are in the high teens in emerging markets, they're nearly double that level and it's coming out of primarily equally Latin America and Asia, so the nature of the Genesis portfolio is more frontier-y, it's less China, India, Brazil, Russia and more other places. One of the arguments here and we'll see when we look at the performance, is whether or not you ought to just get rid of Cap Guardian or whether you would pair somebody with Cap Guardian, give Cap Guardian have the money, because they're a very strong down market performer. Look at their performance, they do really well in down markets, they lag in up markets. Maybe one of the options instead of just canning them, there's about \$57 million dollars here in the DB Plan, it's not small change, one strategy would be to pair them with somebody whose characteristics are different where they're basically one is an up market performer, the other is a down market performer, one is the larger, more established emerging markets and the other is a little bit more frontier-y, one might be top down, the other one is bottom up. So when we look at how we might structure this, you get a different answer.

Dr. Leon Guerrero: Artisan has 3% cash? Terry Dennison: The way you end up with Artisan is if they don't feel that they have a good investment idea or if they think the emerging market sector itself was a little over valued, they'll go over a little in cash, 3% is not much. The others are really fully invested, DFA partly because they own so many stocks, they can invest little tiny amounts of money. If you look at for example Schroder, they have 90 to 130 stocks in the portfolio, so that would be about one stock's allocation that they don't have filled in yet. If you owned 130 stocks, each one of the stocks might be 7/10ths or 8/10ths of 1%, if you just divide the total portfolio by 130 each individual stock on average would be a little less than 1%. At the time this picture was taken it's possible they had sold stock and just not replaced it yet. DFA is zero because if you have 2,700 stocks, you can easily invest even a tiny amount of cash, so they don't hold any cash at all because there's always something for them to buy. Unless the client insists they be 100% invested at all times, they don't want to hold something they don't have conviction in. If they don't believe it's a good investment, they would rather hold cash than invest in something that's not their best idea.

The next thing that's on page 15 that's kind of interesting, one of the things we look at is where do they think they add value. Again a big difference, Genesis doesn't pay any attention to where the company is, they're 100% stock selection, they will buy anything, any place if they think it's a good investment. Schroder on the other hand looks at the individual countries or regions so even if they like a stock if it's in a region they don't think is strong as an investment, they won't own it. So one of the things you would like to have is you don't want 2 stock pickers and you don't want 2 top down market selectors, you really

want to have this diversity style. The object of investing is to win by not losing and the reason you would have 2 managers is if you're doing 2 different things, you don't get them crashing at the same time, they're likely to come up with different portfolios. You can say, yes if they were great, if one of them was great, you reduce your earnings, but the reality is you win by not losing. You can't make enough on the upside to correct for the amount you lose on the down side as we saw with the crash in 2007, 2008, U.S. stocks lost 50% of their value, you need 100% return to get back to where you started from. If you only lose 30%, you only need about a 56, 57% return to get back to where you started from. Part of the reason we have so many managers and so many different styles is to avoid suffering these catastrophic losses because the market is never good enough to ever recover those. Again, the object is to win by not losing.

Let's just take a look quickly at performance. You can't act on this, this is really in one sense to get you thinking about what you might do going forward. If we look on page 33 and here we did include Capital, they are the blue hexagon and you can see the performance has been pretty weak although if you look at it on a little bit longer term, 32<sup>nd</sup> percentile for 3 years, 32<sup>nd</sup> percentile for 5 years and the others have also had periods of weakness, there isn't anybody here who is super all the time and you really wouldn't expect them to be. If you look at DFA they don't have stellar periods, now the thing that's good about them is they also don't have horrible periods either. If you look at them for the dates we're showing here, there's only one period where they're below the median and that's very slightly, contrast that with Capital which is has been basically below the median for every period shorter than 3 years. Genesis longer term is very strong, but has also had some periods where it would take a certain amount of intestinal fortitude to stick it out with them. Schroder has also had pretty volatile periods.

It's probably better actually to look at page 35 because if you just look at one quarter even one year, it gets very difficult because you don't see a long term trend. Generally our investment policy says you should look at longer term performance, like 3 years so this is looking at rolling 3 years. The interesting thing on a rolling 3 year basis is Cap Guardian doesn't look so bad. So again the point here is we're not necessarily committing to make a change or even to do a search, but just put in perspective what Cap Guardian does, this is the reason we did this book to help you get some perspective. Now if we look at Genesis, their performance is even more pronounced and again you can see during down periods, they do relatively well, in the up periods through 3 years ending 12, 2007 they did particularly poorly.

What I'm going to take you to now is starting on page 39, this is looking and you've seen this chart many, many times, there are a lot of things here, the zero line is the benchmark, so above the line is better than the benchmark, below the line is worse than the benchmark and remember, we can buy the benchmark. If we basically want to say we're tired of trying to beat the market,

we'll take the market, we can index these and take the market. If you look at and I just picked Artisan here as the first one, the green bars are up markets, so if they're above the line in the green bars that means they do well in up markets. The red bars are down markets. If we look at this, basically there's no particular pattern here, they're not necessarily a strong up market performer or down market performer. They are a bit volatile, if you look at the purple line, that is the rolling one year number and the dotted line, the middle one is the median, the top one is the 25<sup>th</sup> percentile, the bottom is the 75<sup>th</sup> percentile, they're all over the place.

Now let's look at Cap Guardian, they're all over the place too. The thing that's interesting is Cap Guardian is very much a down market manager, now that's put them in a disadvantage, because lately the performance of the market has been positive, if you look at the bars for the last number of quarters, they're all green if you're a strong down market manager. Look at how well they performed during the market decline, particularly the 1<sup>st</sup> quarter of 2008, the 3<sup>rd</sup> quarter and 4<sup>th</sup> quarter of 2008 where the market was significantly down, they did great. They also had one down quarter during the down market. When the market turned and the market became much more favorable, they lagged. For a while not long ago if you look at that blue line which is the rolling one year, they were well into the first quartile, but because the market has done well lately their performance has lagged. Let's contrast them with DFA, none of these are just burning bush kind of signals, but basically in the up market we've seen recently, they've done very well. They actually were deep in the 4<sup>th</sup> quartile in the 2<sup>nd</sup> quarter on a rolling one year basis in the 2<sup>nd</sup> quarter of 2008, but when the market recovered, they started to go up and you can see just how strong that recovery has been, out of the last 8 quarters, 7 of them were positive for emerging markets and basically they were up 6 out of those 7 positive quarters and you can see what that did for their rolling number, they went from deep in the 4<sup>th</sup> quartile to well up into the 1<sup>st</sup> quartile and they're still in the 1<sup>st</sup> quartile. So we talked about this diversity of styles, there's an attractive opportunity there. Genesis is like, if you turn to page 42, like DFA but even more so. This is pretty volatile stuff, they're all over the place and they obviously rebounded dramatically. Interestingly they've been up now in the last 8 quarters, including one that was down for the market, but they're pretty volatile. The last one is Schroder and they definitely struggled in the up market. So Schroder and Cap Guardian they struggled in the up market, did well in the down market. Schroder and DFA would be a poor combination, they're doing the same thing. The interesting thing is and again you can't act on this because this isn't really a search process, this is a way for you to just think about what it is you might want to do. (We'll look at a bit more data and then we'll move on) I think there's an opportunity to perhaps pair Cap Guardian which is a strong down market with somebody who is a little bit better on the up market side, not lose so much when they're under performing and moderate the performance. Obviously DFA it looks like they're the best one to pair them with and again you have to go through your process.

If you look at page 52, I believe that consistency is immensely important. If you look at Cap Guardian, they're actually pretty decent, they're above the median 40% of the time on a one year basis, if we look at page 53, they're above the median on a rolling 3 year basis 94% of the time, so if you have 3 years worth of patience, historically they have not had 3 bad years in a row. If you look at DFA on a similar period, their 1<sup>st</sup> quartile 75% of the time and even on a one year basis DFA is 1<sup>st</sup> quartile 56% of the time.

The last thing I want to look at is on page 54, looking at Cap Guardian versus DFA and up and down markets. DFA incidentally, on page 54 in the down markets, there has not been a lot of history here, there's not been a lot of down markets in emerging markets, you saw how well they did when we looked at that chart of emerging versus developed. Cap Guardian in up markets is only up 38%, it out performs 38% of the time; 80% of the time in down markets. DFA is up 70% of the time in up markets and is still out performing in 80% of the down markets. So I just think a combination of DFA and Cap Guardian wouldn't be a bad thing to look at. The average excess return is significant also, these last 2 columns, what you need to look at is what is the excess return, excess return is their return minus the benchmark, it's what they added over the index fund. Cap Guardian when they out perform they're up 189 basis points when they under perform they're down 114, which is not a bad combination, but look at how well DFA has done, when they're out performing they're up 372 basis points versus down 171 when they under perform. It's something to think about, we haven't done this before, we typically have done searches where we decided to replace somebody and this case, while clearly Cap Guardian has lately been lagging because the market has been up so strongly we now see they are a better down market performer. Maybe if we pair them with somebody who's a little bit better on the up side, the portfolio of those 2 managers is a better deal for us, just something to think about.  
(End of discussion for DB Plan Quarterly Performance)

### **Defined Contribution Plan**

#### **10:30am-11:15am DC Plan – Quarterly Performance**

We actually do in the next category have a real search because for DC you're buying a fund, you don't need to do go through a procurement process, but let's go back to the performance report the Retirement 401a and 457 plan. Underneath Tab 4 on the DC Plans there are some notes here about Barrow Hanley, they're wrong, but they're not terribly significant. Barrow Hanley is a sub-advisor to the Windsor II fund. Windsor II has been historically one that's excellent, it's in many, many defined contribution plans and historically has done very well and has lagged a bit so we thought it would be good to include this. We did some work on this and we couldn't really find anything that looked bad, but we did want to include it because Barrow Hanley is a major part of the Windsor II.

BlackRock, Blake Grossman who is the Vice Chairman is leaving to pursue other opportunities which is the polite way of saying he's canned. BlackRock obviously has been going through a lot of changes and this is probably just a continuation of that. We don't think he had much to do, Vice Chairman don't have much to do with investments so unless there's a zipper effect again where other people who are close to him leave, we don't think of it as great significance.

Go to page 49, we had a bit of a production problem here. If you look at these 2 pie charts it's easy to simply freak out, it looks like everything in the portfolio has changed. What happened was we took out the balanced fund and the program that produces this chart; this is produced by a computer, what happened is everything slipped a color. I've gone back to our production people in Chicago and said, this is very disconcerting, because it looks like the last quarter everybody moved all their assets around. Realistically the only thing of significance that happened is the proportion of assets that are invested in the target date funds increased about 5% which is good. We will talk a little bit about what your participants have done. If you go to page 50 you can see the data and the change, the only really significant change other than the balanced fund being eliminated and what we did if you remember is we mapped the balance fund into the age appropriate cycle fund, so the 4.9% that was the balance fund disappeared, the 4.5 or nearly 90% of that money was automatically reallocated, so about 4/10ths of 1% of the money was actually changed by the participants not somebody else. We again think this is excellent, the fact that you have now such a high proportion in target date really represents we think an opportunity for your participants to actually grow wealth.

The other thing that we think is attractive is the fairly low allocation that you have to Stable Value. We see a lot of DC plans where Stable Value is a third of the assets and basically Stable Value simply keeps up with inflation, it doesn't add any return or maybe adds one or a half a percent a year which means that 1% a year you have to be invested for 63 years to double your money, so the return potential there is very, very low. In terms of purchasing power, when those participants retire, all the purchasing power they had is the purchasing power they put in, they have got no purchasing value of return from the market. If you had looked at this without knowing that we did this remapping process you would think you have the most effective education process and the most thoughtful participants in the country because of the low allocation of Stable Value which doesn't earn a real return and the high proportion in target date. To show you how concerned many planned sponsors are getting to about how poorly participants are making investment choices, some plans are doing a fairly extreme thing that's come to be called a reset, they're going to their participants and saying, we're going to put your money in the age appropriate life cycle fund regardless of how you allocated it previously and you have 90 days to make changes. It basically is like starting the plan over again. In order to get people away from putting, if there are 20 options putting 5% in each

option, picking every other option or just doing foolish things, it's controversial, because you give people the opportunity to allocate the way they want it to be, but what it does is it does something about the inertia of most participants. If you look at record keeper data, an amazing portion of participants never change their allocation, whatever allocation they put in the day they got hired, that's the allocation they retire with. The reset which you don't need to do, you in effect have done it already, you have a very high portion of your funds in target date which is the right place for most participants to be, but other plans that have been around for a while and now very poorly thought out investment structures by the participants are basically forcing people to do what in effect you did which is make people reallocate their assets and if they don't reallocate which most people won't, they go in the age appropriate life cycle fund.

Again if you look at the colors here it's easy to freak out, everything just moved one color because of the balanced fund. We do show it for the 2 plans combined and the 401a and 457 separately and again, very high allocations to the target dates, lower allocations to the other funds. On page 55 in terms of plan line up just indicating that at your end the Dodge and Cox was zeroed out. There is a search book which we will get to in a minute... it was characterized again as a market check, it does not represent a commitment to make a change it's really to look at what else is out there, which I think is a very thoughtful way to do it. We did go to a somewhat cheaper share class for Thornburg and we did replace Pioneer as of the end of year with DFA Emerging Markets. When we're talking about the DFA fund in the DB discussion we just had, if you went that direction (that we are somewhat suggesting) you would end up with roughly the same fund in both the DB and DC.

In terms of the compliance table in the performance, let's go to page 58. In general you can see all the green numbers, again a green number is basically in the above median category and exceeded the benchmark. There's a lot of green numbers here, we have some pretty good funds. The weakest area and it's not a big difference is in the lifecycle funds where they tended to lag their benchmark a little bit, I wouldn't attach tremendous significance to that, it is something we need to keep watching, we're not certainly suggesting making a change, but perhaps going forward it ought to get looked at, not to make a change but so that the minutes show... this is participant's money and your fiduciary responsibility here is of a different nature and probably a little greater than for the DB Plan, the DB Plan you're sort of investing your own money or as Trustees your investing for the plan. In this case you're providing options for the participants and I think, certainly from a litigation risk perspective and almost an ethical or moral perspective, your fiduciary responsibility here is a bit higher. This is something you want to look at, we don't think action is necessary right now. Antolina Leon Guerrero: In looking at that there's an alternative to BlackRock? Terry Dennison: Absolutely. We're not suggesting you make a change, this is relatively newly selected, we really like BlackRock's approach to it, but it's something we want the minutes to show that the



Committee talked about and not just talked about as a matter of show but talked about because it's important.

Once we get into the other funds basically the performance is pretty good. The Thornburg International Value again as we saw, value is definitely the place to be, it just continues to do extremely well and of course now we're getting the benefit of a little bit cheaper share class. The DFA we show data here but nobody was really in it for this period because the transition was made on 12/29, but clearly we certainly hope the performance we've seen here in the past very, very strong continues going forward. We didn't see anything come out of Pioneer that indicated we made a bad decision.

Looking at the fees on page 62 particularly with replacing the very expensive Pioneer which was 185 basis points with DFA which is 67 basis points, in terms of saving the participants money, this is one of the paradoxes, the lousy fund cost 3 times as much. We cut it by two thirds, nearly 200 basis points to 67 basis points. Obviously it cost less money to run a quantitative mechanical strategy that does not have researchers running around to all sorts of crazy places, it's cheaper to run and collaterally more successful. Paula Blas: Terry, at the last quarterly performance I did bring up a participant, actually now it's a couple of participants interest in adding a fund that has the ability to invest in precious metals commodities. I'm bringing it up again because they asked for the Board to reconsider. Terry Dennison: Obviously these things are cyclical, everybody is watching the price of gold and regretting they didn't buy in at 800, 900, 1,000, 1,200 or 1,300. They really fall into 2 categories, there are pure commodities funds that will track a particular commodities index, if you go back to the book we were looking at before, what we started with and go to page 22, there are 2 principal indices for commodities, one of them is about 25% oil... this is not a discussion on commodities, I want to give you some background. There are 2 indices, the S&P and the Dow Jones. The S&P is about 65% energy, Dow Jones is about 25% energy, but that is you can buy commodities funds. Another flavor is what's called a hard assets fund where basically you can think of it as investing in things rather than pieces of paper, so instead of stocks they buy commodities and other hard assets. Then you have the real return funds that attempt to provide a return adjusted for inflation, it's like a TIPS fund, but it's not buying Treasury inflation protected securities. All of these are similar, they're not distinct things. It's unusual to see commodities funds in a DC plan because they're very volatile. It is becoming much less uncommon, meaning more common to see real return funds and all the fund families now have real return funds, it becomes very popular in this sort of retail, the IRA market place because people are looking at inflation. The TIPS funds, they track inflation but they basically just give you inflation, people want more than inflation, they see inflation as an opportunity and TIPS funds defends against inflation. A real return fund sees inflation or the potential for inflation as an opportunity. Obviously if you have a bar of gold or a pound of copper and the value of the dollar declines, in real terms the value of that physical thing rises in value. In fact because oil is priced in

dollars, a major component to the price of oil is the international value of the dollar and vice versa. When the dollar loses value, oil gets more expensive. So it's becoming more common to have real return funds or hard asset funds, primarily the real return funds. Pimco has one, (I'm not advertising for Pimco) Pimco's real return fund has done very, very well and the idea is if inflation really gets going and inflation in the UK, now the UK is a different economy, is up to 5% and the U.S. Federal Reserve which has two duties, one to protect against inflation and two to foster growth. --- has basically ignored inflation and done everything to foster growth and said, we don't care what happens with inflation. The way they talk and they talk in riddles, it's what's the difference between for a foreseeable future and for a protracted period. There are people who try to figure out when the Feds say, we're going to keep rates low for a protracted period, what does that mean, does that mean like a year, is there some trigger that will cause them to begin to tighten. Inflation has become such an issue in Europe that the European Central Bank increased interest rates despite the fact that their economies are doing very poorly. Now they have a different mandate, their mandate of the European Central Bank which was derived from the Bundesbahn in Germany is solely inflationary, they have no responsibility for growth. In the U.S. the Federal Reserve has 2 responsibilities which conveniently are incompatible, which is to foster growth and to moderate inflation, they can't do both at the same time. Inflation is becoming more of an issue. The question in my mind to answer Paula's (Blas) question is, it really depends on the ability of people to understand what they're buying. There's always something that's hot that people want to have in the plan and there's a danger where you have and I'm going to speak plainly here on the record, I think you probably have in large degree a fairly unsophisticated participant base and people look at what happened last quarter and last quarter the commodities indices were up...the energy heavy S&P was up 6%. (Wow) Let's put all my money there if it keeps going I'll be able to retire wealthy. They really understand these funds crashed when the world economy slowed in 2007 and 2008. Remember when oil was \$147 a barrel and fell to \$32, you look at what that did to these indices, it just clobbered them. You saw copper which is largely an industrial metal, you need a lot of it, it's not like gold, copper went from \$6 a pound to \$1.50 a pound. These things are really volatile and the problem with the participants and I'm speaking freely here, people chase returns and people look at what's hot and when it stops being hot then there's a risk that they're going to come back and say, you as a Committee allowed us to hurt ourselves. There was a phrase when I was in college back in the 60's called "in loco parentis," which is Latin for in the place of parents and the belief then was the university had to make rules to keep you from doing things your parents wouldn't like you to do.

Wilfred Leon Guerrero: How many plans have these kinds of options? Terry Dennison: 10% and that number is growing pretty fast, the real return. Wilfred Leon Guerrero: No, commodities. Terry Dennison: Near zero. Wilfred Leon Guerrero: I think that's the answer. Paula Blas: That was the answer that we gave him at the last quarter. Antolina Leon Guerrero: But now there's

this option of real return. Terry Dennison: The real return funds have been out there and basically it's full of commodities, it's not like it's something completely different, most of a real return fund is commodities because that's what a real return means, something that provides a return adjusted for inflation that isn't TIPS. TIPS match inflation, this would give you a return above inflation because you not only got the value of something you could hold in your hand appreciates if the value of the currency declines, but with most of these commodities, there is a fixed supply. I said already we passed peak oil. I was talking with a colleague, do you know in the world we burn about 6 million barrels a day of oil. A barrel of oil is 44 gallons, that's 300 million gallons of oil a day. The world is a pretty big place, but that's burning it up at a pretty good rate. A big oil find today is maybe a billion barrels of oil that would keep the world going for about a week and a half. So we're just running out of this stuff.

Gerry Cruz: The guy wasn't talking... Paula Blas: He was talking precious metals. Gerry Cruz: I think what we need to do is take a look and understand what he is asking for. Paula Blas: He has side investments. Gerry Cruz: I think the issue is a return that's based on something other than the financial performance of a company which is the alternative being real return. If we start to fill the menu with what is perceived to be hot at the time, we could have a pretty unruly menu. Wilfred Leon Guerrero: Is there something that's preventing from him from setting up his own IRA. Paula Blas: He has his own. Terry Dennison: He wants a tax advantaged investments. Gerry Cruz: So maybe an option would be a real return investment where it's not just precious metals, an aggregate of different commodities that is less volatile than having one metal precious, industrial or otherwise or oil for that matter, some single commodity. Terry Dennison: I would definitely talk you out of doing a single commodity like gold or oil because you can't offer that to a broad group of participants that wouldn't understand it or you're going to get in trouble. Gerry Cruz: And you get those that think they know, who hear something on the news or in the cab ride over and say, let's go. Terry Dennison: One other bit of advice about being responsive to participants and we run into this a lot, that once you say yes you can never say no again, this whole concept on a legal precedent. Your job is not to be responsive to what participants want, your job is to do the right thing for participants which isn't the same thing. You don't want to be in a situation where whatever the next thing is and there will be a next thing. You say you did it because they wanted it, why won't you do this. Your job is not to be responsive to what they want because in some cases they shouldn't have what they want. That sounds very manipulative, but your job is not to give them what they want, your job is to give them what they ought to have. Wilfred Leon Guerrero: It's one thing to have a policy like that but it's another thing to respond appropriately. I'm not saying we should always accommodate whatever the wish is, but I'm just trying to determine what the rationale is. Rosalie Bordallo: It's too speculative and the majority of the population is not, could end up losing their shirt because they see a return this quarter of 30% and then the next quarter goes down 60... Paula Blas: That's what I told him, you already have a side investment, but I'm dealing with 7,000

participants who may not understand that and it's just too risky to have them start put their money in that because they look at the returns from prior... Rosalie Bordallo: Especially when you say precious metals. Everybody is saying gold is going up at an all time high. This is not a time when you want to offer because you're going to have people that say, oh I have wanted to get into the gold thing and it's not... Terry Dennison: These are retirement assets, this is not a tax advantaged, employer augmented speculative pool. It's hard because everybody wants to be responsive and obviously if one person it's easy to say no, if it's 20 people, if it's 3,000 that's different.

Let's go back to the search that's in front of us. Now we're at Defined Contribution Search Report, Large Cap Growth Equity. Again here we have had for a very long time American Funds and Cap Fund, we're in Share Class R4. Again, the knock with Cap Guardian has been that it's difficult for them to add value because the fund is so large. In fact this is one of Cap Guardian's smaller funds, they have others where that is even more a factor. The Committee asked us and no decisions been made, to do a market check to see what else is out there. On page 3 we are looking at 4 other funds. In the defined contribution world there are really 2 different entities that you run into. There are the people that have families of funds, for example, Harbor Capital, Nuveen which basically have access to a client base, but may not have the investment capability and they will hire what are called sub-advisors. For example, the Nuveen Winslow Large Cap Growth Fund is actually managed by Winslow Capital Management which is one of your new managers in the DB Plan. Jennison Associates is the advisor for Harbor Capital so Harbor Capital isn't making the investment decision. Harbor Capital is a firm with distribution, they're on a lot of DC platforms, they provide the distribution, Jennison provides the investments. In a very real sense, Capital Research and Management is the sub-advisor for the American Funds and in that case they're both the same entity, but technically speaking, Capital Research and Management is the advisor of the American Funds. T. Rowe Price they're both the platform and the advisor and RCM is the sub-advisor for the Allianz. The Allianz is German insurance company with a very big financial services presence. So Allianz has the distribution, RCM has the investment management.

Go to page 4, a couple of things leap out at you, here is the Large Cap Growth. You can see that they're twice as big as Harbor and massively bigger than some of these others. Again the issue is the more assets you have the harder it is for you to add value because to invest those assets you either have to buy more of whatever you're buying, if your assets double you either have to buy twice as much of what you're buying which reduces the value of that investment because it drives the price up, you're basically competing with yourself to buy the stock or you have to broaden what you invest in. So you might have 20 good ideas, really good ideas, but you have too much money to invest in those 20 ideas, so you invest in 20 other ideas that may not be quite as good or you start to invest outside of the target range. These are Large Cap Growth funds, if

they can't invest all the money in Large Cap they may go down to Mid Cap. So you end up with and there is sort of a truth in advertising here, you basically told the participants that this is going to have the characteristics of a Large Cap Growth fund and if they're unable and this is more a case of what you would get in Small Cap, all of a sudden it really doesn't look like what it is you have told the participants it is. So at 21 billion in the fund, now we also list total share class assets, that doesn't mean anything because that's just the little fee class you're in, you're in a cheap called R-4, other people are paying more money than you are, what matters is the assets they're managed using this strategy.

Page 5, one of the things you're going to see is again, this isn't exactly a burning bush situation where we're going to go and say look at this being wrong with Cap Guardian, this being wrong and this being wrong, you're going to be pretty even handed here because this is a market share. If you look at 2 statistics here, price to earnings, PE and price to book, these are statistics that are a measure of growth or value. The higher the number and this is PE, the number of the multiple of earnings that's represented in the price. So a PE of 20 means that the price of the mutual fund share is 20 times the earnings. Price to book is the number of times of book value that the share value price represents. In general value funds or value stocks have low PE and low price to book, growth stocks have high price to book and high PE. Now look at the PE and price to book for American Funds versus the others, it's not as growth-y. The market PE right now is about 17 on a forward basis so it's more growth-y than the market, but if you contrast that with Winslow which is over 27 times earnings and a price to book of over 5 versus American Funds PE of 20 barely more than the market at a price to book of under 4. Now remember what we looked at in the performance report, what has been the portion of the market doing well, growth. Therefore it would be logical to assume that the more growth-y the better. So one of the questions here is, are they looking bad because they're not as growth-y as other people are. You can say if we're it growth fund, shouldn't it be kind of growth-y. Well it is if you look at the Russell 1000 Growth Index down here at 17.9 PE ratio, 20.1 is bigger than 17.9 so they meet that, but their significantly less growth-y than the median fund Large Cap Growth. The median fund Large Cap Growth is 24.5 so the reality is this is more of a core fund that leans toward growth than a growth fund. The thing that we have to bear in mind is truth in advertising, maybe we can explain why Cap Guardian is not doing as well; it's not doing as well because it's not growth-y as the other growth funds and because growth is in favor, it's lagging. Maybe we ought to keep Cap Guardian, the problem is the truth and advertising issue, we said it's a growth fund, that's what we call it, that's what the participants were told it is. So we know have kind of an interesting circumstance, we can explain why they're not doing as well, but that doesn't make us anymore comfortable about keeping them because we have a different question, not that they're under performing, but are they doing the same thing that we've told the participants that they're doing. So when we look at the performance we have to adjust for the fact that they're not as growth-y.

The other thing about Cap Guardian and you can see the effective of being huge. If you look at the total number of holdings, Cap Guardian has 186 names in the portfolio, Winslow 63, T. Rowe 62, Harbor 73, Allianz 65. It's unlikely that they have 186 really good ideas, they probably have 50 really good ideas and the rest of these names, well they have to invest in something, they have to be fully invested. They're somewhat lower turnover at 29% that's partly driven by the size of the fund. What makes you turnover is flows in and out and if it's large flows in and out, the percentage basis aren't as great or new ideas, if you have a lot of names your proportion of new ideas or good ideas is less than a portfolio that's made up entirely of good ideas. So we have a couple of issues here with American Funds, not just the performance which maybe we have a little more of an insight on, but it has some internal characteristics that aren't as attractive.

I'm not going to go over all the details because I'm looking at the Chairman and are you really of a mind to replace them or is this strictly a market check and similarly what is Paula's (Blas) view. Paula Blas: We asked him to do an actual search because the last quarter (American Funds) you wanted to see what was out there. Gerry Cruz: I think it's worth exploring as though we are. Terry Dennison: Okay, we'll just keep going then. Gerry Cruz: We're going to do a switch and then at some point, today or tomorrow decide whether we're going to go forward on making the switch. You can see even in terms of their holdings on market cap they're about almost half what the Russell and growth is, the holdings that they have are significantly not large compared to the Russell 1000 which means they're going a lot deeper. Terry Dennison: In market cap, they're going deeper into the Mid Cap.

Let's take a quick look at some of the summary data here, go to page 7. As you know Mercer in addition to having a letter rating, which basically translates A as buy, C as hold, D as sell, it's a little more complicated than that but just to make it simple. We also look at and score 4 factors that we think are very important. Idea Generation which is the most important because if you don't have, this is the source of the value added, all the other things basically avoid losing value along the way and the scoring is double plus which we think is outstanding and you pretty much can't get an A rating without a double plus in idea generation. Idea generation really talks about how do they decide to buy something or how do they decide to sell something and everybody has good ideas once in a while. The question is, do they have a process that can do it repeatedly, because they have to do it this quarter and the next quarter and the next quarter, it depends on research, how deeply do they delve into the markets and into these companies to figure out this is an opportunity that the market hasn't discovered yet. To be successful in investing, what that means is you have figured out something that the market hasn't figured out yet. In fact there's a theory called the efficient market hypothesis that basically says that the market knows everything, that everything that is known or knowable about the future of a company is already in the price and research is pointless, you

cannot discover anything that everybody doesn't know already and therefore is incorporated. So in order to be successful as an active manager, you're doing something that sounds impossible which is figure out something that other people haven't figured out yet which is not easy and importantly you have to do it over and over and over again. So supposedly if you have 60 names in the portfolio those 60 names represent opportunities that you think the market hasn't seen yet, they have a new product or they have a change in their management philosophy, they're doing something about their cost structure that other people haven't figured out, that's hard. So plus, plus means they're good at discovering these and they have a mechanism that can do it over and over again. I once heard a presentation by a manager and after you listen to it for a half an hour it appeared that their idea generation amounted to their Chief Investment Officer heard voices and that's not a particularly compelling investment story. If you look at RCM, clearly they have as we say, an impressive fundamental research platform, there's things about it that are attractive, but we also don't think that it is top of the line, it only gets to single plus which is better than equals or minus. The other factors are basically things that take away. The best you could start with are good ideas. Portfolio construction typically doesn't add value, it avoids losing value. In Allianz's case it only gets equals, we don't think particularly they're particularly thoughtful about putting portfolios together. Implementation is largely and this is where Cap Guardian is definitely an issue, is capacity management. Do they really do a good job of closing a product when it's gotten as big as it can get and still be successful. Finally business management which is a whole bunch of factors, it's really a case of, are the interests of the business and the people aligned with clients or are they just in it for themselves. A particularly derogatory term often used with Cap Guardian is asset gatherer, it's a derogatory term, it means they're trying to make their business bigger and more profitable by just bringing in assets regardless of whether or not they can be successful in investing. Allianz has some good scores, it gets them a B+ but it's not terrific.

The next one is Cap Guardian and you can see why we have issues with them and it's not just performance issues, it's a bunch of issues. We don't think they are idea generation has kept up with others, the firm has become too large in staff and assets to give us confidence they could add value in the future. They are aware of the criticism that they have been an asset gather, that they simply allow the assets to grow and performance to become mediocre. Their solution which I guess they thought was sensible is they split it into 2 parts and they give half the assets to each part. Both parts are using the same researchers, both parts are using the same ideas and somehow they thought this was a solution to the capacity issue. Implementation, it's unusual to see a negative, Cap Guardian is not highly regarded with Mercer's research organization simply because it's unwillingness to close a product, they just let it grow and grow and grow and let the performance become mediocre. Finally business management, it is 100% owned by participants, but one of the negatives for you as an investor of an asset gatherer is they're just making themselves rich in effect at your expense or your participants expense because they can no longer add

significant value, but they're just getting richer and richer. So this is how you get a B and there's been a lot of discussion internally about whether they're over-rated.

If we got to Harbor which is again Jennison, Jennison is owned by Prudential Insurance, it is a very highly regarded manager. Let's look at their ratings on page 13. Idea generation, excellent, the double plus, high quality research, an attractive approach for doing it, we believe it's repeatable, that they can keep coming up with good ideas. Portfolio construction is excellent, it's unusual to get double plus in portfolio construction because again the issue here is not adding value, but minimizing loss of value. It has fairly loose sector constraints, but we think that the portfolio managers are conscious of the bets they're taking and it allows them to focus on their best ideas. There's some interesting research, academic research that interestingly says that managers best ideas actually work, the reason the investors don't get the benefit of it is managers want to gather assets so they dilute the value of their best ideas so they can maximize their own profitability. Implementation capacity not an issue, we don't know what they would do if it go large, but it's not an issue now. Business management, it's owned by Prudential, they're a strategic investor, they don't interfere with day to day management, but it's a very strong parent, it's one of the strongest companies in the world. Solid A rating, excellent long term performance.

Winslow you're familiar with, they're a relatively recent hire in the DB Plan, it's a traditional approach, they use quantitative screens as many fundamental managers do, they focus on companies that are middle mid cap and larger, they look at factors like revenue and earnings growth, typical portfolio holds 50 to 65 stocks which means primarily their best ideas. If we turn to page 16, the idea generation, very strong, we really like Winslow's approach; we hired them again in the other fund. They get a double plus in business management because we just think the management is more focused on adding value for their customers and not just making themselves rich. It's a traditional growth strategy, it should perform best that are both quality in growth. We haven't talked much about quality and speculative growth, but quality growth are companies with strong balance sheets, strong brands, excellent management and that's the place you want to be if things get tough and it's probably the place you want to be with participant money. Speculative growth is not a good place for participant money. They could do fabulously well as we saw with some of the very poor quality companies in the 1999 dotcom boom, but when they crash and burn it's very painful so quality is very attractive, they will under perform in a junk stock rally. To give you an example of a junk stock rally, in 2003 when the market turned around after the decline of 2001 and 2002, we had a junk stock rally and you could characterize a junk stock rally as companies that have fallen from \$100 a share to \$2 a share --- to \$3 which is a 50% return, but they're still junky companies, no earnings, no profit, no business, as an animal lover I find it painful, but it's what's called a dead cat bounce, if you drop a dead cat it will bounce. A rated, we really like Winslow.



T. Rowe, big house, well known growth orientation, they are a big record keeper, they are huge 401k business, they are probably the 3<sup>rd</sup> biggest record keeper and platform after Fidelity and Vanguard. Very classic growth, very high degree of confidence, you can see the idea generation double plus, business management double plus, they spent the money to build the research organization necessary to be successful. That's a quick recap.

Let's talk a little bit about performance. First I want to page 20, page 20 is looking at how the Fund behaves. What we do is technically a regression analysis and looking at how the stream of returns best fits 4 different indices, Large Cap Growth, Large Cap Value, Small Cap Growth and Small Cap Value. In this case purple is matching the Russell 1000 Growth. If you look at Allianz's, I look at a lot of these, I have never seen a fund that is 100% all the time when it's suppose to be. They all have little variations, you can see that even Winslow had not just purple but also the gold which is Small Cap Growth. This is not saying they're investing in small companies, this is a regression analysis, we are taking their returns and regressing them which is a statistical procedure against 4 different indices and finding the best fit. If you think of the Fund as a box, we're not looking in the box, we are mathematically looking at how the box behaves. Look at Nuveen there, they even had a bit of Russell 2000 Value in it, the lighter gold color. T. Rowe Price is coming out of the decline has been pure Large Cap Growth. Interestingly if you look at American Funds, it's mostly purple but even today it's got a fairly high correlation with Small Cap Value. This is a Large Cap Growth fund, Small Cap Value? Remember we said that this fund is less pure growth than the other funds, it's a little less pure growth than the index and it's less pure growth than the median fund. So Cap Guardian is less pure.

Let's turn to the numbers on page 22. First looking at the returns for cumulative periods, you can see the American Funds problems have been recent because even 2 years 37<sup>th</sup> percentile, missing the index by 50 basis points, the index is up 26.5%. The fact they were up 26 is hardly something I would knock them for. They actually lost less in 3 years than the index, they were down 0.4 and the index was down 0.5. They lagged a little bit for 5 years up 2.9 versus the index 3.8, but if we look for example Nuveen the Winslow fund when growth really took off they also lagged but not as much and during the period when growth was weak, 2, 3, 4, 5 years ago the Nuveen fund did much better. It was positive for 3 years while the American Funds and the index was negative, not by much but it's still positive. For 5 years the Nuveen fund actually was the first percentile, it was the best performing fund, up 6.1 versus American up 2.9. Again, they're not exactly apples and oranges, the Nuveen fund is a little bit more pure growth as we saw. The Harbor fund which is the sub-advised by Jennison, a little bit like American, when American is doing badly, it's doing badly, when American does better, it does better. The advantage of Nuveen doesn't have that characteristic, it does better when American is doing poorly.

T. Rowe, solid performer, literally very, very consistent, 3 years in the 6<sup>th</sup> percentile, the most positive number for 3 years, up 1.8% with the index down half a percent it's pretty good results. T. Rowe price is probably not going to get you in trouble, they're a good solid consistent performer. Five years, bottom of the 1<sup>st</sup> quartile, 25<sup>th</sup> percentile, good performance.

There are some really interesting opportunities here. The T. Rowe looks excellent, the Nuveen looks excellent, the Harbor doesn't look bad. Allianz I'm not a big fan of, they're also not A rated, they're B+ rated and I think we can do better than that.

Let's look at 3 year rolling periods. Those were annual periods, these are 3 year which is pretty much closer to the evaluation period. We will let a fund be bad for a year because good funds are bad for a year, good funds are not bad for 3 years. Let's look at T. Rowe for 3 years ended 2007 and the 3 years ended 2008. This is why you have to look at all these different sets of numbers, you look at the cumulative number, you see a very different picture than if you look at it on a rolling period basis. Imbedded in that generally pretty solid performance for T. Rowe is a couple of years, that's a 4 year period, we're looking at 3 year periods, they're 2 adjacent 3 year periods, so we're looking at a 4 year span where they were pretty lousy. At the same time, Nuveen was very strong, American wasn't very great, Harbor was about median.

If we look at the line charts, if we look at American Funds on page 25, again their strategy goes in and out of favor, if value is in favor, they're doing pretty good, if growth is in favor, they're going to look pretty bad, because they're almost more growth at a reasonable price, which is sort of one of those half and half kind of strategies. So they're all over the place, right now, they've slipped down. Not long ago, look at where that blue line is, not long ago they were first quartile but now they've slipped down. If we look at Harbor which is the Jennison fund, again a bit of volatility, but if you look at the size of the bars, look at page 25 and page 26, I've always had a view and part of it is looking out for the participants and part of it is looking out for the Committee that very volatile funds don't belong in a DC plan because it can lead to bad performance, bad decisions rather, bad decisions by participants. If they're really, really good everybody piles money in them and they go to a down cycle, lose a lot of money, participants become frustrated and some become angry then they go chasing the next thing. I'd rather get rich slowly, performance consistency. We can see that Harbor is much more consistent. The bars are generally positive except for lately, but they're not as big.

If we go to Nuveen on page 27, basically if you look at where they are, the bars are up market, down market, larger and more positive than anybody else. If you look at the green line, the green line bounces around but it never goes below median, it kisses it once back in 2007, maybe even slightly below it, it gets close in 2009 and close again in 2010, but despite the ups and downs,

there's not wild swings in performance, it never goes below the median on a rolling basis.

T. Rowe, look at page 28, this worries me, I could see somebody looking at that performance and saying, let's just throw all our money into that. We have a coding system as you've seen for managers and there's a code that none of these managers have, it's a "T" tracking error, basically it's not very benchmark aware, it's very volatile and even if it's really good I think very volatile detracts from it's attractiveness in the DC Plan because again it leaves participants to do the wrong thing.

If you go to page 29, as you've heard me say, return is important but so is risk. What we're looking at here, you're use to the cloud of dots, the cloud of dots here is a Large Cap Growth universe, these are all the mutual funds we have in our Large Cap Growth universe, these dots are all over the place. Look at Nuveen's upward green triangle versus American's blue downward pointing triangle, you want to be up and to the left what we typically call the North West corner. Nuveen is giving you, compared to Cap Guardian what amounts to a free lunch; you are getting more return and less risk. In our economic system generally the more return you get the more risk you accept. That's striking, the only thing approaching it is T. Rowe. Allianz is a lot less risk for the same level of return as American which has merit. You literally are getting more significantly more return than the median and some less risk than the median fund, (what's not to like?)

On page 30 we have some interesting statistics. The right hand bar is something called information ratio, basically what it is a measure of the value added adjusted for the risk. Technically its alpha divided by tracking error, actually the square root of tracking error and the bigger that number is, the more return you're getting for the level of risk you're taking. If you look at that, you have to look to find the green triangle, it's at the top of the bar. It is information ratio generally for Large Cap, a good manager has got an IR of about .3 which means to get a 1% return, they're getting about 3% tracking error. They're getting 1% return for 2% tracking error, that's a really good deal. The American Fund, it's in there, it's a negative IR, it's not at the bottom, they are a lot worse funds. If we were looking for a very bad fund, there are plenty to choose from. We know Winslow, it's small, which means the opportunities for value add is a lot higher than American Fund. Statistically it's done everything you want it to do.

Go to page 33, this is the up and down chart. American Funds are in the up market 38% of the time, down market 57%. Down market in growth is likely a good market for value relatively speaking. They both can be down in absolute terms but in a sense if growth isn't working it's very likely value. Nuveen is up market, out performs 62% of the time, out performs only 29% of the time in down markets. If you go over to the right and look at the average excess return, American Funds loses more money when they under perform and they gain

when they out perform, so it's an unfavorable balance. Contrast that with Nuveen that more than doubles the positive performance when they out perform versus when they lose when they under perform. If this were the DB Plan where we had an option of having half and half, this would be a wonderful pair because what you'd have is a fund that does well in up markets and a fund that does well in down markets. They're very different, they're very diverse. We really can't do that here, it would be confusing to the participants to have 2 funds and you would have to explain what's different between them and you don't want to give investment advice, that's very dangerous and it's very hard to explain what's different without crossing that line into giving investment advice because all you need to do is answer the question, in which environment are we now. So we don't really have the half and half option, but certainly in terms of numbers, in terms of our belief and our research is very strong on it, our belief is that it's much more attractive to look at Nuveen as being a purer growth fund, much stronger performance, more like what a growth fund should do.

Finally let's go to page 36, this is one year and 37 is 3 years, the story is the same and in fact if you look at the 3 years, the story is about as conclusive as you could get. Nuveen on page 37 for 3 years they're in the 1<sup>st</sup> quartile, 100% of the time, they're average percentile ranking is 8, they beat the benchmark 100% of the time. American Funds is in the 1<sup>st</sup> quartile 5%, 2<sup>nd</sup> quartile 65%, average percentile ranking 48 which means basically they're throwing darts and they beat the benchmark only about a third of the time. The one year numbers are very similar, they're just not as extreme. 2.45 done  
(End of discussion for DC Plan Quarterly Performance)

### **11:15am-12:00pm Mercer Presentation – Asset Allocation in Terms of Risk Factors**

Wilfred Leon Guerrero: What I'm primarily interested in is how is this different from when you say we made this money at very little risk. Terry Dennison: (Overview of Analysis of Economic Risk Exposure) Turn to page 1, this is a relatively new concept and it's one of the learning's from the financial crisis. One of the things we discovered from the financial crisis is portfolios did not behave as though they were as diversified as we thought. Your portfolio is actually not as diverse in terms of asset classes as many, you don't do emerging market debt, you don't do non-dollar fixed income, you don't do hedge funds, you don't do private equity, there are a lot of things you don't do. Your portfolio is largely regulatory and frankly I think at comfort level of the Committee, but it still has a wide variety of asset classes and actually you suffered less through the market decline than most of the other funds that's why your performance ranking for 5 years is so high versus everybody else. What we did discover is that you could be very diverse in terms of the asset classes you had, like I said, you could have emerging market debt, you could have private equity, but in periods of stress diversification fail. The conventional shorthand for this is saying when things get bad, all diversifications go to plus one. Correlation is the degree to which 2 variables behave alike and it's a number between plus

one which means they behave exactly alike and minus one which means they're perfectly uncorrelated, when one goes up the other goes down. Conventionally you can think of it as if a correlation is .5, half of the return of one can be explained by the return of the other. So it's a measure of the degree to which your returns all go together. In fact correlations are a part of looking at asset classes, in fact if you go to page 38 of the book we were last looking at (the search report), here's a correlation triangle, it basically shows what the correlation is between all possible pairs of asset classes, but correlation which might be fairly low between bonds and stocks, fairly high between small cap stocks and large cap stocks, when everything goes to hell, everything goes to hell. It's more sophisticated than that, it's easy to say that, but it's really more sophisticated. First of all there's something called "fat tails," which means returns are not normally distributed. You all know what a normal distribution looks like, it's that bell shaped curve and in a normal distribution the likelihood of a bad result is the same as the likelihood of good result. When you hear the word fat tail, what that means is the likelihood of a bad result is bigger than the likelihood of a good result. You maybe heard of a book called "black swans," a black swan is an unusual highly impactful negative event, a financial crisis like what we had in 2007 where all of a sudden it looked like the banking system was going to collapse. Typically when asset returns were modeled normal distribution was used. There's a technical reason for that, the mathematics works easier if you have a bell shaped normal distribution, but that's not the way the world behaves, the world actually behaves in a non-normal fashion. Bad results don't happen more often but when they happen their significance is greater, the occurrence of the black swan. 99% of swans are white, but once you get a black swan, which is an unusual event, it's very negative. That was one of the learning's.

A second learning was called the importance of dynamic asset allocation. Historically we've used that here, historically asset allocations were strategic. You did a process every 3 years or 5 years or 2 years, whatever where you looked at a range of asset classes, we've done it here a number of times and found the combination on an expectational basis and they're all forecast, expectational basis had the likelihood of giving you an acceptable result; acceptable in terms of the level of risk and acceptable in terms of the expected return, you need a 8% return to maintain actuarial stability. Dynamic asset allocation which is what we used when we said we like REITs, when we did the last asset allocation we said you ought to include real estate, but at the time real estate was over valued, real estate had this huge run up and we said, let's hold off because we think REITs are going to decline because they're too over valued, too many people like them, the value has gotten beyond that which was reasonable from a valuation perspective, let's let them come down, they came down, we bought in and they went back up. Dynamic asset allocation says instead of looking at asset allocation every 3 years and then closing your eyes regardless of what happens in the real world it says look at the real world. We had a discussion today where I said I think small cap is attractive on a strategic basis, it's run up so much, look at the returns not just the domestic small cap

manager, but the international small cap manager has done so well that they're probably over valued. The stocks cost more in the market than they're worth and the balance of risks would suggest that they're not going to go up much further, let's not put more money in them.

The whole issue of behavioral finance, behavioral finance is a recognition that the real world is not rational. A lot of the models assume that people are rational; you don't pay more than the market is worth, you don't fall into the trap of thinking you are brilliant this time so you'll be brilliant next time, all of these behavioral problems, people hate to recognize a loss. All of the research show you and in fact there's a phrase for it on Wall Street called "your first loss is your best loss; if you buy something and instead of going up it goes down you should sell it right away, if it goes up the likelihood is the next move is more down, your first loss is your best loss and the reality is people don't like to do that, people hate to admit that they are wrong. There are a number of different things that have fallen into this area of behavioral finance that basically say that the formulas, the models, the equations assume that the decision makers behave rationally. Humans don't, humans don't like to acknowledge mistakes, humans remember their gains and forget their losses. Realistically the market is in the large case a zero-some game, the winners and losers match because for every winner there's a loser, for everybody that bought a stock that went up, there was somebody that sold a stock that didn't have it go up. If you talk to anybody who has invested, they always win. It's just like Las Vegas, who goes to Las Vegas and loses; they can lose 9 times out of 10, but the one they remember is the one time they won. Behavioral finance really means that people behave not rationally, but in a non-rational way.

Scenario analysis considers the fact that the economy has multiple potential futures. When we do modeling now instead of saying here's our best estimate, we actually model and we're doing a project now where we're looking at stagflation where what we had back in the late 1970's where there's growth but it's not very strong and inflation picks up. We're also modeling ideal growth where basically what you had in the 1990's where there was strong growth both in the economy and in the markets, but low inflation, unlikely to happen, but it's possible. We model different economic scenarios because they identify risks that don't show up in the traditional models.

The most important thing is called factor analysis. What factor analysis means is that there are things that are common to asset classes that cause them to behave the same that you wouldn't think. I've said earlier that high yield bonds behave much like stocks. How could junk bonds, a bond is not a share of ownership in a company, it represents a loan, a debt, why does it behave so much like stocks, because there is an underlying factor which is the economic health of the company that is more important than whether or not you're a part owner or a lender. The fact that it's dependent on the return and the viability of that company is more important than whether or not you own it or are simply lending money to it. One of the things that we discovered was that you could

have a very diverse portfolio, a portfolio with lots of different things in it, but actually if you looked not at the names, but the underlying risks, there were tremendous concentrations of risks and that's why diversification failed, that's why everything went down because most of the risk in the portfolio was dependant on a couple of factors. They have different asset classes but these factors were common to all of these asset classes. So it's a way of looking at risk and return. The easiest way to think about it is, asset allocation is not the same as risk allocation. You can have an asset allocation with a pie chart with lots of different slices, all different colors, but the reality is all those different asset classes have the same underlying risk factor which means if that risk factor is negatively impacted all those assets are going to go down, it doesn't matter what they're called, they're all going to go down.

If we go to page 2, the little chart there is simple definition, the total return from a strategy, be it stock strategy, bond strategy, real estate strategy, is made up of 2 pieces. People sometimes forget this, again it's a human characteristic to forget that if you own stocks and stocks go up 10% and you're up 10%, all that means is you're invested in stocks, it doesn't mean you made 10%, you made 10% mathematically, but there was no value added there because you got what the market return was. The second letter of the Greek alphabet, beta is used to connote the return of the market. If you actually say we're not going to invest in index funds, we're not going to accept the market return, we're going to ask the manager to add value and that value is alpha which is simply the difference. The manager's ability to hopefully add and potentially detract from return is dependant on their skill; if their skillful they can add value, if they are not skillful they will detract value and that's the sort of conventional way of thinking about the total return. If you look at risk and say, what risk factors are really being exploited here and there's something in bold there called "risk premia," premia is the plural of premium and premium basically means something extra you get for investing. The first is equity risk and let me define equity risk; there's something called an equity risk premium which is ERP and what that is, is what you should expect to get because stocks are more volatile than bonds. If you're going to invest in something that is more volatile than bonds, you should get paid for that and that payment you get that you're suppose to get is called the equity risk premium. Technically it's the expected return of stocks over Treasury bonds. If you're going to invest in stocks, you should get something for taking that risk and that is the equity risk premium.

Credit risk premium is what you should get if you invest in bonds that aren't guaranteed by the Government. If you buy bonds in a corporation, or a state, or a city, you should get a return above what you would get from investing in U.S. Treasuries. U.S. Treasuries are in one sense, risk free, the Government, despite what I said several hours ago, can't go broke or at least in theory, whether it will is another question, but in theory it's assumed that the Government can't go bankrupt. So if you invest in credit securities you take credit risks, you should be paid for that. So just because you earned more investing in stocks than bonds or you earned more investing in mortgage

backed securities than investing in Treasuries is partly skill, but mostly it is simply earning this risk premium.

Let's go back to our little example of high yield bonds, the problem with high yield bonds is despite the fact it's a bond, it's not a share of ownership in the company, it has a very high equity risk because if the company goes broke, meaning the stock would be worthless, the bond would be worthless. So in effect it behaves just like a stock, it's totally different, but it behaves just like it. If you think about it, let's look at a lot of other asset classes. Private equity, private equity is equity partial ownership in things that aren't traded on the stock market, it's got equity risk. Hedge funds largely invest, they use exotic techniques, but they typically invest in stocks, they might short the stocks, they might leverage the stocks, but they're investing in stocks. What we found in the 2007/2008 period is you might have a lot of asset classes, but the vast majority of the risk allocation is coming from equity risk. Another risk is term risk or interest rate risk. Interest rate risk is, as soon as you invest longer than overnight, if you invest overnight, meaning literally one day, the potential is rates could rise or fall. If you invest in a 30 year bond and rates rise, the value of that bond will fall a lot, just mathematically. If you invest in a one year bond and rates rise, the price will drop a little bit. So term risk is a measure of how exposed you are to the maturity of the fixed income instrument.

Illiquidity risk, this is sometimes argued as one of the reasons for investing for example in private real estate. If you for example, built the building next door, you can't sell the building next door and get your money in 3 days like you can in stock. Logically you should be paid something, a premium, an increment to return for the fact that you can't sell that security and get your money in 3 days like you can with a stock or one day like you can with a Treasury bond. So just because you make more money owning the building next door doesn't mean that you're smarter, part of that return is the fact that you can't sell it and get your money right away.

What the factor analysis does is look at a portfolio and say not what asset classes do we have, but what risks are in those asset classes and do the risks get very concentrated where if this risk is negatively impacted in the market, we get hurt badly.

Here are some allocations that can be captured simply by looking at risk premiums. If you invest in large cap stocks, part of what you're getting is simply equity risk premium, the fact that you're investing in an equity which is more volatile than a bond, you're getting something extra. That's why we assume that stocks will return 8% long term and bonds 5. The reason for that is the fact that you are accepting more volatility and you're getting paid that equity risk premium. In small caps you're really getting 2 things, you're getting the equity risk premium because you're investing in a stock, but you're also getting a small cap premium because small caps are more volatile. So you should get a return, it's not a skill thing. You invest in small cap stocks and



you make more money it's not that the manager is smarter; the manager is just getting free the risk premia that's associated with investing in small cap. Value stocks have a value premium that you're investing in companies with weaker financials, companies that aren't growing, they're more leveraged, they're less attractive financially.

The left hand panel is core beta. These are all different risk premiums, you see Government bonds that have maturities more than one day, you're getting a term premium or a term spread. Corporate bonds, you're getting credit spread. The next category over is non-traditional betas. These are premiums that you're getting because they're not traditional sorts of investments like commodities or emerging markets. If you're wondering what a catastrophe bond is, people like to reassure their risk and a catastrophe bond pays off if a very rare event happens. If you have a high exposure to nuclear power, you could buy a catastrophe bond that would pay off if there was a large for nuclear power. So it's a way of diversifying risk. We all know what real estate and agriculture is.

Then you have on the right hand side kinds of betas that are partly beta, market returns and partly alpha which is value added. For example, a carry trade, a carry trade which we had in Japan forever because Japanese interest rates are very low, you could borrow money in Japan for nothing basically and invest it in New Zealand. New Zealand Government bonds which paid 5% and you got 5% at no risk for doing nothing. That worked until the Yen took off in which case the people doing the carry trades all got murdered because they borrowed Yen in Japan, they paid no interest rate but had the currency exposure invested in New Zealand, they were getting the spread between the interest rate they were paying and the interest rate they were getting but all of a sudden when the Yen appreciated from 95 to the dollar to 80 to the dollar, they lost 18% of their principle and it takes a long time at 5% a year to make up for an 18% loss in a week.

Wilfred Leon Guerrero: If we ask somebody to take a look at our portfolio and say, tell us what the asset by risk is, would they be using a formula? Terry Dennison: Can you wait about 3 pages.

If you look at those return drivers or risk factors, one of them is unexpected inflation and expected inflation doesn't really have much impact, it's factored into the price. If everybody knows inflation is going to grow 2% a year, everybody adjusts their valuations, it is surprises, unexpected which can cause a big change. So because of oil prices and Japan and what's going on in the Middle East causes a big sharp spike in inflation, we're going to see it impacting the portfolio. So the purpose of this is to look at your portfolio and say, do we have too much exposure to unexpected inflation or illiquidity premium.

Turn to page 5. We have a portfolio here which doesn't look like yours, it's extremely diverse, it's actually hypothetical, it has about everything you could have. One of the things that we're pointing out here is if you look at the column

“Capital Allocation,” it has 41% in large cap and 5% in emerging markets, 10% in small cap and 10% in REITs. So the capital is allocated one way but if you look at where the risk is because of these risk factors, for example, 41% of assets are in large cap equities but that represents 55% of the risk. The point we’re making here is the risk exposure in your portfolio isn’t the same as your asset allocation because in this case we have a little less than 42% of the assets in large cap, but 55% of the risk. What we found during the market crisis was often diversified portfolios at 80% of the risk in equities, not 80% of the assets, 80% of the risks. So if equities did badly, despite the fact we looked like we were diversified, you got pounded.

The other thing that’s interesting is the return allocation because you can also look at where the return comes from which is also different from how the capital is allocated. Let’s just look at that first line. You have 42% of the capital in large cap, 55% of the risk and 45% of the return. What that would tell me is that you probably ought to take some of the money off the table or you shouldn’t put any more money in to large cap because the risk is growing faster than the return. Contrast that with, let’s look at REITs, REITs have 10% of the assets, 10% of the money is invested in REITs but only 8.5% of the risk is coming from REITs and 8.9% of the return is coming from REITs. So in risk return space, looking at the relationship between risk and return, we have to put more money in REITs not because we think REITs are going to go up, but rather we get more return per unit of risk for investing in REITs... Wilfred Leon Guerrero: I think I’m learning something, that if I want to look at that risk allocation, I should also look at return allocation. Terry Dennison: Yes. Wilfred Leon Guerrero: So then I need to look at all 3 of them. Terry Dennison: You need to look at all 3 of them. If you look at fund of hedge funds, it has 15% of the capital but it’s only contributing 4% of the risk and generating 8% of the return which in this analysis indicates that it’s a very attractive asset class because it’s generating a lot more return than other things for the same level of risk. The point of this is you can see in the graph that if you look at the capital allocation and you get one picture of where your return is or where your money is, contrast that with the risk allocation and the return allocation, green is the developed market large cap and if you just look at the green bars, as we said, they only represent 41% of the assets, but they’re producing 55% of the risk and 45% of the returns, unfavorable.

Wilfred Leon Guerrero: Let’s take that developed market large cap, what would you like the figures to look like? Terry Dennison: I would dial down the capital allocation, reduce the allocation to developed large cap and take that money and put it in places where the relationship between risk and return is favorable. Wilfred Leon Guerrero: What would be the ideal figures? Terry Dennison: Well clearly REITs to a small degree, emerging markets to a significant degree because every dollar you put in emerging markets, every percent you put in emerging markets you’re getting more return than you are risk. Multi-strategy which is a kind of hedge fund actually is also very attractive because for every percent you put in it you get much more return than you do risk. Basically

what it does is this whole theory makes you think much more about risk. When we do traditional asset allocation we think of risk in terms of standard deviation or value at risk, how much could you afford to lose and not lose faith in the allocation. This makes you look at risk in a much more detailed level, where am I getting my return and where am I getting my risk. The idea here is to get a good deal and a good deal is as much return as I can get for a unit of risk or as little risk as I can get for a unit of return. Notice it's not looking at all at what the expected return is, the expected return for stock is 8, for bonds it's 5, but if you look at investment grade credit, these are the sort of bonds you have, core, fixed income, you get more return per unit of risk, there's higher contribution to return than there is contribution of risk. So this is saying you should put more money in bonds because you're getting more return than you are increment of risk and you should take money away from developed market equities because you're getting an unfavorable combination. For every percent you put in you get more risk than you get return. So it's a way at looking at how your asset allocation looks like when you are separating out return and risk. All these pie charts in this book are looking at the asset type, they're not looking at returns.

On the next page, we talked about these common risk factors and we have identified them as equity risk, small cap premium, emerging market premium, credit risk premium, unexpected inflation, term premium, illiquidity premium, non-corporate GDP growth and alpha. We look at the capital allocation as where we have invested our money. This is a typical portfolio unless you have done this kind of analysis. 24.3% of the money is in things that are driven by equity risk premium, so only a quarter of our money is in equities. 82% of our risk is coming from 24% that's invested in equities. More than 80% of the total risk in the portfolio is coming from 25% of the assets. We've got 30% invested in securities like fixed income that are exposed to a term premium, that only contributes 2.6% to the total risk in the portfolio, but it's also contributing 13% of the return. That's a good deal, so what it's saying is, in this portfolio bonds are a really good deal, stocks are really a bad deal because stocks are producing half the return for 80% of the risk. Look at the return column, we're getting half the return from stocks, but it's producing 80% of the risk. On the bonds, we're getting 13% of the return, but only 3% of the risk. So it's a way of thinking and we talk in the beginning about a holistic approach. Holistic is one of those fancy words that basically mean, look at everything at once. Historically the asset allocation process has said, okay, let's look at all the different asset classes, they're expected returns, their correlations and their volatilities, but that's basically just looking at one aspect. This is saying, let's look at these common risk factors and what we discover is we have got what looks like a diversified portfolio. It can only have 24% of the portfolio invested in stocks or exposed to equity risk premium, that's very diversified. We have more in bonds than we have in stocks and we've got 23% in hedge funds. So it's a very diverse portfolio in terms of names, in terms of things, 80% of the risk is coming from one risk factor. If that risk factor turns negative, it doesn't matter how many different things you have in this portfolio, it's going to get

killed. That's what came out of the 2007/2008 is the old way of thinking about things.

Wilfred Leon Guerrero: You're capital allocation is 24%, I don't know if I'm asking the right question, but your risk allocation, you would like it to be what?

Terry Dennison: No more than 24%. We don't want an allocation to generate more risk than its return or its capital. We want more return for the risk and we don't want more risk than its capital allocation. You can see this portfolio is just very badly done. Wilfred Leon Guerrero: So I put 24% in this equity risk, I would like my risk to be less than 24%, I would like to get my return allocation to be more than 24%. Terry Dennison: Right and basically what you want to do is you want to rearrange the risks. There's an approach you may have heard if you go to conferences, called "risk parody." Risk parody, the idea behind risk parody is you get all the risk allocations to be the same, so you're taking the same amount of risk in equities as you're taking in bonds and in real estate, all of these different risk factors have the same risk. Right now you have a huge over weight to one kind of risk and huge under weights to other kinds of risk and you want to have the same amount of risk every where. So no matter what happens, you get about the same effect. You don't want, if that happens, we're going to be killed, you want to be able to say, no matter what happens we know we're going to suffer a loss, but we know it's not going to be disproportionate to the return potential that we're taking. The interesting thing about risk parody is because the risk of bonds is so low, in order to get the risk of stocks and the risk of bonds to be the same, you use leverage. You lever the bonds 4 or 5 to one to get the risks to be equal because the risks of bonds and stocks you could see here are so different, to get them to be the same, you actually have to use leverage to increase the allocation of bonds, but then you end up with a portfolio where the total amount of risk is the same across all these risk factors and it's not like it doesn't matter what happens because if anything happens that's bad, there's no one thing that can ruin your day versus some other things.

The notes here on page 6, risk is dominated by equity risk premium, the return contribution is less. That's un-desirable, we have more risk potential than we have return potential. Emerging markets and small cap premiums contribute more return than risk, increasing these exposures would be beneficial. So how do we decide where to put money, we put money in places like emerging markets and small cap where the premiums contribute more return than risk. We move money out of places with more risk and less return and put it in places with more return and less risk. Credit risk is significant but it doesn't contribute as much return as risk. If we look at the credit risk premium, the risk allocation is 8.2%, the return allocation is only 5.2%, so it's an unfavorable exposure to credit risk. Wilfred Leon Guerrero: What's another term for credit risk? Terry Dennison: It's investing in bonds that aren't issued by the Government, private bonds that could be mortgage backed, they could be corporate, they can be state or local, anything other than Treasuries have some degree of credit risk. Here we're not getting paid for the credit risk we're taking.

We have 6.2% of the assets invested in credit risk, insecurities with a credit risk premium is contributing more risk than return so we should take money from that and put it in places where we're getting more return and less risk.

So it's a way of thinking about how to allocate these much more scientifically than just saying, let's have lots of names. Wilfred Leon Guerrero: What's the difference between equity risk and small cap? Terry Dennison: Equity risk is inherent in owning a stock which is a fractional ownership. If you 100 shares of Microsoft, what that means is you're actually an owner of a little tiny bit of Microsoft. The sum of all the share holdings of Microsoft own the company and you own a little tiny piece of it. If you have small cap there's an additional premium above that because small caps are more volatile. So in a sense the small cap premium is added on to the equity risk premium because small cap is an equity too. So the small cap is basically the premium you get or the incremental return you get for accepting the additional risk of buying smaller, younger, less substantial companies. So what this is saying is, it's not focusing on the name of something, it's focusing on what risk you are taking and what return you are getting. The object is to get the best deal you can trading off risk and return and that's what this model does. On page 7 is the actual mathematics behind it. Basically what we're saying is, for example that things with equity risk premiums, we expect to get 3.5% so if bonds are yielding 5%, if Government bonds have an expected return of 5%, if you own equities we'd expect to get 8.5%. We would expect to get an additional 1.5% if the equities are small cap, if they're emerging market we would expect to get a 2% premium over large cap. Wilfred Leon Guerrero: Does everybody figure out this the same way? Terry Dennison: No, but everybody is trying to think in these terms for the simple reason that the old way, the crash of 2007/2008 demonstrated there are flaws in the old way of doing things. Wilfred Leon Guerrero: If people are in the business of trying to figure out these risks, do they use the same formula or are they given the same weight? Terry Dennison: Everybody develops their own values for these, although the reality is most of the values are similar. You can look at history and if historically stocks out perform bonds by 4%, that's the equity risk premium and if you assume the equity risk premium going forward as 2%, you better be able explain why you think it's half of what it use to be. If stocks out perform bonds by 2% and you think the equity risk premium going forward is 6%, you better have a really good explanation. So a lot of this is tied back to history, but which factors you look at how the factors relate, the correlation matrix, everybody devises their own. We built this model in Australia, the Australians built it, but then we took the model and determined what the values would be for the U.S. because the values for each market are different, but we're beginning to use this model to do asset allocation. We're not throwing out the old and in fact what we would typically do is use the old technique and then run this technique to see if it says something significant we ought to react to. So it's not like we're throwing out the old, we're using this as an addition to the old because basically in the old way we looked at things like this and now we look at them differently and maybe it says the old way is fine, maybe it says the old way is okay except you

ought change the equations just a little bit, you ought to change the weights a little bit. So it's not that this has replaced the old approach, but it's a valuable supplement to the old approach because it looks at the world differently. Wilfred Leon Guerrero: My sense is that I think we should learn more about this thing. We're going to be asking the Legislature to make changes in the investment law. We're not smart enough to tell them why the law should be changed, but I think that's what's going to happen. Terry Dennison: Clearly and obviously the Board Chairman and I have different views on this, but the right answer is prudent person. The reason being is it's impossible to predict in advance what the right thing to do is and if we're always going to the Legislature, this has proved to be a good thing we do this now, we're always behind. If the Board understands this and the Board gets good advice and good approaches... I mean, this is actually safer than the old way of doing things. I pulled out page 40 of the original book and if you look at where you are versus all these other funds, you are getting more return for less risk than the typical pension fund and in part because you have small cap, you have REITs, you have international small cap. Diversification is a funny thing, it's hard to explain, I can imagine, I sat in front of the Legislature, it's a little hard to explain diversification because it behaves differently than the real world. If you have 2 apples and you add a 3<sup>rd</sup> apple, you have 3 apples. In diversification you can take 2 things, both that are risky and put them together and have less risk and more return than either of the 2 pieces. The mathematics behaves in a manner that's different from our day to day experience, our day to day experience says things are added, if you add 2 numbers you get the sum, you don't run into things where you have something that's risky and something that's risky and you put it together and you get more return and less risk, that's not the way your mind is built to work, but that's what we have to make them understand. Wilfred Aflague: Isn't diversification a form of risk reduction? Terry Dennison: Absolutely it is a sort of risk reduction. What we're doing here is we're moving away diversification strictly by correlation of asset classes and doing it risk return looking at risk factors. It's simply an addition to the same old approach.

(End of presentation by Mercer)

### **1:00pm-1:45pm Capital Int'l - Emerging Markets**

Wilfred Leon Guerrero: We're going to ask you to lead the discussion about your performance and the only thing we ask is that you include in this discussion issues with regulatory agencies you may have, changes in personnel and just expect us to ask questions as you go along.

Phillip: Thank you all for inviting us to Guam, it's the first time I got to see how beautiful the beaches actually are. We were asked to talk about 3 different periods for this portfolio review, 12 months ending September, 3 months ending December 2010 period and also 2 months ending February 2011. So what I would do is just go through the results in the respective periods and then I will

leave it up to the Board to decide where you want us to focus the discussion in terms of what contributed or detracted from the portfolio.

Before I do that I'll just go ahead and handle the 2 issues, one being changes in management, there's been no changes over the last year and we're also happy to report that there were no legal issues or litigation that came up.

So if I could just take you to page 1, your portfolio for this period between September 2009 and 2010 increased by a little bit less than \$11 million. Obviously the market did very well for this period and the benchmark that we measure ourselves against just a reminder is MSCI Emerging Markets, what we call the investable market index. There are primarily 2 indices that we look to in our company, the first one being the regular MSCI Emerging Markets and the second one being IMI and just a refresher, the IMI includes both the mid and small caps and the emerging markets as well so it's a much larger universe in terms of measurements so there will be periods where it does better than the regular one and there will be periods where it doesn't do as well as the regular benchmark.

In respect to our investment results for the 12 months ending September 2010, we've under performed by 2.1% for this period, but we would also like to highlight the fact that look longer term in terms of our results and during short term periods we do go through periods of under performance. If you look at the same September period ending for a 3 year basis, we are up about 120 basis points or 1.2%, this is net of fees for the fund that you have invested in.

Then if I may take you to page 12, this is the second period that we've been asked to do a review for which is the 3 months ending December 2010. The value of the portfolio went up slightly, less than \$2 million dollars for this period and again our results for the 3 months period was also a negative return so we under performed by 220 basis points. Andy will certainly be able to go into the details as to what was behind the under performance and I can say just briefly that it had a lot to do with the volatility in currency especially during certain months within that year and especially in the latter part of 2010.

Lastly if I can draw your attention to page 22, there we've been asked to summarize how we did over the last 2 months ending February 28, 2011 and there at the portfolio level it has decreased in terms of its value by almost \$2.5 million dollars, it's just that the markets were down and we can talk about the reasons behind that as well. Fortunately for the results we had a positive return of 7 basis points and again we can talk about why but primarily it was actually the reverse of what happened in late 2010 which is the currency movement that kind of went the other way so it favored us.

So that is basically a summary of how we did. The way we organize this presentation is there's sections behind each of these tabs that I talked about so far are all the details behind the portfolio and what contributed and what

detracted and Andy can talk about those details. If there's any particular period you would like us to focus on, please let us know.

On tab 4 we do have the outlook section and again Andy can focus on that as well as tab 5, something you hear about in a lot more recent periods which is the valuation markets. I think there's been a lot of concern if you read the press about money flowing in emerging markets causing valuations to be a bit high and of course more recently there have been flows out of emerging markets and back into markets like the U.S.

Andy: So Phillip described 3 time periods and we've done the performance for the first 2 and we got started in a very short period for this year. Perhaps I can start by talking about the 12 month period that finished in September of last year. In that time period we under performed by a couple of percent relative to a fairly strong market so the good news is we out performed well, the bad news is we lagged the index. There were some things that worked well and there were some things that worked poorly in the portfolio in that period. I'll start with the things that worked well, one very exciting part of the portfolio has been the investments that we have in the South East Asian countries and Indonesia has enjoyed a very strong economic growth and market growth since our president came into power, he's done some very good things with the country is run, he's worked on the legal system, he's also organized some big investments in infrastructure. The investments we made on your behalf in cement companies in Indonesia have performed very well. There's also another quite large company called --- which it does a number of things, but one of the key things it does is sells cars and motor bikes to Indonesian people and that business has grown very, very strongly. All of those stocks almost doubled during this particular period. We also invested in --- Bank, the interesting thing about that bank is it's done very well because of the investments it made in Indonesia, so that's something that's worked well.

In a slightly different part of the industrial world, we had some investments in North Asia that did well, in China there's a company called Weichai Power, they make truck engines, it's a great way to invest in the economic growth in China and that was a stock that doubled. Other companies in the portfolio that performed well include LG Chemical which is a Korean company that's increasingly focusing on rechargeable batteries, a very big growth area and then another company would be --- there are a consumer goods company in Brazil and that's something else that performed well.

So why did we under perform. It comes down to a handful of key parts to the portfolio. The first thing is, this is a period when the market performed quite well, but our portfolio managers did remain quite cautious and several of them in particular were keen to hold a little bit more cash, on average we were holding about 4-5% in cash in your portfolio and in a strong market that really holds back your investment results so that's the first thing. The second thing was we've been very cautious about South Africa, we're concerned about the



economic impact of black empowerment. I really hesitate to say that because for the --- we are totally behind it, it's just that the way it's being implemented is causing economic value to be lost from a number of businesses so from an investment perspective we have to be cautious we believe. In addition we know that unemployment is rising very quickly --- the currency is too strong, it makes it hard for South African companies to do business outside South Africa. So we're under weight in South Africa and that's proven to be the wrong place to be. The market has not performed that well, but the currency has just gotten stronger and stronger. That gives us more conviction that we're doing the right thing, but over the short term it's hurt the portfolios results. In addition we had a handful of companies in the energy sector which performed poorly, Gazprom in Russia and Shenhua which is a big Chinese coal miner, we feel very positive about Shenhua but the stock wasn't --- Reliance which is a big Indian gas company, that stock was also weak, not because the underlying business but because a --- was going on between the chairman and --- his brother and that was very high profile that actually hit the courts in India and that meant the sentiment on the stock was poor. So why did we under perform, cash, under weighted very strong South African ---- and also had some energy companies that performed poorly, so that was for that particular period.

Chapter 2 is what happened in the 4<sup>th</sup> quarter of last year and this story is a little bit neater. Through much of the 4<sup>th</sup> quarter our portfolio results were in line with what was happening in the market but then the last few weeks of December there were some really big moves in currency that we hadn't foreseen. Firstly, South African--- continued its onward march upwards so this is clearly something that would be great ---. Secondly, towards the end of the year there was a surge in confidence that maybe economic momentum in the U.S. is starting to come together, maybe the U.S. economy is going to be okay and when that happened it meant that the companies or the countries in Asia that do lots of exports to the U.S. and to the British ---, Korea and Taiwan, their currencies suddenly soared really quite sharply and actually we're under weight by Taiwan and Korea so the portfolio unfortunately suffered as a result of being under weight in those currencies and that actually accounts for all the under performance in the 4<sup>th</sup> quarter. The good news is we have seen a little bit of a reversion during this year, but certainly no doubt the 4<sup>th</sup> quarter --- to be under weight in South Africa, Korea and Taiwan because those currencies were strong.

Now the final chapter, the third chapter out of 3 would be what's happening so far this year. This year is a very short time period, it's only a couple of months but the portfolio has performed better. The markets have actually dragged a little bit but the good news is we've managed to preserve the value in this environment. What's happened here has much more to do with individual stocks. The investments that we have in telecomm stocks around the world have actually performed pretty well. Telnext which is one of the big telecomm companies in Latin America has done very well and also a Polish telecomm company that we're very excited about has performed well. We've also seen

some much better results from some of those energy stocks. Gazprom started to do rather better for your portfolio and of course we still have that cash so when the market is going down having that cash helps you to have --- value. There have been a few things that have gone wrong primarily to do with some Indian stocks that we're holding but it hasn't stopped the portfolio from out performing the index.

So that kind of summarizes what has happened over the last 15-16 months. As a reminder one critical factor that's being removed is we --- currencies. Currencies are of course something that we think about very carefully, but we don't generally seek to add value to currencies, we try to, our skill is researching individual businesses and identifying which ones are going to be stronger in the future so sometimes our portfolio is knocked around a little bit by currency movement, but hopefully as time passes that will stop being an issue for the portfolio.

It might be helpful for me to just make a couple of comments about how we're thinking about the future of your portfolio. The key question would include, what would happen with inflation. Another question would be, what's going to happen with currency, especially in Asia and there are some strong expectations with Chinese currency, the Yuan it's going to be --- appreciate and that's going to have an impact on companies and it's also going to have an impact on other South East Asian currencies as well. In addition I think people are asking whether or not emerging markets, particularly the Asian emerging markets are going to continue to be the engine of growth in general for the world in general. The next year is going to be an uncertain period, but if we're able to extend our time frame beyond 12-18 months instead and starting from more about 3-5 years then I think it's possible to have a much more competitive framework about what you can expect from your emerging market portfolio and that framework will basically have 2 components. The first component would be the earnings growth that companies can produce or basically how much are they going to grow their profits and the second would be the valuations, basically how much you have to pay for those earnings growth. While the next year is uncertain, if we look out to more like 3-5 years in our opinion and in fact in the opinion of many investors is the earnings from the emerging markets companies are going to continue to grow quite strongly and the number that we had in mind is around or about 15% per --- profit growth in emerging market companies, so that's quite strong growth. The next question would be how much do you need to pay for those earnings, they're probably too expensive. We have some slides that might be useful and perhaps I can ask you to look at page 34. I'd like to ask you to focus particularly on the blue line and the orange line (in the charts). Those lines represent the price earnings multiple at which is basically saying how expensive the stock is, how much we have to pay for it. The orange line is the developed market and the blue line is the emerging markets. It goes back over the last 10 or 12 years and what you see is for much of the last 10 or 12 years, the blue line, emerging markets has been much lower than the MSCI World developed markets and what that is saying is

that emerging markets used to be much more cheaper than developed markets and that's one of the reasons why emerging markets performed so well. Now today the lines are closer together and emerging markets are still cheaper than developed markets and in addition we think the absolute level of that valuation, 15 times earnings looks to be pretty reasonable. If you add that to a very healthy level of growth, the implication would be we think you should expect some nice solid investment results from your emerging market portfolio moving forward.

I'm sorry to give a fairly technical explanation, what I'm trying to do is actually be objective otherwise I'd just give you our subjective opinion, what I'm trying to do is give you an objective view of what I'd like to expect from this portfolio moving forward. In summary we are saying the next year has some uncertainties, but over slightly longer periods it looks like this portfolio will hopefully continue to do what you need it to do which is to produce good investment results that are probably going to out perform the developed portfolio.

Wilfred Leon Guerrero: I missed it, about this uncertainty, what was the area that you aren't comfortable with? Capital: There are I think 3 areas that any investors and ourselves are concerned about right now. The first one would be inflation, particularly emerging markets inflation has jumped up very sharply recently and it's jumped up basically because of rising food prices and energy prices. Our opinion is that the forces for rising food prices and energy prices are, well there's a long term force and there's a short term force and the big force right now is the short term one and it's just to do with droughts, food supplies and getting food from farmers to the individual and so we're expecting that food prices are going to stabilize in the short term. In the short term we think inflation is going to be less of an issue, we don't need to worry too much. The second issue would be currencies. The events in the last 3 or 4 years have revealed there were some very, very big imbalances in the world and one of the imbalances is caused by the fact that Asian currencies appear to be held --- low. Now the cutting of low currencies is great, it means that exports can sell their goods overseas cheaply, but it also means that inflation starts to become more of an issue at home and the Chinese authorities fully recognize that and they are keen to let their currency gradually appreciate. That will have some issues on individual companies profits, it will also have some issues on other Asian currencies because it will mean that they can start to depreciate. So this is an area of uncertainty, it doesn't mean it's going to be all bad, it's just something to focus on. The final element of uncertainty is, where is growth going to come from in the world. Since the global financial crisis we have relied very, very heavily on emerging markets as being a driver of growth in the world. The developed markets have not been in a position to provide growth and momentum for the world. Actually we think the developed markets are starting to sort themselves out a little bit, but we also think that emerging markets growth is going to slow down a little bit over the next year or so, we still think they're going to grow pretty strongly so we would tend to see then next year as a

period of opportunity for investing rather than a time to be scared. Those are the key risks that we think we should focus on. Wilfred Leon Guerrero: What happened in Japan, is that a major concern? Capital: No and yes. I'm speaking purely from an investment perspective here so please excuse me if some of my comments seem a bit heartless. The reality of Japan is that it is a net-exporter, Japan is not a huge consumer of other people's goods and so if the Japanese economy does go through a sharp slow down, we don't perceive it will be a big disaster for the world. In addition it's not clear that the Japanese economy will slow down. The loss of life has been horrible and the destruction in that North East corner Japan has also been very unpleasant but Japan is going to be able to rebuild and the process of rebuilding is going to help the companies that participate in the rebuilding. So it's not clear to us that the Japanese economy is going to be permanently damaged by what's happened. What is very important is the impact on energy prices, Japan has made it clear that they are going to have to shut down a meaningful chunk of their nuclear power stations once they understand what the implications are and nuclear is a very big part of Japan's overall power generation and that means they're going to have to rely on more conventional hydrocarbons to generate their electricity and the way the Japan power generation is set up is where they have capacity is actually in oil fire and gas fire power stations. So that means there's certainly a big new customer who is asking for a lot more gas and a lot more oil and it's likely that we're going to see prices maybe go up but at the very least strongly supported. So it looks like we're going to be looking at higher energy prices for the foreseeable future and that is something that everyone in the world is going to have to factor in to how they live their lives whether their individual or a business.

There is one other thing I will mention as well, there are going to be some issues with disruptions of house supplies in Japan, blackouts as well as some factors that will destroy them. This is a big issue in the technology sector. A lot of the supply chains, if you think about the mobile phones, there's a long supply chain that comes off the bottom of the ---, it starts with all the different materials that go into chips and then building the chips and the cases and then finally it ends up in with the phone. All the companies in these chains they tend to run a very tight operations, they don't carry inventory, everything is in time and the --- of these disruptions that happened in Japan --- it's likely that we're going to see quite a few electronic goods, the supply is going to be disrupted so maybe some technology companies will suffer and it's just going to be harder for them to grow their profits as fast as they thought they could.

Terry Dennison: Can I take you to page 17. I'm looking at the attribution analysis and only 3 of the top 10 countries are in the index. I think this is intended for the emerging markets portfolio and so the more notable emerging markets are Canada, Australia and the UK and the U.S. Also in the return section, because they're not in the benchmark, you're plugging in the return of the benchmark producing extremely exaggerated return differences which aren't considered into the active return contribution but it just produces some

numbers that aren't at all meaningful because 37.5% in Canada has to be compared to what's going on in Canada, not what's happening in the emerging markets index. The fundamental question is, given this is an emerging market portfolio and more than 10% of it is in highly developed countries, what actually are the guidelines for this? Capital: I think this is a really interesting point. The first point, I want to reassure you that this is an emerging market portfolio and so the question is, what are you doing investing in Canada and Australia and the UK and Switzerland and others. The answer to that question is that there are a lot of emerging market companies that for various reasons have chosen not to list themselves in emerging markets stock markets and they've listed themselves in developed markets stock markets and sometimes they do it for tax reasons, sometimes they do it for Government's reasons and sometimes to be fair they actually started as a developed market company but then they changed into an emerging market company. The good news is the portfolio guidelines or the Fund guidelines allow us to invest in emerging market businesses wherever they are listed. The second good news is we're a global fund manager that does emerging markets and developed markets, we have some skill in identifying these emerging market businesses wherever they are listed. Of course there is a bit of a cap on how much we can invest in this type of business.

Capital: Just to help demonstrate the point I wonder if I could give you a couple of examples. One example would be a company called Anglo American which is one of the biggest South African miners and it's listed in London. Another example would be a company called Uranium One which is a large uranium miner, in fact virtually all of their operations are in --- and they happen to be listed in Canada. Another example the final one I'll mention would be a company called Oil Surge, it's a company that originated in Australia and they're basically in the --- gas business and all of their operations now are in Papua New Guinea and all of the gas there that they're going to be producing will be sold in China, so in every respect that is an emerging market business. So over the lifetime of your portfolio the investments we've made in these developed markets, stock markets, emerging market businesses have actually been very positive for the portfolio. We're grateful that the Fund has guidelines that allow us to do this so we can basically produce better results for you. Capital: Generally the guidelines are flexible in these funds and in addition to developed markets, they are operating in emerging markets, we also allow frontier markets as well and I will say generally it's between 15-20% but I can confirm that with Diana (Bernardo) just to put in the numbers and I'll make sure I explain it properly, that 20% might just be a total off market benchmark allowance and it might be a different allowance with emerging markets than frontier markets. We do go through a stringent test before we put these companies in the portfolio to ensure it really is an emerging market exposure.

Terry Dennison: Just for the record could you define an emerging market company? Capital: Yes, but I'm going to stumble here because I don't have the exact definition but I can tell you roughly how the definition works. It's a

company that has at least two thirds to 3 quarters of its revenues or profits that come from emerging markets activities. I think there might be assets --- and the bit I'm uncertain of is the two thirds. Now this is a guideline that is watched very carefully by the independent Board for this fund and they meet every quarter and one of the things they would be looking at is to make sure that we're not doing something that is --- mission. So you are certainly not the only ones who are making sure is truly an emerging market.

Terry Dennison: You might think about doing something about the returns column because those numbers are nonsense. I mean in the context of how well a particular stock did versus its country. Capital: Yes, that's a really good point there. We will have that fixed in the attributions. Terry Dennison: Thank you. Capital: Thank you.

Gerard Cruz: The emerging markets have done really well in the last few years in general. Do you think that we have approached a peak with returns, how do you position a portfolio like this? Capital: Perhaps there are a couple of elements to answer. The first thing is, I guess I'll refer back to some of the comments I was making earlier about the framework of returns being earnings growth and then valuation and in fact if you added dividend yield to that then that's the total return you're going to get. So the question is, what could let you down. Earnings growth could disappoint and that's something we're watching very carefully, but for the moment we're having no difficulties identifying what businesses we think can grow their profits very, very strongly. The second issue would be valuation and we've showed a chart which shows that relative to developed markets valuations are okay, not spectacular. The question is, could that number just come down in absolute terms and that's another thing we need to be focused on. Our belief is that the valuations are fair and it's fair because emerging markets are a much less scary place than they use to be, the Governments are better, the economy is better, the central banks are better, the legal systems are improved, the companies are much more focused on improving profits rather than designing the pockets of their management. So we think higher valuations are justified and these are things that we focus on. When we invest your you may have noticed over the lifetime of the portfolio, the portfolio tends to do better during weaker markets and sometimes it falls behind when the market is moving very strongly. This doesn't surprise us, because what we try to invest in is basically real companies with real businesses, real customers, real supplies, companies where we think we can get visibility to what these businesses will look like in 3-5 years, in other words they tend to be safer investments and this type of investment will do well when the rest of the market is falling away because it's real, they will tend to lag when the market is doing very well because strong markets are driven by emotions. So I hope our approach at investing in real tangible businesses is something that will help the portfolio to do well even if valuations do start to fall a little bit.

Capital: I want to add to that as well. I think that --- came out to Asia in 1993 right before the --- run and it's interesting when you look at page 36 for

instance and you look at how the markets have done. We know about the periods between 2004, 2005, and 2007 where we reached a peak, we know about that huge drop subsequently and the huge rebound right after that, but I think what we forget is that before this period, we had very much a sort of side pick market for emerging markets for a long time. I think if you take that into account or the recent run up, the extreme run ups are they really that extreme, well yes in the short term they are, but over a longer term period, it's probably a bit more reasonable and I think what we show here too is --- these numbers looking --- and looking at what that --- PE is and there it looks a lot more attractive. Now the question that comes is, are PE's going to be expected to grow at that rate; we feel pretty comfortable that it will be growing at that rate. The other thing that's encouraging that we're seeing from a marketing perspective is the number of institutions that are allocating what we call strategic money into emerging markets. In the old days I remember this coming out to Asia, a lot of the markets, at least in Asia were dominated by trading by the retail investors and on the other hand the foreign investors but these foreign investors didn't have --- the allocations that emerging markets - or Asia, but now we're seeing an increase usage of this thing called the ACWI, (all country work index) which includes about 50% of emerging markets, so I think that's a very, very positive sign.

On top of that we're seeing a lot of large sovereign funds and institutions from around the world who are also looking at emerging markets as a strategic allocation and I don't know if Mercer has any particular views on this. Terry Dennison: We're very strongly supporting over weighting the market indices to emerging markets. Capital: And it's a long term thing. We think that obviously volatility will always be around the short term but any long term is very positive.

Wilfred Leon Guerrero: When I look at page 13, it looks when the market is good we under perform, but when the market is bad, we don't lose as much, is that by design? Capital: We want to perform well all the time. I think your observation is a very good one and maybe I can refer again to the comments I made about our aim is to invest in real businesses where we can see how the business will develop over a 3, 4, 5 year period and what we find is when markets are weak people love that kind of confidence --- visibility so the companies we invest in tend to do better which is why we out perform when markets go down, but then equally when everyone is getting really excited, it tends to be the kind of smaller companies and maybe the more exciting companies that are performing well and so businesses we're investing in tend to under perform. So I think the profile you describe is very typical of our style and we actually feel very good about that. If you take some time to work out the --- on it, over long periods of time you can out perform in down markets, that is the best way to generate good long term investment results. So it's when markets go down you really have to try to hang on to value and that's how we've gotten your fund to grown over the long term. Capital: And I think something about the way the numbers work, we won't go into how it gets calculated. I was

talking about it this morning saying when markets come down --- less, the impact is a lot bigger to the out performers in the portfolio. Maybe one way to demonstrate that without going into all the details is just simply looking at 2008 where we out performed by 4.3%, if you look at 2009 we under performed by 4%, if you look at the more recent 2010, we under performed by 3%. So you say, I have one positive 2 negatives, I should be negative, but for a 3 year perspective, we're actually up 1.2% and I think that's the beauty of adding value when the markets are down especially in large ----, I'm not sure there's an easier way. (Terry Dennison: We've literally talked about this today.) Capital: Thank you very much. Thank you for your time.  
(End of presentation by Capital Int'l)

### **2:00pm-2:45pm Fisher Investments – Non U.S. Equity Developed Mkts**

Geoffrey Hansen: Chris Davis had a prior commitment and he apologizes for not being here in person. I was called to volunteer and substitute in his place. Some of you may remember me, I use to be the primary service person going back 4 or 5 years so I've been here before, I recognize a lot of you. I'm now managing the team of our service professionals.

Wilfred Leon Guerrero: The rules are still the same, you will lead us in the presentation. We do have some administrative issues that we would like you to address to meet our fiduciary responsibility and that's any changes in your personnel, any of the regulatory agencies have issues with you and of course your performance.

Geoffrey Hansen: Okay, I'll just hit those questions up front. In terms of changes in personnel, we notified you in early December that we have expanded our investment policy from the 3 folks who have been in place since 1995, Ken Fisher, Jeff Silk and Andrew Teufel, we've added 2 individuals, Bill Glaser and Aaron Anderson, a couple of investment professionals from our firm who have been doing very well. This move is all about preparing for the future. (There's a picture on page 6). You'll notice there's a generational planning behind this so in 5 to 10 years when some of the older folks on the committee want to settle down and perhaps retire if that's something they want to do then we will have people in place well trained on the investment policy committee and ready to take on more responsibility. It's the first expansion of the investment policy committee like I said in about 15 years. So that's really the only significant material change in terms of personnel.

In terms of regulatory issues, as I'm sure you are aware, the SEC visits investment managers every 3 or 4 years. The SEC came and visited us last fall and we have yet to hear back from them. Normally they provide a letter saying, fix these 2 or 3 minor things, we haven't gotten a response back yet. They don't tell you that they're done, they just stop coming and stop asking questions. That was a while ago so I guess we would expect to hear their response shortly.



We have great relationships with the SEC and we will certainly disclose any material findings.

With the administrative stuff out of the way I trust everyone has a book and I'm going to start on page 2. This is sort of an overview of our relationship. As of year end the account stood at \$93.5 million dollars. Our performance is there in the middle section. 2010 was a very good year, we out performed by about 4.4% and we're very proud that's it's been now over 5 years that Fisher Investments has been managing the account for the Government of Guam Retirement Fund and have been exceeding the benchmark on an annualized basis since inception. At the bottom of the page Chris Davis remains your primary point of contact and he reports to me and I listed one of our operations associates who also reports to me and we can all be contacted at operations@fi.com. We all sit right next to each other, it's really difficult to actually call the wrong person.

Page 3 is just sort of what I discussed earlier. You can see on the one, 3, and 5 since inception we're out performing the benchmark. Year to date I'm pleased to say I checked performance before I flew out here, we're actually flat year to date so whatever we were lagging through February 28 there we have now made up and our inline with the benchmark.

Page 5 is just an overview to sort of remind you of who we are. We are founded by Ken Fisher who is our CEO and CIO in 1979. You had asked for changes in personnel, one thing that I would let you guys know is that Ken is 60 years old and he has said when he turns 65 years old he no longer wants to be the CEO, he just wants to focus on investments. Actually this is something he sort of said for many, many years, that he wants to pare back his executive management responsibilities and just focus on investments, so that is 5 years out.

The investment professionals average 18 years at Fisher Investments and we believe that contributes to the consistency of our investment results. We remain 100% Fisher family and employee owned as we have since the inception of the firm.

On page 6 just another snapshot of Fisher Investments, over \$13 billion now in institutional assets, half of that is in strategies similar to the one that the Government of Guam Retirement Fund is invested in. Foreign equity strategy about \$6.7 billion, we also have an emerging market strategy which now has a 5 year track record, \$732 million in that, some folks actually hire us for global strategy and then we have several strategies that are more stock picking bottom up strategies with several billion dollars in those strategies as well. So our research team is at an all time high, our performance has been very good and the representative client list on page 7 & 8 reflects that.

Page 10 is just a brief review of our invested process and we describe it as a top down process. We first select countries and sectors, we use portfolio drivers that look at things like economic, political and sentiment factors to help us form country and sector weightings and then from there we screen for market cap and valuation and for stocks in those countries and sectors, we do a liquidity screen, --- screen and then call the list of prospective stocks down further and then our research analysts do the fundamental analysis looking for what we call strategic attributes of these stocks which said differently, these are attributes that allowed these companies to beat up on the competition and those are the type of stocks that we like to buy for our portfolio.

The next section is just the portfolio characteristics which as a top down manager I would describe in terms of our country and sector allocation. Rosalie Bordallo: (on page 12) I'm looking at your country allocations and I notice a lot of what's considered emerging markets or emerging countries, you have others, you have Brazil, Other EM, South Korea, Mexico, Singapore, Taiwan, China, Hong Kong, even Israel that's not considered developed... Geoffrey Hansen: Israel is now in the benchmark, most people now consider it developed. Rosalie Bordallo: Can you tell me of this portfolio, of our portfolio how much impact has the emerging market countries had on your performance? Geoffrey Hansen: The opportunistic exposure to emerging markets, I have an attribution on page 29, it has been positive, in fact it's been the biggest net contributor to country allocation since inception of the portfolio. The other country everyone is asking about these days is Japan, we are and have been under weight to Japan for quite a while. Our view there was the country was not as well positioned to take advantage of it, the global economic recovery that we see going on and so we had a material under weight in Japan. With the recent market volatility this has actually helped the portfolio.

Page 13 is our sector weights. Again, forgive me if I'm assuming you're use to seeing things presented this way, but the dark green bars to the right are over weights in the portfolio and the lighter green bars to the left center are under weights in your portfolio. The sectors I would basically describe that we are over weight to those sectors that are the cyclical sectors that are most sensitive to global economic expansion and most of the sectors that we're under weight to are the classic defensive sectors, telecom, utilities, staples, healthcare, etc, in other words the sectors that typically hold up well in a market down turn, the one exception being financials not normally included among defensive sectors, but given the risk and the risk toward changing Legislation in terms of how that sector will be able to compete going forward, we still remain very cautious on that sector although we do believe that the worst is probably behind financials.

On page 15 we summarize our market outlook for both the stock market and the economy as a whole. The way we describe 2011 and we look at the markets on a year by year basis and in 2011 we don't expect the bull market to be over any time soon although we have very tempered expectations for this year, not likely to be an up year as we've seen in the past couple of years though we

think the risk of a big down year is very unlikely. We are expecting greater dispersion among categories, the last couple of years have been characterized by basically if you took the position that stocks were going to go up you probably did well, but a lot of folks call it beta bet. We see that changing over the next 12 months too, there's going to be much greater dispersion between countries, between regions, between not just picking the right sector but picking the right industries within the sectors and picking the various stocks within those industries, we think it's going to have a much bigger impact on the portfolio than this year. This isn't exactly ground breaking news but typically as a bull market evolved you see the categories that lead change and we think this year is likely to be a change in terms of the leadership of the type of stocks that out perform. It's not going to happen over night, but the last couple of years maybe the smaller cap stocks out performed tremendously, it would not surprise us to see the larger cap stocks take on more of a leadership role.

We listed many of the risks that, we get a lot of clients that ask us, what about high unemployment, what about municipal finance and the situation that many states and cities are in or the Portugal, Italy, Ireland, Greece, Spain debt situations. Our viewpoint on the list that we listed here are they're so well discussed that they have to be priced into the market. That's not to say that the things listed here are not problems. I think in the news now there's a lot of talk about Portugal either they're probably not going to default on their debt but require further assistance from their --- neighbors. That doesn't come as much of a surprise to us, but basically the way we look at the whole, people refer to them as the PIIGS, the way we look at that situation is there's progress being made, there will be plenty of bumps along the road, we don't think we're out of the woods, but we don't think there's going to be anything that's going to occur in the next 12 months that's going to seriously disrupt the market in a meaningful way.

On the economic front we're in an economic expansion so when you look at GDP, all measurements of GDP we're out of the recovery mode in terms of global GDP and we're now into an official economic expansion. So any talk of a double dip recession which we heard a lot of last year at this point it wouldn't be a double dip recession, it would be a new recession. So we are now in an economic expansion and the thing that gives us some encouragement is there's not a lot of press given the fact that we are in an economic expansion, it's when folks start to talk a lot about either a booming stock market or a very strong economy then we think that gets priced in the market and the risk for a downturn increases. This is not to say things are great, but we think the risk for a big downturn is very limited. Wilfred Leon Guerrero: Political gridlock is good for the market? Geoffrey Hansen: Well the market typically does not like change and uncertainty. For the last year when the U.S. Federal Government was debating healthcare, there was lots of, it's going to turn out this way, it's not going to happen, there's a lot of volatility with how folks thought that Legislation would turn out and then once it was decided the volatility decreased. So the market just does not like uncertainty. When you have

political gridlock the opportunity to pass sweeping Legislative reform goes down, in our opinion. If you look right now at our own Federal Government, especially after the last election it doesn't look like anything major is going to get done, so the market would probably respond with less volatility. That's a phenomenon that we're not just seeing in the United States, but worldwide. There's gridlock in Germany, Australia, it's not limited to the United States so we would expect volatility associated with political risk to diminish.

On the sentiment front what we're seeing in 2011 is you had many people who had previously bearish in 2010 now become very bullish based on the big year we had in 2010. You still have folks who remain bearish since the last bear market and you have a new camp of people who are extremely bullish. So the way we're describing what we see right now in terms of sentiment is that it's --- where it's a barbell sentiment curve, you have people who are very bullish and you have people who are very bearish. The way we look at the stock market is it usually does not do what everybody thinks it's going to do so that leaves a big gap in the middle which will probably frustrate the people who are very bullish and the people who are very bearish. So that's why if we had to guess, 2011 will probably be a volatile year, but end up fairly flat, maybe up a little, maybe down a little.

Page 16 is just more of what I was talking about in terms of, we don't think it's going to be a very big up or down, though it will be volatile, that doesn't mean it's going to be a nice flat year, but we don't expect the bull market to be over any time soon.

The next couple of pages are just some data to highlight the way we see this year unfolding relative to past bull markets. We just finished the second 12 months of this recent bull market and I apologize I didn't fill in what the return there was, it was a lot less than 68.6% though which is in keeping with the way a bull market typically evolves, so the first year, the first 12 months after a bear market bottom you usually see very outsized returns, the second 12 months less so, the 3<sup>rd</sup> 12 months kind of a mixed bag, you see some years where it's up and some years where it's down and the average of those years, typically the average is somewhere around 4%. We would expect this next 12 months of this bull market to show modest returns. So the way we're describing 2011 is sort of the 3<sup>rd</sup> year of past bull markets, 1994 and 2005 were also the 3<sup>rd</sup> year of the most recent bull markets and those years saw a big pause in those bull markets and we're referring to it as the pause that refreshes, as if the market needs refreshing. We just finished the first 2 years which was some nice strong gains, the 3<sup>rd</sup> year we would expect a pause and then giving way to the next leg up in the bull market.

Page 20, this is not drawn to scale by any sense but it really just shows how coming off a bear market bottom typically whatever falls the most during the latter stages of the bear market bounces the most in the early stages of the bull market. In fact we had our portfolios positioned to over weight those countries

and sectors that fell the most and that worked very nicely coming off the bottom of the market. Now we think we're moving into that period where fundamentals take over and it's not enough just to get the countries right and the sectors right, it's going to require much more fine tuning in terms of stock picking and industry selection. So that may mean a slight increase in turn over in the portfolio. Typically our turn over is very, very low, on average I think we're about 25% year for a full market cycle, so this year it might be a little bit higher than that as we have a little less patience for stocks that are not performing.

On page 21 is just another way to look at 2011, it's the 3<sup>rd</sup> year of the President's term and that has traditionally been the sweet spot in terms of how the stock market performs. The point of this slide is just to show that the market going down in 2011 is not very likely. The only other year when the market was down a lot in the 3<sup>rd</sup> year of the President's term was in the early stages of the great depression. As I mentioned earlier, we're in a global economic expansion, we think that type of scenario is not at all realistic.

Page 23 just to remind you folks of why you hired us. We think we are a nice compliment in your international equity portfolio. Our top down investment process considers countries and sectors and then picks stocks that leverage those higher level themes and our consistent performance delivers excess returns in a variety of market conditions as evidence of our now 5 plus year relationship we've been able to do just that.

We very much look forward to the next 5 years of this relationship which is incredibly important to Fisher Investments and you're a very, very valued client.  
(End of presentation by Fisher Investments)

### **3:00pm-3:45pm Dimensional Fund Advisors – Non U.S. Equity Small Cap**

Kevin Hight: The particularly easy part about this is, have there been any regulatory issues for Dimensional and there have not. We have had no investigations or anything into that regards from any of the bodies that cover Dimensional, the SEC, the --- or the other regulatory bodies. We have had a couple of important organizational announcements which we put in place in the last recent time frame. Most important one we just recently, David Booth who is our founder and Chairman announced that in 2013 he will relinquish his co-CEO title which he's had basically since inception of the firm with Eduardo Repetto and Eduardo (Repetto) will take over as sole Chief Executive Officer. David (Booth) will remain as Chairman, so he will continue to be involved in the organization.

Other aspects that are important for us at least in terms of our updates, we have reached the 5<sup>th</sup> anniversary of our core strategies. I only mention that because in the deferred comp investment to the emerging core strategy. Dimensional is built around providing building blocks to plans such as yourselves, in terms of whether or not is small cap or large cap strategies, our

core strategies emerging markets and developed are all about providing some solution --- so they're cover the size and value spectrum, large and small, value and growth. We reached our 5 year anniversary and so we're proud of that and hopefully the long term success we've seen there will be seen in the deferred comp investment plan, currently right now we're a little under water, but hopefully ---. I included in on page 2 of the presentation some events that are coming. We know that you don't go to the mainland very frequently, but I included a couple here. At the end of January, early February of every year we have a big annual conference usually now in Austin, but we have events in Santa Monica, New York, Boston are other locations where we have all day events in terms of bringing in outside speakers, academics so they can provide interesting research and we welcome your attendance at any of these and a couple of them are highlighted if you have any interest we'd love to have you.

Rosalie Bordallo: The Institutional Investment Forum, where is that going to be, has it been decided? Ken Hight: That's what we typically have in Austin and it's a 2 and a half day event and usually we'll have outside academics, some of them we have long term relationships with and some we just think are very interesting. For example next week in Santa Monica we're having an investment forum, a one day event where one of the academics we work closely with is providing a presentation on trading that he's been doing for us, he's actually the head of the economics department at the University of Arizona. We'll have those kinds of presenters and we'll talk about the academic research.

We also included on page 2 a couple of the recent articles posted on the website and I know a number of you have access to that. Terry Dennison: Quick question on the Marlena Lee, did she come to a different conclusion on Rogoff and Reinhart? Ken Hight: I'm not sure what conclusion they come to. Terry Dennison: That basically if public debt gets over 90% of GDP it starts to negatively impact growth, it sounds like exactly the same topic. Ken Hight: It's certainly the same general topic. I don't have enough information on that. Terry Dennison: Can you send me the paper? Ken Hight: Sure. Terry Dennison: Rogoff and Reinhart have a book called, "It's Different This Time," it talks about their view. You can Google them, there's a ton of stuff on the web.

Jumping ahead to page 3 just to give you a sense of where we stand in the overall relationship. Since you all first began investing with us back in 2006, there's about \$1 million in the Emerging Markets Core Equity Portfolio and a total relationship of slightly over \$50 million.

Since we are here to talk about the International Small Company Portfolio, page 4 gives you a general view of what you're invested in. We've been investing in international small cap strategies outside of the U.S. since the mid 80's. This particular portfolio was first launched in 1996, it's well diversified, we're in invested in 23 countries and through the underlying portfolio it's invested in over 4,300 different securities so it's incredibly well diversified. As we talked about on each of the occasions I've been out here, we have a very structured

approach to how we invest the assets that we think provides a reliable, consistent allocation to the strategy and it's done in a team managed environment.

Just to give you a quick refresher in terms of how we actually go about doing that, the next couple of pages are talking about how we actually structure the portfolio and on page 5 is an example at the country level. The target of the portfolio is to invest in small companies with--- markets around the globe, outside the U.S. We're looking to invest basically in the bottom 10-15% of each market that we're invested in, so we use a number of names approach, we look at the large to make a break in the small cap spectrum, about that level, 10-15% of the small company stocks usually based on each individual market, a fixed number of names and it does change periodically. The idea is to use that approach to limit the turnover and we do buy all the way down to the market cap, \$50 million dollars. Typically we see most of the indices usually make their cut off of around \$250 million dollars, so we tend to buy a lot smaller and that does account for a lot of the significant number of names in the portfolio. As you get smaller and smaller into market cap spectrum you are increasing your number of names and since we're trying to buy the entire representative class you'll see a lot of --- names.

From that, once we made the quantitative screens we are putting a qualitative layer on top of that and that's really what page 6 is describing. As a reminder our approach is an exclusionary model, we're not trying to pick the 6 year 100 or 200 stocks we think are the best for the portfolio, we're trying to buy the entire asset class and only excluding the ones we don't think meet that asset class definition. So we're excluding things like REITs, we think that REITs are a perfectly fine investment, but the long separate from your equity allocations. We exclude things like IPOs which we think historically as a basket has performed as well, so ----. We exclude things that might be in play in the short term allocation. A small company being acquired a large company tends to perform like a large company and we'll exclude that as far as ongoing purchases.

From that when we've gone through those 2 quantitative and qualitative screens you end up with what you see on page 7 which are the general characteristics of the portfolio. As mentioned, a well diversified portfolio, well over 4,000 names. A couple of characteristics that I'll call to your attention, the median market cap, (the middle of the page) you can see that strong orientation towards small companies, we'll invest in a similar size range as the indices, but we'll invest a lot smaller so we have a much greater exposure in that regards. Terry Dennison: Of that 4,600, what did you start with, how many were excluded? Ken Hight: (From the industry universe) probably about 6,500. The other number that I'll just call to your attention is the median book to market, as a result of having this greater exposure to small cap stocks you have a tendency to have a slight orientation toward value stocks. We think that's not an intentional tilt, in this case we are trying to buy across the size spectrum not

against the value spectrum, but we think that does result in a slight --- expected return.

Page 8 is really just for your information showing the sector allocations. We don't make any sector allocation bets, we do put caps in terms of where we'll invest on a sector basis, meaning that we'll put a 10% market cap limit relative to the overall, to the natural weight within the portfolio. That generally doesn't impact this portfolio, that really only comes into effect when you have value strategies. In the market you can have value stocks becoming a much larger percentage in your portfolio than you desire, but nevertheless it doesn't apply here. You can see (this portfolio) is well diversified across various sector investments.

Page 9 is really around the country allocations. The one thing that I did want to call out is both the MSCI World ex USA and the MSCI EAFE indices as far as how we're benchmarked, the benchmark that you have all identified for us that you'd like to see this portfolio measured is the EAFE and we included that. The fact that we do include Canada in this portfolio is a significant bearing relative to the portfolio but in terms of how we're structured it's certainly in terms of our performance. Canada was added into the strategy a couple of years ago, that might be something that warrants your all consideration whether or not you want to be considered having us measured against the World ex USA, that's really your decision, we're ambivalent to that but it is at 12% of the overall market.

Page 10 is where the rubber meets the road in terms of performance. You asked for a couple of different performance periods and we included those in the materials, the first one being to the most recent month end. I'm please to say that from the most recent period from inception we're well ahead of the benchmark. These are net of fees so the management fees and other expenses are embedded in the performance since it is a mutual fund investment. At well over 270 basis points since inception and 140 against the ex USA, we think we're performing well and hopefully you are happy with that out performance. Pages 11 and 12 are just for the different time periods that you all requested.

We certainly like to think that we add a lot of value through trading. Trading for us for many years trading and portfolio managing, fully integrate functions. We can consider several important terms of what we did, that there really was no separation in responsibilities. We separate those responsibilities in the last few years, but really just because of the scale of the organization not because of it differing in a sense of how important they are. One of the areas where this gets and there's still a significant overlap in the concept of momentum and momentum is something that's existed in the market place for a long time, it's hard for us and others to truly quantify, but generally speaking it's a trend for stocks that are moving in one direction to have a tendency to continue in that direction. So stocks that are doing well continue to do well, stocks that do poor have a tendency to continue to do poor. We view that as a market friction



rather than something we can take advantage of. You can create portfolios around momentum, but the turnover that's involved in creating those portfolios and the transaction costs that's involved in creating those portfolios has a tendency to swamp any added value. So what we try to look at when we look at momentum is how could we utilize that data of a stock that is relative to all the other stocks in the spectrum, do we correlate or do we --- to include or exclude it from the portfolio to maximize the expected return. So what our portfolio management team does is they look at on a daily basis, those stocks that over the last 6-12 months have continued to be correlated and we'll exclude those from the buy list in terms of whether or not we're ---, but those stocks that are doing well is to exclude those or to limit those on the sell side --- to take money out of the portfolio so that we're taking advantage of the fact that those specs. We think that those specs are significant, but you really have to take advantage of it at the margin rather than the aggregate exposure. It ties in very closely to what we do on trading costs, we think that particularly when we talk about small cap stocks, trading in small cap stocks where it's not so much the explicit costs --- but whether or not you're --- the market and that's really the implicit costs that's highlighted on page 14. You're putting a lot of money to work in those particular stocks, you can definitely --- spreads and we want to make sure that we don't do that so we're not --- in our portfolio.

Page 15 highlights this the fact that --- gets smaller and smaller --- where it's spread out. The liquidity dries up on a relative basis and the spreads widen out.

The real advantage when we talk about those 4,300 names, 4,600 names that we've talked about is it gives us a great deal of flexibility in terms of what we buy and sell. When a traditional index manager has a set number of names they need to invest in and they need to do that effectively --- and a traditional active manager has 100 or 200 or whatever names that they want to buy, we've got this vast flexibility of being able to put money to work because when we're talking about positions that are 10 basis points, 5 basis points in the portfolio, whether or not you're slightly under weight or over weight on a relative target weight on a particular day really is almost negligible. What we're trying to do is the overall asset class exposure and with trading is by providing a lot of flexibility to our trading team they can go out and they can invest in all these different names and not because we're neutral on a given day on stock A versus B, we're probably own both stock A and stock B already, we're looking to put a little bit more money to work in each of those, we just want to make sure that we're getting the best price. By being patient, we can make people who are anxious to sell for whatever reason to cross the spread and come to us and be able to trade. The proof in the pudding on this is on page 16, which is we provide all our trading information to an independent 3<sup>rd</sup> party called ITG one of the leading players in terms of trade cost analysis and they look at all the trades that we do and they measure us against their own metrics against a peer universe that they establish, so we don't really have any control on which universe, we try to engineer and figure out who it is, but we don't know for

sure. Their general group, this is representative across a variety of trading categories that they have you can see where Dimensional ranks. So if you're looking at the developed markets trading you can see that the median peer in their trading, using their methodology is losing 42 basis points when they're trading, so when you're looking at where a money manager trades versus where the stock ends up the next day, they're actually detracting value at 42 basis points. Dimensional on the other hand is actually adding value by 53 basis points. You have to adjust this number slightly because this is representative by the turnover in the strategy so this isn't actually value added by 53 basis points to the one year performance, numbers, this is value added relative to all of our peers and the fact that we have relatively low turnover relative to our peers, meaning this number is slightly muted for us and slightly understated as far as our peer universe. We only have about a 25% turnover and I think it's representative of the fact that we spend a lot of attention on trading.

The way that we construct the portfolio is really to provide generally a market cap weight on country basis and across the size and allocations. So what we're trying to do is provide that overall exposure and then try to limit the negative impacts of doing so by how we trade and construct the portfolios. So when you get into the attributions, look at page 19 and you can see that the relative to the Fund's benchmark which is World ex USA, relatively similar weights across the countries, so we're allocated roughly inline with what the market is. How we execute the portfolio and how we structure --- orientation to small cap that we can provide that excess return, so you can see again if you look on the country --- the composition had relatively small impact over the one year period so again what we're trying to do is provide that general asset allocation investment and not necessarily ---, we're not trying to gain the market ---, but we think that by keeping that consistent approach in our exposure to small cap stocks and going smaller than what the rest of the market is, over long periods of time we'll be able to provide that excess return. So you're seeing a consistent closure to the asset, to small cap stocks, country allocations. Going back to page 17 you see where we are in terms of size allocation, we have a higher exposure to small cap stocks and we think that orientation is going to drive the long term.

It's all about the exclusionary approach as opposed to the inclusionary, we're trying to buy everything we think represents small cap. Again we think that small cap stocks have a long term higher expected return, they are riskier but we want to buy that entire and not try to forecast which, buy them all, take advantage of that systemic risk factor. That really what drives, especially when we're talking about a large client such as yourself, that exposure we think really is the long term focus is making sure you're the asset allocation exposure to small cap stocks and not relying on whether we have better information.

The way we generally think of the market is do you have better in terms of --- alpha or hiring ----, do you really think, as a money manager do you have better information, do your analysts and portfolio managers have better information than the rest of the market does or can you execute better. As a firm we don't

think that we generally have better information, we think it's a very sophisticated market, it's a very dynamic market and very fast. We do think that there are factors in the marketplace where we can add value in terms of how we're structured and how we trade and so what we're trying to do is focus on a better execution --- of that, providing that system, a reliable exposure to the market and reduce the factors, reduce the costs to investors so all this attention to trade, how we trade and increasing the systemic exposure to small cap stocks by going smaller than most of them and we can do that because of the attention to trading costs.

Wilfred Leon Guerrero: So trading costs is the main criteria? Ken Hight: It's significant. Wilfred Leon Guerrero: You mentioned in the universe is over 6,000 and you own 4,000, what criteria was used for not buying that 2,000? Ken Hight: Go back to page 6, there are some qualitative reasons why we don't buy stocks and also some quantitative ones. We will exclude stocks from that universe if their liquidity dries up on a consistent basis, if they are largely Government controlled, if they are IPOs, so they may be trading on the main markets and the main exchanges but it's stocks that have been on the market 3-6 months, we won't buy it, we want companies that are seasoned, if they are holding companies rather than operating companies, if it's a merger and acquisition target, if a small company is being targeted by a large company there's a tendency to trade based terms of the deal, so if it's a cash deal that small company will tend to trade cash --- or if it's trading or being bought by a large company it tends to trade like, so we'll exclude that stocks. We will also look at new screens in terms of whether or not a company is in financial distress. Small companies can be more --- than the large, not always, they get less press, but a big company that's going into financial distress we will exclude that even though we're trying to buy all these stocks and a news story doesn't necessarily mean that it's going to be the truth in the long term basis.

Wilfred Leon Guerrero: How do you find stocks to buy in China? Ken Hight: We buy through Hong Kong. Wilfred Leon Guerrero: Aren't they all Government owned? Ken Hight: There is a significant portion that are, but there are also a lot that trade --- we think have sufficient diversification of ownership. We're not buying stocks that are invested in the local shares just because we don't think the --- the local Chinese market --- where they ought to be for investing client's money, but there is significant ownership... Wilfred Leon Guerrero: These companies are in Hong Kong? Ken Hight: No, these are companies that are based and operated in China, but they are listed on the Hong Kong exchange. Wilfred Leon Guerrero: There are actually companies in China that are privately owned? Ken Hight: Yes and they've reached out into the global capital market infrastructure and sought equity out and it's actually been a very positive thing for China and for investors. The investment for Chinese securities by the way, is in the emerging markets portfolio, not in the developed market. In the developed market for this portfolio we only invest in Hong Kong securities for Hong Kong based organizations. We still consider

China even as big as it is, still an emerging market country whereas Hong Kong is generally considered a developed country. So a company, an organization that's based in Hong Kong and operates out of Hong Kong we would consider that eligible for this universe. For the emerging markets universe we would just be looking at Chinese based securities that have issued through Hong Kong. So that's the separation that we would make, but it's about 12% of the eligible universe with the emerging markets portfolio and Hong Kong is a smaller allocation.

I hope you all continue to be pleased with the investment strategy. To come back to the performance on page 10, I think the strategy has performed well over long periods of time and certainly the period of time that you have benefited from that, but it's performed quite well since inception, going back to 1996. The strategy has remained focus on providing its allocation to small cap stocks and I think that is consistent with you're long term asset allocation. We haven't changed our tune, the asset allocation drive is 96% roughly, total return for plans such as yourselves, we want to continue to be a part of that asset allocation.

I'm happy to take any questions if you have any. George Santos: What is our outlook for 2012? Ken Hight: One of the hallmarks of Dimensional is not making a forecast. We think that the best way for large plans in particular is to stay focused on the long term, systemic factors that drive returns and to stay true to their asset allocation and invest accordingly. There are too many variables in the market place for anyone to rely on bet. That doesn't mean that they're aren't good people that can forecast, there are some problems identifying them before that the world changes and not after the world changes. There are an awful lot of money managers who have made a career of one or 2 really good bets and have been right. We think it's better to stay focused on the asset allocation, so we think that exposure to small cap stock, as a firm exposure to value stocks as a long term higher expected return, staying focused on that and making sure that you're well diversified across the size and value spectrum and be well exposed across the bond and equity spectrum is what makes sense. Trying to forecast and predict I think is somewhat of a challenging exercise.

George Santos: Do we have money in auto plants? Ken Hight: Yes. I don't have the allocation of which particular stocks, but I can certainly get it for you. We definitely have exposure to companies involved in the auto industry. Joe T. San Agustin: With regards to Tokyo, Japan, we're talking about the auto industry, a lot of parts are made in Japan and a lot of industries are now cutting back, how is that effect our performance? Ken Hight: The country is definitely invested in Japan and we continue to do so. Joe T. San Agustin: But also companies that depend on Japan to provide them, to keep them going like... a lot of parts are made out of Japan and a lot of companies, we just heard, are shutting down. Ken Hight: That's something that affects a broader investment spectrum I think. Apple is not a part of this portfolio because it would be a large stock, extending all of it's delivery time for all of it's Ipads and

everything else by 3-6 weeks because of the turmoil in Japan. That's certainly something that's going to have a systemic factor, impact across the market, we don't think, why we have slowed up our investment into Japan, we continue to be invested in Japan, we stopped investing in this --- particular portfolio, Tokyo Electric is a publicly listed company, we held back on anymore Tokyo Electric, but we do own it. Joe T. San Agustin: You're not dumping them? Ken Hight: We're not dumping them. Again I think from diversification of the portfolio, any individual name across the sector is going to be a relatively small portion of the market. Just as concerning as the problems are in Japan, there's also a reasonably good argument that it's almost a good opportunity to buy into Japan because the Japanese market has been penalized. We think that the long term factor makes sense to be continued to be invested in Japan and Japan will continue to persevere through this just as other various kinds of economies have been able to preserve through similar tragedies. This is clearly a big impact and something that we pay attention to. We don't think it warrants pulling out of Japan. If you're pulling out of Japan now, you're pulling effectively a loss. Joe T. San Agustin: I just want to make sure you guys don't panic and end up with a loss, unless you want to swap it for a higher return. Ken Hight: If we thought there was a higher return we would certainly contemplate that, but we think that what we're trying to provide and what clients invest in this portfolio are looking for is exposure across all developed markets. I think that when significant events have occurred around the globe with Dimensional, we do have a tendency to slow up or stop what we're doing, but not to change what we're doing.

Again, since I did provide you with some information on emerging markets strategies, other than Japan some other more recent examples, Brazil implemented a tax on new capital going into the market, we slowed up what we were doing in Brazil, we didn't stop. Joe T. San Agustin: Do you think there are some companies that would try to profit from Tokyo, the impact, maybe indirectly like South Korean stock --- the industry would move out of Japan and go to the surrounding countries ---? Ken Hight: It's certainly possible that some companies will benefit from that, our general position is that a plan such as yours would rather have exposure across the entire equity spectrum, there ought to be exposure to emerging market stocks as well as developed and those portfolios will benefit or those investments in those areas. Our emerging market strategies are invested in South Korea, we think there certainly is a possibility that South Korea will benefit.

The only change in recent times in terms of country allocations that you would see in this strategy is Israel is now part of this strategy. If you go back I think it was 2010, it migrated from the MSCI World from emerging markets to developed markets, we did take that into consideration and migrated it also to our developed market strategy, but that was down over a period of about 6 months, not in any kind of aggressive way, not in a speculative way, we tried not to do it in the same time frame as MSCI because we didn't want to take the migration pain that went along with that. Joe T. San Agustin: Speaking of

migration, did your firm develop any migration analysis on your stock portfolio? Ken Hight: We can certainly provide some additional information on stocks that are moving out of the small cap branch. Joe T. San Agustin: The overall migration, what is the movement there? Ken Hight: If you go to page 17 where it shows the allocation around size, the break points here are in our small cap breaks, so it's a little confusing, but the portfolio is designed around small cap stocks. Stocks that move out of our buy universe are moving out of our buy universe because they're becoming large cap stocks. We will be selective in terms of how we move out of those stocks and we will have periods of time where we will have allocations to stocks that are above our buy universe perspective, because we're taking --- that positive momentum I was talking about earlier and so there's not a trigger point from when we sell a particular stock.

Like I mentioned earlier, our market cap tends to be around 10% of the universe so the bottom 10% of the universe is what we're trying to buy. Just because it moves to 10.05, doesn't mean we sell. Joe T. San Agustin: So you're going in the parameter of 10%? Ken Hight: That's the general target. It is set country by country at about 10-15%... Joe T. San Agustin: And that's when you sell... Ken Hight: Let's say we have 1,000 shares of a particular stock that starts moving out of our buying universe and we need to move it towards our selling universe, we will look for opportunities to sell that, we take the same patient approach that we do on the buy side which is we look for people that are anxious to buy and anxious to hit us on the --- side so we'll tend to place fairly high orders and let the people that are willing to push and --- spread up and taking the patient approach. Again, the only reason we're looking to sell is because it's falling outside of our universe or if they're a significant client we need to raise cash, again because we have so many names we could be flexible in terms of which names we put out in the market place. Change is country to country so we look at the size, the way we look at each market is we're looking at the of the lining of the companies by market capitalization and we think that the small cap is about 10-15% based on the market. The reason I'm using this range is there are certain markets that are fairly tight in terms of how dominated they are. New Zealand for example is not a very broadly diversified market so it's a fairly small number of names that constitutes the large cap portion of the market. Joe T. San Agustin: So they become more stable. Ken Hight: They tend to be more stable. Joe T. San Agustin: They're not as flexible as other countries, so there is hardly any movement, you expect to have no movement, no migration. Ken Hight: We would expect that it would be certainly less, yes. Wilfred Aflague: So momentum does generally tends to hold back the trigger point as to when to sell. Ken Hight: What it does is slows up, it doesn't stop us from selling because we're looking at the relative momentum, so a stock that is doing better than the rest of the market, so again if we have that position of 1,000 shares we would be looking to see what is happening, we're not going to sell the entire position, we might look to sell and again typically the numbers are much larger, but we're not looking to sell the ---. Basically allow for the portfolio to benefit from the continued momentum, but

we're doing that in ---, we don't want the portfolio to move away from its focus in small cap stocks. If the company really falls well outside its size, we'll move probably a little bit faster. One of the advantages of that approach is when you're selling a security in the larger end of the spectrum --- spreads have a tendency to --- so it's cheaper to actually trade. So as the company is doing well, it's actually easier for us to get rid of it. Similarly on the buy side when we're looking at companies coming into the universe, if they're coming in the universe sometimes they're not doing well, so we want to make sure that we're not just catching that falling knife, so that doesn't mean that we're not necessarily going to buy it, it is something that we'll look at in terms of it's doing worse than the rest of the market, we're going to be slow to buy, we have no need to rush into it again because we're so well diversified we can allow --- to stabilize and then buy, we will own it at some point, it's just a question of when.

Wilfred Leon Guerrero: Any other questions? (no) Ken, thank you very much.

Ken Hight: Thank you.

(End of presentation by Dimensional Fund Advisors)

**Respectfully submitted,**



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**Stephanie A. Herrera**  
**Recording Secretary**

**Affirmed:**



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**Wilfred P. Leon Guerrero**  
**Chairman**

