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Quarter Ended September 30, 2013 DC Plan Quarterly Performance Meetings

October 30, 2013 Retirement Fund Conference Room

Board of Trustees Present:

Wilfred P. Leon Guerrero, Ed.D, Chairman, Investment Committee Gerard A. Cruz, Member James R.F. Duenas, Member David O'Brien, Member

Staff Present:

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

Other Present:

Terry Dennison, Mercer Investment Consulting Inc. Doris Flores-Brooks, Office of Public Accountability Alice Taijeron, Great West Retirement Service

Economic & Capital Market Environment DC Plan Performance

Pages 2-20 Pages 21-26



Economic & Capital Market Environment

Terry Dennison: Multipliers probably somewhere around one so a dollars worth of government spending has about the same effect as a dollars worth of private sector spending. But you could see there's really a huge divergence previously there were divergences financial crisis because the government was much more stable but the reality 2001-2002 the private sector is oppose .com decision. The private sector decline the government actually boosted up a little bit and now this is very much different from before and this is the first time seen we've seen this pattern. Gerard Cruz: I'm wondering how much of government spending shows a down trending line but how much of that spending or non-spending of the dollars went into buying more digits that's not being reflected here.

Terry Dennison: Now this is investment action rather think of it as a simple investment versus expense I'm using the accounting language there but the reality is if they buy a bond, yes there putting up money but they still own the bond, there's no net change in the balance sheet were assuming the bond has a value at least what they paid for it. So this is really and it's not considered output because otherwise you could crank the output infinitely simply by buying and selling bonds or buying and selling securities you could make the GDP anything you want this is actual output. Gerard Cruz: No, I understand what I'm wondering if they weren't putting money into buying bonds in a finance world would they be able to use that money to boost up government. Terry Dennison: Absolutely, now if they used that for infrastructure or for just hiring people the reality is that would count as output. Gerard Cruz: And there was a program in 2008-2009 that Terry Dennison: There been a number of infrastructure I'm trying to had just that. remember how much was put into that it was several of hundreds of billions but compared to the trillion dollar spending were doing for QE that's not going to have much of an effect. I remember seeing signs you know that this was financed by this infrastructure program like building bridges something worthwhile building bridges is good having bridges collapse is bad.

Turn to page 9, this is all worth reading incidentally I'm just using this to illustrate in some cases graphs illustrate circumstances a lot better. David O'Brien: So you are not saying the fall of in government spending is good or bad. Terry Dennison: It's bad in output terms because it has reduce GDP, government spending not investment in buying things but government spending itself is a component of GDP. Governments probably on average 20% of GDP because remember. David O'Brien: I thought it was 70. Terry Dennison: The consumer is 70. So the consumer is the vast majority of it, so the rest of it is corporate R&D spending corporate capital expenditures of the like, so the reality. Doris Flores-Brooks: There's only 10% then, government is 20 and the consumer is 70 you mean corporate R&D and all that, investment is only 10. Terry Dennison: Yeah. David O'Brien: That historically been right. Terry Dennison: And will talk about the fact that a lot of the economist are now beginning to wonder if America is losing its innovative edge because R&D spending is so much down but the reality is we are not seeing a lot of new business formation, were not seeing a lot of R&D spending we're not seeing a lot of capital expenditures one of the weakest part of the economy is corporate capital expenditures. You only spend money to build factories of the like if you think you could sell the product they make and frankly most of the expenditures have been in production efficiency which is largely replacing people with robots which is part for the reason that the unemployment statistics are what they are.

Page 9, the upper right hand corner is a number you've heard of much that median real household income adjusted for inflation has not moved up, it actually has fallen back to where it was in 1995. So the average household is living on the same real income adjusted for inflation that they did almost 20 years ago. And if we wonder why we're not seeing the kind of robust economic growth that we historically see coming out of recession this is part of the reason that the household income has been stagnant and it has been stagnant because the labor share of GDP has fallen. Companies still basically control the high grounds in terms of hiring and investing and that has a negative effect on household income. And if household income drives 70% of GDP you are going to get the kind of very, very weak recovery that we've seen since 2007 and 2008.

Lower left hand corner is interesting this is Congressional Budget office estimates of U.S. budget going out to 2023. The brown is historical that's actual and then the different color blue, the dark blue is a base line scenario this is assuming that sequestration cuts were maintained and the budget deficit shrinks to 2% of GDP in 2015. And then starts to widen again because of our old bug a bear entitlement in spending. The alternative social security, medicare, Medicaid all of those programs. The light blue is alternative physical scenario which assumes the sequestration cuts are restored so basically government spending goes back to its prior level now that what you have then is that prior graph would start to have a hook up again but of course there not collecting enough in taxes to be able afford that so the deficit start to increase. As far as what's really bad probably anything less than 4 is good, anything more than 4 is bad but that's just a wag number I want to find what that acronym means. Another graph I want to take you to. Doris Flores-Brooks: Could we do the debt graph? Terry Dennison: Sure, the light blue number is an estimate of what happens long term when we talk about this a quarter or two ago with entitlement spending in fact as the baby boomer moves into retirement Medicare expenses grow dramatically these are CBO forecast this is not some wild eye, right wing, think tank this is the congressional budget office. Obviously, if you expect that you have more realistic assumptions about retirement spending with baby boomer in the light you see that graph go it's the cayenne colored line grows to a level which is basically unsustainable. Japanese, Greek pick your poison realistically the truth probably lies between the two lines but I think the alternative scenario has fair legs behind them.

Let's turn from general economics to emerging markets. There's been a lot of concerns about emerging markets. A lot of the emerging markets are net in quarters of capital, people like to invest there it's called foreign direct investment we saw tremendous amounts of money flowing in to China. It depends what you do with that investment, if somebody lends you a hundred million dollars and you build a factory that produces 100 million dollars a year of product it was a good investment. If you build a 100 million dollars worth of apartment houses that nobody lives in, that's a bad investment. So a lot of these economies will spend a fair amount of time in China because our senses there are some real issues growing there you can almost picture Chinese as the big domino. If certain bad things happen and you start to worry about for example the third plenum meeting of the Chinese communist party which is going to take place next month is going

to make some very big decisions reforming the economy they get it right it will be good, if they get it wrong the world is in trouble.

Let's take a look at the world economic growth looking at the four brick countries in the upper left hand corner. One of the things you can see is growth has slowed everywhere. Now realistically the Chinese growth, the historical low double digit Chinese growth is unsustainable. Basically if you think about it if you got growth in the low teens that means it doubles every 5 years. And after awhile it get so big that it just can't keep doubling so it's no surprise that its slipping but clearly were seeing a significant slow down in the Chinese economy and one of the issues about the Chinese financial statistics is there largely just made up. There's actually a quote from one of the senior leaders in China who in some off moment who forgot that all guns are loaded and all mites are live said we actually make all this stuff up.

So the reality it's a little hard to determine exactly what their growth rate is. One way to tell how much people are selling them if you asked the Australian for example how much iron ore are they buying well they scale that back a lot, if you ask Canadian how much timber are they buying well they scale that back a lot. So, the reality is unless their economy has become strikingly more efficient in there use of inputs it's not growing anywhere as fast as even these number are and then the question becomes are they making wise investment and we all see these pictures of empty cities and empty buildings, I haven't been to the Mainland China in a couple of years but the reality is people say you can't walked down the street without one empty building per block. The reality is somebody basically either made that investment or borrowed money to make that investment and has no creditable chance of paying it back further discussion. India is probably the worse hit of the brick countries very poor infrastructure, the economy slowed down a great deal there is a lot of uncertainty about the future direction of the government and they've gone from being another Asian tiger to being a fairly weak economy.

Brazil which has been struggling with a slow down in the demand for oil and very poor infrastructure the economist magazine did one other special section couple weeks ago about the infrastructure problems in Brazil. An American soybean farmer spends about 7% of the value of the soybeans getting into market. A Brazilian soybean farmers spent 25% of the value of the soybeans getting into market because very poor roads and virtually no railways.

And Russia a very peculiar place without regard to the government policy it's basically a one plague its energy and the reality is not just it's oil seize its rise but the fact that the US has gotten almost energy self sufficient particularly gas we will be net exporter of gas if the government permitted it has reduce world price of gas and the world price of oil to the fact the Russians are feeling the poorliest.

We talk a little bit more about China, but let talk about what I have circle there little note at the bottom. There is a real question about the level of debt increase in China to give you an example. In the last five years the total assets of the banks in China just the increase is larger than the entire banking system in the United States. Just the increase in the last five years is larger than the whole value of all the banks in the United States. No time in history have we seen a developed economy which in terms of size certainly are grow this

rapidly in terms of the amount of debt and in the same sense that we can't really trust the figures mean if we look at the publish debt its very low but what they have is effectively a off the books market for debt that involves trillions of dollars. We'll talk more where those trillions of dollars have gone and who owns that debt and why it is so dangerous.

But the reality is people said well Chinese pick a number 2.2 or 2.4 trillion dollars of treasury securities, if they had a failure of one of the large state owned enterprises or a failure of one of the large state owned banks. Well in the government could just bail it out. People forget this money isn't just sitting in a vault some place it's invested it happens to be invested primarily in US government bonds. Well suppose they need a fast trillion dollars and they have to sell a trillion dollars worth of US government bonds because that's where the money is, it's not in the vault some place. Basically what you have is government bond prices would fall to the floor and rates will shoot up to the sky. So what happens in China has a huge effect on what happens in the US because if they need money and actually in July they sold 20 billion dollars worth of US treasuries that's not the same solely because there's nothing else they could pawn but the reality is having this amount of our bonds effectively held by a foreign government that may need to redeem them, to sell them.

Wilfred Leon Guerrero: Who would they sell it to? Terry Dennison: That's a good question. The mechanics would be, the prices would fall because of selling pressure and yields would rise so right now the 10 year treasury is 275 there abouts, but what you have is the only way you could sale a ten year bond as if you're willing to sell a yield of 5 or 7 or 9 if you need the money you have to take what anybody will give you for what you're trying to sale. So there's interplay between what's going on in China and the fact that this debt is going and I could give you some articles to read from some very thoughtful people but you wouldn't ever sleep again in the interest of the health of my client we won't but I could send you some links to some very scary, very sensible sounding discussion about where this is all going to end.

If we continue to page 11 upper right hand corner is very descriptive you can see net in flows and out flows into emerging markets. And if you wonder why the emerging market currencies many of them have crashed, many of stock markets have crashed, many of the economies have gone into decline look at that big brown line and that big brown line all started with Dr. Bernanke's comment that maybe the right think sometime possibly of thinking further about reducing QE3. Now, we have a very interesting additional interplay it's not just China literally all of these emerging markets, and the upper left hand corner is the inflations and current account balances that are negative means the only way they could stay in business is to borrow money. So the ones that are circle India, Turkey, South Africa, Indonesia, and Brazil these are countries that have high rate of inflation and need money so these are the ones that are going to be hurt very badly if the governments starts to taper QE3. In fact the international monetary fund has formerly warned central banks if there to aggressive at reducing their stimulation there going to crash the emerging markets.

So now we have a situation where the FED may feel for reason for the benefits of the United States they need to do something to reduce the increase in their balance sheet growing net of redemption several hundred billion dollars a year the total spending is a

trillion dollars a year 80 billion per month but some of these are coming mature. If they stop which might be the right thing for the US we have a global crisis from the emerging markets. We are getting into a very awkward place you can see from the upper left hand corner what's happening is emerging markets all of a sudden after gorging themselves with cheap money and it was cheap because interest rates are so low now we are seeing money not coming in, but actually money going out.

The bottom right is an interesting graph because what it shows is the blue line is the external debt and the brown line is the currency reserve and you can see that a lot of the money that has come in is still in the form of currency reserves in central banks. And those lines stay roughly together but if all of a sudden the reserves are drawn down to pay of debt it's going to cause severe financial crisis in these countries and some of these countries have terribly stable financial systems.

Skip what I circle on 12, but let's spend a lot of time on page 13, because this page is labeled the Fed hold off tapering QE3. The upper left hand corner graph is interesting because what it shows since the global financial crisis what's happened to the monetary base which is basically the liability side of the Feds balance sheet. The Fed actually interesting enough is a corporation is owned actually by the regional branches of the Federal Reserve and it doesn't have a government balance sheet it's got more of a corporate balance sheet so this is the liability side of it.

Terry Dennison: You can see what's called the monetary base has grown dramatically the thing that's interesting is the brown line is called M2 that's the statistics the economist use it's basically currency, checking accounts and money market funds. And while there's been a huge amount of money printing that's what the blue line is money printing very little of that money is actually circulating in the real economy. It's all gone from the Fed to the banks were it sits in the banks balance sheet.

Now part of this talk about this a number of times has been a very sly effort on the part of the government to recapitalize the banks at a time when the banks were amongst the most hated institution of the country. If you pay interest on excess reserves and hand out free money it's a way of increasing the profitability of the banks and restoring balance sheet without doing the politically awkward thing of giving them money or bailing them out. The interesting is that there's no demand right now, no loan demand very little credit required so this money is sitting in the balance sheets at the banks. The trouble is that if loan demand ever picks up all of this is inflation in waiting that all of this money that's floating around in the banking system could lead to an out break of unexpected inflation and everybody has been waiting for inflation you just can't print all this money and not have inflation and the monetarist are shaking their heads how can this be because the monetarist would argue inflation is at the end always a monetary phenomena, you print more money and don't have a commencer increase in goods, prices go up.

If I gave a tip not proposing to this, a million dollars what would happen is prices on Guam would increase. You see this in Alaska every time in February the Alaska permanent funds sends the checks to the citizens in Alaska they get a dividend from Alaska permanent fund several thousands of dollars a year, you see all of a sudden prices for pickup trucks that's currency in Anchorage. Pick up trucks get a lot harder to

negotiate prices because everybody knows that everyone's walking around with \$5,000 dollars in their pockets.

Why don't we see the inflation well part of it is on the upper right hand corner which is the velocity, velocity is a term the economist use for the number of times a year the money changes hands. And if you think about it a fractional reserved banking system what that means is every time the money goes into a bank the bank has to keep a little bit 5 or 6 percent. I give you a dollar you put in your checking account bank takes out 5% and loans out .95 cents. It goes there, puts in the bank, the bank takes out a little less than .5 cents so every time the money goes from hand to hand a little bit gets taken out for bank reserves but you get the multiplier effect that same dollar produces a great deal of wealth at least paper wealth on bank statements.

What's happening is the velocity has dropped dramatically the money is just sitting in the vault. Another way of thinking about these two charts that tell basically the same story and that's why you are not seeing any inflation.

David O'Brien: That's why you see QE3 continue. Terry Dennison: Yeah. The funny thing is that it's done a good job intended to spur economic growth it has not done that what has done is produce asset bubble so the net result of this is very little effect of what it is intended to do in a very promiscuous effect intended to do because of the nature of bubbles is to burst.

Wilfred Leon Guerrero: That's why the employment picture has not improved. Terry Dennison: Yeah, exactly. Realistically now haven't said that the central banks who were not as aggressive in pushing money out, remember helicopter Ben they'll be a helicopter and it just dumps \$20 bills out in the street Dr. Bernanke's idea. The reality is other central banks like the European Central bank, Bank of England, Bank of Japan basically have not cut interest rates as much, not been simulative and their economies were suffering for it. So it not that is was a good thing it just didn't produce what was expected.

The Cains in the economist said you give money away growth follows. Well we have been giving lots of money away nothing happened but you got all the space under between the brown line and the blue line in the upper left hand corner. Gerard Cruz: Banks on the other end that commentary is Congress who made it difficult for banks to lend with new restrictions with laws, it makes more sense to take the money cheap and invest without assuming the credit risk and all the new regulations. Wilfred Leon Guerrero: That's what you do with the money. Gerard Cruz: Not all of it, I'm exempt from that because we are below \$10 billion but banks would love to lend money. Terry Dennison: It's unintended consequences all these ideas individually seem like decent ideas but the net result of it is it just gums up the system. I showed you a graph couple of quarters ago that basically showed the decadal GDP increase remember it started in the 1940's, 1950's, 1960's all the way through so it's not peak to troth it's decadal and every single decade GDP growth was lower than the previous decades the economy is loosing it's ability to grow.

Previously coming out of a steeper session we see from a couple of quarters at 6% growth and right now the horns are tooting when we get 3% growth and it's becoming endemic because we talked about it earlier the fact that there's reduced R&D spending government

regulation as Gerry said it's making it unattractive to start a company, unattractive to lend money, the effective of health care is reducing employment we see a large number of people on short hours to avoid having to pay health care cost.

The net result of all of this is not only the economy growing much more slowly than it needs to grow the tools use to be controlling the economy don't work anymore. If you can't make the economy grow 6% plugging a trillion dollars a year of cash in the economy that lever isn't connected to anything anymore it's just broken. Pretty soon we'll end up in a similar situation and I'll use a strange analogy here but if you're familiar with concerns in the health care profession about antibiotic resistance basically we are going to end up with nothing works if the economy slows down, nothing works anymore that's not going to be a happy place to be.

Page 19 upper left hand corner much has been made about why stocks have done so well. When the people who saw big losses in 2007, 2008 if they did not lose heart if they just stuck with it they not only made good there losses they actually made money beyond that and part of the reason was corporate profitability is at all time high and companies are rolling in dough, their balance sheet are fat, sometime their going to decide to spend this money for something other than buying their own stock back and the reality is great wealth and zeus.

Look at what's happening year-over-year Operating Earnings Growth obviously we had a big peak coming out of the decline from the crash but the reality is we're now pretty much down to zero. Upper left hand corner page 19 if operating earnings growth is at zero. Doris Flores-Brooks: Why are we down to zero? Gerard Cruz: Because it's all coming from investments. Terry Dennison: Growth operating earning means somebody making something that somebody's buying, top line sales growth, yes you're seeing earnings grow because of share buy backs other accounting tricks. But the reality is it puts a new light on equity valuations. Doris Flores-Brooks: That's why UOG does good because it has lots of investments, their investment income is pretty good it's pretty substantial.

Terry Dennison: Look at page 19 bottom right hand corner you can see equity valuation by capitalization and if you look particularly at small caps they got some pretty steep PE ratios there I mean their can't be unless we're seeing striking earnings growth which the previous chart suggested were not going to see.

The real question is how much gas there is left in the tank I'm done with this being mindful with time this just some thoughts collected from all the reading I do. Again one of the companies we pay attention to is Bridgewater one of the large hedge funds manager and Bridgewater sends out to very selective people once a day. Some comments and they have a concern that despite the fact that global growth has been improving a little bit, Northern Europe is now above zero, and Southern Europe not slipping anymore and Japan pick up a little because of Abenomics. But the reality is they believe most of risk that realistically a lot of this global growth was due to one of the events the effect of those have faded and we are likely to see growth decline for the remainder of the year.

We talked about the balance of payment crisis with a lot the emerging markets we talk a little bit about Chinese growth we've seen it fall from low to mid double digits down to high

or middle single digits even if you believe the publish numbers. But the reality is they are a significant part of world GDP not only do they sell a lot of things they also buy a lot of things because they buy there's not a lot of resources there no iron, no copper, no oil and there's no there, there. Geology didn't favor them much and what they have is a lot of people, they make good use of those people.

I remember a comment unrelated but a funny comment from Golden Miare she was the Prime Minister of Israel and grew up in Milwaukee and she said and everyone says the Jewish people are so smart so how in the world could they wander through the desert for forty years and stop and the only place didn't have any oil.

Realistically much the same as Japan. Japan basically imports everything and they add enormous value to and sell to the rest of the world and that's what China's been doing. And they've the advantage tremendous amount of labor that they can take out of the world economy bring in to cities and do low to moderate value added manufacture. But the reality is they basically sucked most of the people out of the land in Western China. They have made the advances that they can there model has basically run out of gas. The next model is instead of making foolish investments try to get consumers to spend money, build things that produce returns instead of just building things become a more balanced economy that's the question are they able to do that.

Turn to the US in a short term US growth has slowed moderately from rates began to rise 5 months ago with Dr. Bernanke and basically effect slowing growth from 3% to 2½%. It's been mostly interest rate sensitive area if you would expect rates go up interest rate sensitive activities slows. What's the most sensitive activity housing you know that 125 bases rises mortgage rates basically you seen traffic slow, building permit slow, sales of existing new homes slow the whole process is slow. I mentioned many times if you buy a house you buy new appliances and I remember I bought first house we celebrated the first day we didn't go to the hardware twice.

The reality is there is tremendous growth in economic activity if housing works. There also a huge consumer of labor because houses other than manufacturing housing which is still a very small percentage in population mostly stick built housing. You got the carpenter, the plumber and electrician and all of that so their significant consumer fairly high value added and therefore highly compensated labor so as that dies off that has a very significant impact economic activity.

There's been a lot of question about whether or not the US finally achieved some normal economic activity and the likelihood is we probably are near a normal level of activity. Now normal doesn't mean terrific growth, normal doesn't mean 5% unemployment normal does not indicate 4½% GDP growth.

The reality is we are now talking about the new normal probably 2 to 2½% growth in fact we talk about the rise in interest rates. The reality is interest rate has probably risen about as much as they can rise without really having to damage the economy. If we see further rises on interest rates go back to 45 minutes ago we were talked about the Chinese it's going to have not just slowing effect it's going to push you to negative grounds.

One of the things we're seeing it's perfectly consistent with what I am talked about slowing retail activity. Obviously we've seen household real incomes flat nationally decline down to a level we saw 20 years ago. We are not seeing income growth labor is still not able to get a larger share of the economic pie and it's affecting people's ability to spend. And we're seeing retail sales down if we look at the institute supply manufacturing or ISM basically a lot of the retail sector become very pessimistic we're heading to a holiday season I don't expect this to be a good holiday season. Doris Flores-Brooks: Why?

Terry Dennison: Because people just don't have money in their pockets. Gerard Cruz: Is it sentiment that's driving that or is it just, I mean there's been so much federal government bashing federal government politics going on both ways, so much rhetoric for the laborers even if you don't work for the federal government it's scary you do not want to spend continue to deliver. Terry Dennison: Conquer down save your money. The other thing is and this is why.

Doris Flores-Brooks: This Dave Ramsey guy says being debt free is the Mercedes of today. Terry Dennison: Absolutely, now the interesting thing is from an economist perspective debt means health in the economy. If everybody was debt free and you only spent what you made you would see very low economic growth. So it's a little bit one of those things where it's good at the individual level, it's not good at the group level it's dangerous at the group level.

We had one year during the Clinton administration when actually we had budget surplus and people actually talked about if we kept this up we could get rid of all the federal government debt wouldn't' that be great. Federal government out of debt hasn't happened since shortly 100 years ago there was a date back in the 1800's. The reality is that would be a very bad thing because we used debt to manage the money supply, we use debt to manage the economy. If there was no debt the economy would just do whatever it wanted to do with no real control. Doris Flores-Brooks: But the debt we have is way out. Terry Dennison: I don't disagree that will kill us basically if you look at the growth and the debt. Doris Flores-Brooks: In less than 10 years we've gone from \$7 million to \$17 million in less than a decade. Terry Dennison: You don't have to buy all of the economic discussions about does debt inhibit growth and does debt above 100% of GDP have a significant visible impact on growth.

The reality is more debt you have the more you are paying interest for example. If we ever got back to 5% treasury yields the interest alone on all this debt will consume pretty much all the discretionary federal budget. When you see this graph like the one we saw a couple of minutes ago that showed by 2045 the debt would be 200% of GDP.

Because what happens is that if the amount of debt is growing faster than GDP growth schools out. Now even if you could print money and even though you are the world's reserved currency this is why the deflationary spiral the slow growth negative growth spiral you got in Southern Europe is so difficult to get out of. If debt is growing faster than GDP you can't ever service the debt.

Not to turn this to economics class but there is an economist I believe to see and his name is Primer Minsky and he cited during the financial crisis and he said there's basically

three levels of financial position. And you can think about a homeowner if you can borrow money and pay principal and interest your fine that's sort of the first level. Second level of Minsky is where you at least can pay the interest you can't reduce the principal but you can at least pay the interest. And the third level which is very evil is where you can't pay either literally the debt just goes up exponentially because you can't reduce the principal nor can you keep the interest from causing the principal to increase.

And people talked about in 2008 the Minsky moment because that's in effect where a lot of people were and that's how you ended up with the mortgage loans interest only or you didn't pay the interest, the interest is amortize into the loan and the theory was that house value increase so you would never be in a negative equity position but the reality is when you get in the Minsky moment that's where you are. Well think about that at the national level where basically the debt is growing faster than the output you can never get out of that and that's where you are in Southern Europe. The debts are growing faster than their ability to pay and a different kind of numerator effect.

If you look at debt divided by GDP, GDP is flat or falling, debt is increasing that expands to infinity until somebody's say you're bankrupt. Gerard Cruz: But what do you do though, because even the talk of turning off QE3 sent the bond markets to the floor now it's just a talk. Terry Dennison: Not to become terrible bleak I think our generation grew up with the Apollo program and if we can put a man in the moon we can do anything. There are problems you can get into that you can't get out off. Doris Flores-Brook: Now you are starting to scare me.

Terry Dennison: Doris I have to say if you haven't been scared yet you're one tough lady. Doris Flores-Brooks: I tell you why I haven't been scared yet because of GovGuam I used to predict GovGuam was going to have a payless payday and I don't know what it is but God has Blessed us every time we come to the brink we have that \$20 million dollar thing every time we come to the brink so I said someone has brought us out, I don't worry about it anymore I give up exactly it is no longer rational.

David O'Brien: Doris you missed the payless payday you did they just weren't reflected in peoples paychecks, they were payless paydays. Doris Flores-Brooks: When? David O'Brien: When vendors didn't' get paid, when the government now borrowed a billion those were the payless paydays. Doris Flores-Brooks: That billion is only cap at our ceiling debt, we have other debt that is not even counted. David O'Brien: All I am saying is the payless payday didn't go to peoples paychecks they were financed. Doris Flores-Brooks: That's what I'm saying we keep on we are a perfect student of the fellow government we get an A+by following the federal government because our debt we are doing exactly what the federal government is doing. Terry Dennison: Follow Uncle Sam. Doris Flores-Brooks: That's right.

Terry Dennison: We are all going to see how this works out with Puerto Rico. Paula Blas: With what? Terry Dennison: Puerto Rico is on the verge. Doris Flores-Brooks: On the verge of what? Terry Dennison: Going bankrupt. Doris Flores-Brooks: Now that one I haven't heard, I've been following more of the pension area that's what we talk about. Terry Dennison: With Puerto Rico is very similar to Saipan basically they had unusual

economic circumstance which works to their benefit it was different you could invest in Puerto Rico and earned money there repatriated back to the Mainland and not pay tax.

If you know what a Makidora is they tend to be thought of industrial plants near the Mexican border, Puerto Rico all number of US companies built factories there because they could make money there and bring it back and not pay taxes on it because it was seen as a depressed area it's another kind of economic stimulus program. Well that tax benefit ran out 4 years ago, unemployment is about 20%, the government has been borrowing to pay current bills and the reality is the retail brokers who never been known very cynical comment we all have never been known to have their clients interest of heart, and basically been refusing to sale Puerto Rican debt to retail clients because so dangerous and it yields 10%. If you have to pay 10% for money and you are exempt from Puerto Rican taxes, exempt from US state taxes exempt from federal taxes and you still have to pay 10% that is the market saying you might as well go to a racetrack and get some sunshine and fresh air.

So we are going to see what happens in the same sense that we're not seeing Congress and administration run to bail out Detroit. I doubt seriously if there's much of a move to bail out Puerto Rico, so we're going to see what happens when the territory can't pay its bill which won't be long from what I have read, there was an article in the economist magazine basically in fact they made a joke, I can speak a little Spanish instead of Puerto Rico it ought to be Puerto Poeble because they have real problem and we're going to see what happens.

I don't sense that there's any appetite for any sorts of bail out for this local situation because how does a representative or senator from not just North Dakota which is as rich as Saudi Arabia pretty much any state justify to their voters giving money to some place that was seen as not behaving responsible. I was asked and actually the issue went away to comment about the debt ceiling and the debt limit and the shutdown of the government I'm writing a long term paper for the benefit of Mercer strictly for clients on the financial situation of the U.S.

Doris Flores-Brooks: Oh you are. Terry Dennison: Yeah. Doris Flores-Brooks: When will you have it? Do we get to see it? Terry Dennison: Oh yeah, you get to see it as soon as I get enough time to finish it. Doris Flores-Brooks: What are your thoughts though? Terry Dennison: Well, the reality is. Doris Flores-Brooks: I just got back from Europe, the one effect that I really sought was the dollar. Terry Dennison: The thing that's amazing is that the dollar has lost eight cents to the Euro, and the Euro is just as bad shape as it always been. Doris Flores-Brooks: In Athens I was always asking people how and maybe I'm in the wrong places, but Athens was bustling and so where is it. Wilfred Leon Guerrero: They don't know they're broke. Doris Flores-Brooks: I guess. Terry Dennison: They don't read the paper. Doris Flores-Brooks: But it was active, but the one thing I did see almost every block down empty building and empty office space that was the only clue, talk about graffiti heaven, so that was the only clue for me and I didn't hear much yet because with the bail out, so can you talk about that. Terry Dennison: Sure, we'll get to Europe but let me say a little bit about the debt issues. The debt issues have not gone away we heard the phrase that was referred to the European crisis kicking the can down the road that's exactly what we did we accomplished nothing now it's January the problem is still there.

A group of people the Simpson balls group about 2 years ago actually came up with a plan to deal with it. The problem is that it requires a compromise and what's happened in congress is lot of things. What's happened in Congress on both side there are extreme unreconciled positions and the reality is we can't keep spending as much as we're spending and we have to raise taxes. In reality we have to raise taxes on everybody you can't just raise taxes in rich there's not enough rich people they don't have enough money, if you look at where the money is it's in the middle class you're going to have raise taxes in the poor. The reality is you're going to have to you put the numbers together you can't make it work.

But the problem is one of governance the fact that sensible people can't stay elected I referred to this before the finance minister of Luxenburg said during euro crisis "Is it not that we don't know what to do, we just don't know how to get re-elected after we do it."

And you got all the safe seats nobody needs to compromise because everybody is got a safe seat of people of like minds but I think going to run into a situation we're going have to make a substance of change. We don't have to cut entitlements we have to slow the rate of growth that's killing us because it is growing exponentially. We saw that graph the graph we showed you isn't straight it's curve linear and the reality at some point the rating agency or the market itself is just going to stop buying the reserved currency and they've got all this wealth and we're going to start to see things start to break apart.

I want to go back and for example, where did this debt limit come from? Does anybody know? It's not in the Constitution, how long have we had it? Doris Flores-Brooks: I think it was imposed by Congress. Terry Dennison: Yeah, when? Doris Flores-Brooks: I don't remember. Terry Dennison: During WWI it's a hundred years old. It is simply become a tool to try to force change its logically idiotic if you spend the money you're not going to pay the bill I love to be able to do that where do I sign up. You only get to do that if you are in a country with an Army or the Navy but the reality that it's illogical you don't control paying the bills, you control spending the money in the first place but it's a political tool to make people face up to the fact we're living hugely beyond our means. Because the US economically but some time in a relatively near future is going to be fill in your favorite explicative.

So I going to spend fair amount of time writing this I just don't want to copy stuff from the press I want to get back why we have this fundamental problem. Why growth is slow if we had decent growth we wouldn't have this problem. What we're doing is in the same situation that I talked about debts are growing faster than the economy. If you are Greece you can't play that game very long unless someone bails you out nobody can bail us out Chinese can't bail us out even if they wanted to, if they did they probably want like California in exchange.

The reality is that we're so big who's going to bail us out somebody will provide and I realize that there's nobody's I mean maybe some extraterrestrial arrive or a solid gold flying saucer something like that but I wouldn't count on that. But the reality is I really want to spend a fair amount of time with that it's probably going to take a couple of months to write it so maybe when I'm back here in January we could go over it because I

want to do a first class job, because I've got request from our colleagues around the world all of whom are wondering what's that going on around over here. Asking what's this country going to do the world won't survive if we go down.

Doris Flores-Brooks: The commentary that I saw there is people just can't figure out what our congress I hate to say this it's almost laughable. Terry Dennison: Well part of that is a perspective and you all know I use to live in England and I still read British newspaper everyday.

They live in a different governance model they live in parliamentary model this cannot happen in a parliamentary model because it affect it's not a case of they understand how our system works and can't figure out why it's malfunctioning they can't understand how our system works. That you don't have the party that controls the government also controlling the legislature that basically we got this divided structure, we got the two houses of Congress and the President. Doris Flores-Brooks: And to each's own that what's happening now. Terry Dennison: It happens on both sides. I think the American people as a group actually prefer divided government they're afraid of what happens we saw it in 1994 where excess was changed, we saw it in 2008 were excess was reversed.

The reality is they kind of like the fact that nothing can get done now that's fine except if it's the economy that's falling apart we need some states person ship seem to find very short supply. I think we're all relieved you can go to the Grand Canyon again something that Gerry can relate too I saw an interesting piece talking about the government shutdown and some of its more subtle effects on the economy.

One of the things that they shutdown was the IRS didn't do process inquires to get a mortgage to get your copy of tax returns fill out form to get copy of tax return we're not in business today, we're closed. They weren't issuing social security numbers, they weren't verifying social security number even existed.

So banks were basically just winging it. Now the problem is that the governance sponsored enterprises that basically buy most of this paper could basically push it back if it turned out this person was a fraud. So, in the interest of just keeping things moving they took a flying leap and said okay we'll just assume that this person is what they say they have are and so forth but that was more of the interesting thing that the sense was that this couldn't go on much longer because the risk of doing all these loans where they couldn't verify income or verify the person if social security number even existed would eventually raise issues where they wouldn't take that risk anymore but I think that it's a much longer term issues.

Doris Flores-Brooks: It has to be a long term issue the one thing that kind of struck me is a couple of people, like David Walker we always talked about the deficit and what they continue to say is they still need to spend in the short term because of the economy hoping that growth will happen but the way you're talking is growth really is not going to happen.

Terry Dennison: The economy is being strangled by well meaning individually relatively sensible regulation. It's not the people making regulations for the purpose of wrecking

things for everybody all of these make sense in isolation but they all have unintended consequences and the net result is, I mean you see this in Europe where in France for example were the social charges change once you have 50 employees vast number of firms have 49 employees they basically becomes expensive to get the 50th employee.

Doris Flores-Brooks: Well that's the same effect that's happening right now with companies in the part-time. At NASDAQ the two issues were healthcare meaning Obama care and pension those were the two issues we haven't really talked about the pension issue as much which is more relevant for us. Terry Dennison: I mean clearly that's a significant part of Puerto Rico problems we're going to see at least a couple of state funds in Illinois literally run out of money before the end of this decade and their bank account will be empty.

Gerard Cruz: What do they do with those cases? Terry Dennison: Nobody knows. Gerard Cruz: Those are government pension. Terry Dennison: It's Illinois municipal fund. Gerard Cruz: No pension guarantee. Terry Dennison: Yes, the pension is guaranteed but if the guarantor can't pay there's no PDGC coverage on public funds separation of roles in the Constitution. Doris Flores-Brooks: Because I remember at one time wondering whether or not GovGuam could. Terry Dennison: And the reality is that once the funding level gets down to some of the Illinois funds are 30%, 25% no creditable rate of return will get you out of the problem. Realistically you mind us well buy lottery tickets if you win you survive if you don't you're dead anyway.

Doris Flores-Brooks: Well I heard in Illinois that constitutionally that's why they haven't acted because the Constitution says once those benefits. Terry Dennison: But if there is no money there's no benefits that's what been missed in this thing. Yes, I can guarantee I'll pay but if I have no money the guarantee is worthless. Now the constitutionality and the guarantee whether for future benefits or accrued benefits is different by every state.

Terry Dennison: There's an interesting analysis that was done by a law student at the University of Minnesota law school. Basically looked at state by state varies all over the place and Arizona you are not only guaranteed you're accrued benefits which is only fair your guaranteed your benefits will not be decreased or plan change to your detriment from the first day you start work.

In Texas pensions are a gratuity. If they don't want to pay they don't have to pay there's strictly a gratuity not only no guarantee of accrued benefits there's no guarantee of anything.

Gerard Cruz: How does Arizona afford something like that. Paula Blas: It's statutory for them. Terry Dennison: It's Constitutional for them. Doris Flores-Brooks: Illinois, Connecticut there are 5 states really I was surprise that Connecticut was one of them too. I don't know who the other three are but there are five states that are poster child of pension problems and California is not one of them, California has rebounded.

Terry Dennison: California has a very cyclical economy when the .coms or Biotech is booming and you've got people paying 100 million dollars in state income tax because became instant billionaires that tends to fix your problem pretty fast. It's the older

industrial states that don't have as dynamic economy their high tax people are exiting from there.

The issue in Illinois which I'm familiar with is not just bad investments and over promises its contribution holidays. That basically if you don't put money in for 20 years because you want to spend it on happy times for voters the reality is you run it in to problems. And now they're saying why can't the market get us out of this well if you had a 20% rate of return applied to few dollars produces few dollars so the point now where in effect is like a black hole there just going to spiral it into bankruptcy because no creditable rate of return of course the state has no money they can't contribute anything they kept raising taxes and people have fled.

I grew up in Wisconsin which has always been a high tax state. People are moving their businesses from Illinois to Wisconsin to escape taxes in Illinois it's cheaper to have a business in Wisconsin which is always been historic to high tax state than it is in Illinois. And the reality is if you don't put money in the market can't make money for you.

So as soon as you stop making contribution things start to unwind very quickly the other problem is the governance model I'm going to get hit at the heart here but I got to be truthful. If you have participants involved in the governance process particularly setting benefit levels you are going to have an obvious problem I saw this I was a consultant for another twenty years in the state of Arizona in 1999 they were about 122% funded and of course enormous glamour for a permanent benefit increase lets share the wealth. Well the problem is the market is cyclical and what you got to do however difficult it is you take the hills and you bulldoze them into the valleys.

If you pay out based on the peak and the valley happens all of sudden you are out of money because under their law if you make a permanent benefit increase it's permanent you can't take it back. So you got a bunch of poor investment economically targeted investing and all sorts of ideas. When I used to worked for the city of Philadelphia I got to know the finance director very well you know Terry I don't' ever want to be 80% funded make that happen because if I ever got anywhere to full funding people would come out of the woodwork to find good things to do with all that money I always want to be poor in a moment of truthfulness that is. Doris Flores-Brooks: In our cases it doesn't matter our fund we still give out the benefits. Rosalia Bordallo: It did happen to us because when we were 80% funded or close that's when we had to pay the supplement.

Paula Blas: That's when ERIP, 5 year pick-up, we had to pay the COLA and supplemental, as soon as we hit the high 70, almost 80% funded they're like wow you're real close to getting the 100% funded next thing we knew it dropped our security ratio. It was just the timing of everything '97, '98, '99, 2000 was ERIP, the Tech bubble happened in 2002. Terry Dennison: The Tech bubble ended in April of 2000. Paula Blas: So everything was happening all at one time.

Doris Flores-Brooks: One question I don't know her name but she was already nominated to replace Bernanke and her philosophy she seems to be a student of Bernanke. Terry Dennison: I think there's a sense that she's believed to be softer on inflation, she's a soft dollar person she's not a strong dollar person. Doris Flores-Brooks: What does that

mean? Terry Dennison: She thinks the economy is better off if the dollar looses value versus other currency you had your last cheap trip to Europe. She's going to be very much of inflation dove, she's not going to get aggressive as Greenspan did when inflation got out of hand he tightened the valve on the economy to slow down inflation. Probably certainly in the Bernanke mode but maybe even more. That's why there was a concern when Larry Somers was in the mix a concern that he was an inflation hawk and he will be quick on the draw to slow down QE3 people were saying if Larry Somers become Fed share it's 300 basis points on GDP. You see GDP growth fall because he is much more of a strong dollar less inflation more aggressive changes in the monetary policy is needed anymore.

So if we've talked a trillion dollars a year in terms of quantitative easing and now you have IMS saying if you turn of the valve to fast you'll collapse the economy emerging markets. They'll probably do something to taper QE3 for cosmetic purposes but the reality is I think some kind of highly stimulative monetary policy on interest rate policies is going to be on for a long time were going to have close to zero policy rates for years.

It's cheap to borrow money bubbles get very easy. We've seen what happens we had a bubble in some prime mortgages across the global financial crisis there's a huge bubble in housing debt in China will see what that does. There's probably a bubble in risk securities the reality is the credit spread for high yield bonds are tight. Companies have some chance on paying the money back are not paying much more interest than for companies that are sure to pay the money back credit spreads are very narrow so were very much of a risk on kind of market let's find whatever risk we can invest in because money is cheap.

Quickly on Europe some concern there's been a lot of press about the European bank stress test. This is the third edition of the banks stress test. The first one consisted of asking the bank everything is okay, they had no creditability.

Banks that were full of bad debts basically said yeah we're fine and they went away the market left of that and then they came back the second time and asked a few questions now there committed because now there looking at 160 banks that the ECB going to maintain sort of control identified 160 largest bank in Europe and it's going to be those banks that ECB is going to be regulator for and now they're talking about real stress test not just superficial or if the economy slows down to a 2% growth is that going to hurt you in an economy that's already below zero in terms of growth.

This is causing a lot of anxiety even in places like Germany were frankly there's a lot of bad debt on the balance sheets German banks too but they're not even interested in having us there but going to have any creditability you are going to see a lot of national government outrage that their banks are being characterized is in solvent we'll have to see how that happens.

One of the questions is who's going to bear the loss if the banks are holding a lot of bad debt particularly sovereign bad debt. There's been no interest so far in bailing out non governmental entities. Well the reality is a lot of these banks are full of the sovereign debt of the local country and now if the bank is in sovereignty you bail out the bank shareholders, you bail out the junior creditors, you bail out the senior creditors who do

you bail out and of course since it's the Germans who do all the bailing there going to be reluctant to spent a lot of money doing this so that's another stress.

Terry Dennison: There are debt problems in particular countries Portugal looks like it's going down the Cypress root and the issue there is are we going to have private sector participation in losses as we saw in Cypress they said when Greece needed money we will do it once but never again. Now done it three times and they've got there snout in a troth again.

When they did Cypress and said we are never going to do that again. Now they are looking at it in Portugal looking at it similar situation in Greece, similar situation in the Czech Republic there are lots of places now where they could be private sector losses. In the case of Greece there is no private sector money left so if the losses in Greece it's going to be the tax payers who have been assured that despite all of these guarantees and all of these promises it's never going to cost them a dime. So, it will be interesting to see what happens when it doesn't decrease a dime.

The final thing is issues in France. France is becoming the next big problem and of course that would be the domino that just blows up again. There debt is growing at a significant rate faster than incomes are growing they have a huge public sector. Doris I guess you weren't here last time I think the last meeting I said that 8,000 jobs a week are being lost in France companies are moving out because of the taxes, because of the social charges like social security and unemployment and the like that's what they call them over there the economy is just dying.

A large part of France debt is funded by foreign creditors who are approaching there prudent position. There is only so much debt they want to have when they stop buying who's going to pick it up unless they start charging much larger interest rates and if you already having debt service grow faster than incomes and you have to pay more in interest the debt service grows even faster than income and then you just spiral in the ground then in your running is a very large negative financial transfer their borrowing money externally more than their exports are worth they're running a negative balance of payments.

Going to skip that and go right to China which is the last big piece because I do want to spend some time in the Fund. Emerging markets in general are at a very shaky point. We talked a little bit about the bricks. The forecast for emerging markets from the international monetary fund a lot of the country growth rates has been slash down to 1.8% growth for India, 1% in Russia, and India that is nowhere near enough even to maintain constant level of unemployment there population is growing very rapidly. I've already mentioned the concern about what the central banks are doing the issues are more severe in China.

Fitch which is a rating agency has been the most aggressive at talking about China's financial situation they characterized China's credit bubble is unprecedented in modern world history. There shadow banking system is out of control and under mounting stresses borrower struggle to rollover short term debts.

When particularly local government there's an investment vehicle over there called a local government funding vehicle and it's very much like the special purposes vehicle of the various financial crisis we've had here and the concern is much of the debt is off balance sheet. The banks look notionally very healthy they have like 1% bad debt. Because what they're doing it's more dangerous than just the economics summit.

Terry Dennison: All this bad debt is being packaged think collateralized debt obligations they've reinvented that tool of destruction and selling them to the newly rich.

So all of these people who've been accumulating all this money fabulous savings rate 40% saving rate versus the US which is 3. What do you think there putting the money in the banks pay nothing the banks pay 10th of 1% interest there investing in all of these wealth management products. Which are completely opaque you have no idea what you are buying, who the creditor is, what the assets are behind it and they sold about \$2 trillion dollars worth of these things.

David O'Brien: So, how do the call them CDO? Terry Dennison: It's not a collateralized debt obligation exactly but it parallels much the same they've taken a bunch of debts from local provinces, local city. David O'Brien: So repackaged debt with some guarantee. Terry Dennison: Well some guarantee by somebody the guarantee is worthless and they're selling it and there's a bunch of their called trust bank and they sale these securities to the newly rich people.

So this savings always sighted is being the savior of the Chinese economy because they save. There not saving there investing in these opaque vehicles and Fitch characterizes there no transparent in the shadow banking systems and the systematic risk is rising.

We have no idea who the borrowers are, who the lenders are, what the quote of the assets is this undermines the whole process trying to manage the economy. While non performing loan rate of banks may look benign at 1% this becomes irrelevant as trust wealth management funds of vehicles and other forms of regular lending make a path of all new credit. You can have a great looking balance sheet if you take all the junk and take it off and put into these other vehicles.

We talked about the ratios of credit to GDP there now up if you look total credit to GDP it's gone up 75 percentage points to 200% of GDP compared to 40 basis point in the US over 5 years leading up to prime bubble they're reproducing magnitude by a factor of 5 the exact same situation that lead up to prime bubble.

There's an analyst that Fitch uses her name is Charlene Chu she was characterized by the Wall Street Journalist the Rock Star of Chinese debt analysis and they said her report said that the total credit in China's financial system may be as high as 122% of GDP jumping almost 8 fold in the last 10 years.

Companies have to fork over a trillion dollars in interest payments this year alone. Part of the problem is companies can't borrow from the banks because the state owned enterprises. When we talk about state owned enterprises we're not talking about the Guam Power Authority kind of state ownership this is the people's liberation army owns all of these. People's liberation army is an industrial conglomerate as well as being a

nuclear armed military force. So they basically and they don't have to make a profit and they just take whatever credit is available so the rest of the economy is using a shadow banking system.

It's interesting because Charlene Chu, a Mercer client who I can't name actually happened to have a staffer who once worked for her and they called her up in Beijing on the 3rd of September and her public warnings are extremely scary in private her warnings were considered more ominous as compared to her public pronouncement she said it would unravel and it would be very ugly but she said the central government can hang on for a while. Now contemplate those words, the central government can hang on for a while. Obviously their nearby but you're in a lot safer place than the people in Taiwan are incidentally because it's often the case where when things go bad they start a war. There's a number of ways that this contagion can impact the rest of the world. Doris Flores-Brooks: He's right it is a contagion.

Terry Dennison: Eight of them a Chinese hard landing causes a collapsed of both commodity prices, wave of currency devaluation sweep across emerging world, emerging markets devaluation, steel growth developing world possibly throwing Europe back in to intense crisis, developing market economy particular in US and Japan are likely to counter with yet easier monetary policies raising specter of competitive devaluation inflation, global trade relations likely to break down, emerging markets become unwilling and unable to continue to subsidize US government by a large holding of low rate US treasuries as a result of absorbed and privileged of reserved currency status being abuse to the breaking point this is where our government policy interact with there situation. Global deflation works to inflation as a source of real supply side growth in the US, Europe and Asia all exposed just lacking and finally the bursting of Chinese debt bubble takes to go on a monetary system to the breaking point.

I cannot share it because it came to us on some regulatory requirement a perspective from a fund of course they're selling something that is short in China basically they're betting that China collapses and they cited a number of certain things like this and they also have some interesting discussion all of which is independently verifiable and the next statement you can look up and verify but it's a wonderful collection of all of these sort of issues that are there. The cities that don't have anybody living in there it's all of these and they had some examples they've sent out some mystery shoppers to some of these wealth management product firms with I have a million you want that I made selling my house for whatever. Wilfred Leon Guerrero: What would happen if China collapses? Dennison: It's sort of a wild card scenario. David O'Brien: It would affect us? Dennison: Yeah. Doris Flores-Brooks: Yeah, substantially. Terry Dennison: They had some mystery shoppers go and to and of say I've got a million you want and I want to buy some of these both management products and they listed some of the sales pitches and one of them was hilarious because the salesman from one place said all the rest of them are crooks but I'm not and he was selling exactly the same products so there's very interesting situation. Anyway that's kind of where we are with the economy.

DC Plan Performance

David O'Brien: When are we going to do our fund? Terry Dennison: Now. News incidentally is substantially better. Wilfred Leon Guerrero: In the interest of time focus in on the problem area on two funds here. Terry Dennison: There's a couple of problem areas if you go to. Wilfred Leon Guerrero: The first one on page 16, the time line of the funds. Terry Dennison: Page 14, BlackRock LifePath Fund. Wilfred Leon Guerrero: What does monitor mean again?

Terry Dennison: Well if we look at page 32. Page 32 is looking at their compliance with policy and it's just the reflection of underline date that's under tab 5. They're all struggling and I was actually hoping not that I do things behind your back but I don't like to put people in an awkward spot that they might not be prepared for but I was actually hoping that I can talk to Alice beforehand. My question to Alice?

Terry Dennison: If we moved from basically folded all the BlackRock money into the Great West Secure Foundation funds which are doing a great deal better turn to page 35. In your mind is there any operational or investment issue that would cause you to question doing that. What I would do for the committee members is look for example at the BlackRock LifePath 2020 and look at the corresponding Secure Foundation fund. And just look at the numbers across.

I apologize to Alice for pearl harboring her but is there an issue either from and operational perspective, a product design perspective, some investment perspective it would make it a bad idea to basically take and we would just move like for like out of BlackRock into the Secure Foundation fund. Alice Taijeron: Operational and/or investment issue. Terry Dennison: Yeah, look at page 35 column by column and then compare the two rows, there's a striking difference in performance.

Doris Flores-Brooks: My observation of that here and I know is that these funds haven't been around as long because look at our 5 year, 10 years there's no history we're only talking 1 or 2 years. Terry Dennison: I'm not recommending it yet. Now the other issue is there is certainly better funds but we also then have this issue about a 15 basis point difference fund to fund in the revenue sharing due or the expense ratio.

Again the fund has to be self supporting I looked at these numbers and I understand what Doris is saying is we have short history on some of them. This is not a recommendation at this point. Doris Flores-Brooks: The other question would be the perception, the conflict she's managing and now she's investing. Terry Dennison: This exist virtually in every fund basically the record keeper often provides the target date funds. That is not an issue this is actually an unusual case. Doris Flores-Brooks: I'm just saying the perception to the common person who doesn't have the knowledge and that's where most of these are that's why most of the fund money is in there. Terry Dennison: We put them there. Doris Flores-Brooks: Because they didn't know how to make with all the choices. Terry Dennison: Agreed. Wilfred Leon Guerrero: My first question, what does monitor mean again? Terry Dennison: Monitor means that we're not happy, we're not ready at this point to recommend, remember I don't want to put you in an awkward place.

If I say get rid of these guys and you don't follow that advice it puts this committee in an awkward place so what I like to do is and I recognize this is on the record but I want to give you a discussion and a way of thinking about how to decide rather than putting you in a position. Monitor means everything from we're not happy we're keeping a more intense eye on it to cock pistol we're ready to blow them out if things don't get better right away. David O'Brien: Which is called what on your lingo here. Terry Dennison: Retain is we're happy with them don't bother it. Watch is a little bit more severe than monitor but again this is where most of the money is because of the default we put these people there and we righteously did that I mean it's not a case of manipulation, we righteously put them there.

But the reality is these numbers if you go back to page 32 would argue notice that we're not just underperforming for both the "I" which is the index return and the universe median but we're also doing both the 3 years and 5 years. I think at this point we could go another quarter because actually if you look at it for the quarter they don't look half bad. If you go back to page 35, they didn't have a bad quarter the question is do we want to replace the target date fund and then said we have another target fund already, that's the question for Alice.

Alice Taijeron: In response to your question regard to operational issues or investment issues. I don't see any operational issues with us with regards to mapping or anything like that sort, no, and/or investment issue we can provide more information with regards to the underline investments if that's a concern on how these funds are invested in the universe, so, no. With regard to the expense ratio and revenue issuing that's something that can be discussed with our product managers on how that is determine and what can be done with regard to the fund and to meet their needs. Just to get you aware, I don't know if the auditor is aware that the difference between the two funds the BlackRock and Secure Foundation is in the Secure Foundation there is a guarantee withdrawal benefit between the two funds they both function the same.

However, in the Secured Foundation there is guarantee withdrawal benefits it's an annuity for the most part. 10 years based on the account value, the age a certain percentage is locked in 10 years prior to that target date at that point there are no fees until 10 years prior to that target date because of that guaranteed withdrawal benefit. This is a concern that has been addressed by this fund participants are afraid when the market dips and the account value decreases and the amount they would be able to access.

So, Secure Foundation offers that protection from market decline and when the account value increase with the market it affords participant in the fund to access funds and a ratchet benefits up to certain percentage in the account value. So that's the difference between the two funds I don't see any problems with that Terry.

David O'Brien: At the end of the fund what happens when you go to withdraw, what happens on the Secured Foundation? Alice Taijeron: You can withdraw your account value of course, yes you have the access to withdraw it. David O'Brien: Or you can convert it to annuity, I mean what kind of annuity? Alice Taijeron: There's the fixed annuity however with the guaranteed withdrawal benefit that is not fixed it actually helps a participant keep pace with inflation and that they can access market increases.

They may have been ratchet at a certain dollar amount when the market decreases that stays the same and their account balance decreases that stays the same even if their account balance decreases to zero they have that guarantee withdrawal, so that liability is not played upon. David O'Brien: So these are not the same products is what you're saying. Alice Taijeron: There's an additional product in the Secure Foundation fund. David O'Brien: And that's reflected in the pricing. Alice Taijeron: Yes.

Terry Dennison: Now that triggers at 10 years to retirement date for example if you're invested in any fund 20-25 or beyond they function identically. It's once you get within 10 years of retirement this feature triggers itself and these are obviously the 10 years make sense because if you get within 10 years retirement and there's a big loss we saw that in 2008 where a lot of people on traditional target date funds that had very high allocation to risk assets even at 2010 fund saw 40% losses 2 years before retirement. Doris Flores-Brooks: Now it's rebounded. Terry Dennison: It's rebounded if you stayed with it if you said oh my god I can't live with this and you abandoned it you lost 40% of your retirement fund and you have no chance now of making it back.

David O'Brien: So in the case of a market down turn the Secured Foundation fund basically stays at some defined annuity. Alice Taijeron: That guaranteed withdrawal benefit remains the same 10 years prior. David O'Brien: So the question is I thought that was on the table from Terry was throwing BlackRock into those Funds many of those BlackRock investors would be already less than 10 years from their retirement. So how does that work? Am I missing something.

Terry Dennison: If you go to page 35 you could see there's a column percent of all plans and it looks like. David O'Brien: They're big percentages 17, 23, 14, right there in a row. Terry Dennison: But the 2030, 2040, 2050 this would have no immediate effect other than assuming the performance distance. But the reality is if you look at Great West performance all be it for a short period. The reality is it's been much better than BlackRock, I'm not recommending it there was a discussion of adding the Secure Foundation fund when they were added but to now totally commit to them requires a lot more due diligence by you guys so let's think good governance here you've got to think a lot more about this.

Doris Flores-Brooks: Because I did see when I got the last data that this was added, this was only recently added they didn't have it at the time when we talked about transfer because I don't think it was in existence at that time and yet the return year to date are far better than the BlackRock.

Wilfred Leon Guerrero: We are going to be discussing this on the next meeting. The other one Terry is the Thornburg. Terry Dennison: Thornburg. Yeah, we've done more due diligence on that it's rated B we have 2 issues with it, we don't think research process if Thornburg is as good as some of the others, other International Funds. Now remember when we look at the returns here this is a value fund so comparing it if you look at the block of data on page 37 the returned of the fund you have two indices. The first is the EAFE General and then the EAFE Value we would expect them to outperform or perform similarly to the value fund which in some cases doesn't look quite as bad as comparing it

against growth plus value which is the first line. But they're still under performing by quite a bit even if we look at them like for like, value versus value, again we don't think and it's rated B which is been downgraded since it's been added.

The other issue we have is there are multiple managers to the fund that's all managed at Thornburg but they have different portfolio managers. And the comment that came when we asked manager research was they fear that they've begun to allow the individual managers to have too much latitude. So, if you got five managers each running 20% of the fund while there's one research base and one view from the firm about how they manage it they're letting the individual managers do things with little bit more flexibility or latitude that we would feel comfortable with, so this I think is definitely a candidate to look at replacements.

Its B rated which means we don't think and for your benefit we have a rating system its simple ABC, we think A rated managers have above average probability of beating the market, B and average probability, and C less than average. So, this basically is rated average likelihood of outperformance and we're seeing under performance. So this is one where we will be happy to take direction to look at alternatives to be talked about in January.

Doris Flores-Brooks: And right you said you have a difference between watch and monitor?

Terry Dennison: More severe. Doris Flores-Brooks: Oh, so it's on a watch. Terry Dennison: They're not on yet partly because it's such a big decision. Again I don't want to paint you on the corner but that's why we proactively said we really need to take a look at that certainly we got an option here, we've got a set of funds in place and incidentally I think from a design perspective there's a lot to be said for what Secure Foundation is doing.

The big issue which participants in participant directed plans are painfully aware of is there is no life time annuity. That's why people love defined benefit plan who can get in them, stay in them. And people in the defined contribution plans feel less safe because they could run out of money and you got the issue not just of running out of money you got the issue of near term volatility. Doris Flores-Brooks: And with no social security. David O'Brien: But the near term volatility how does the fund work. Terry Dennison: It's got the guaranteed withdrawal benefit. David O'Brien: Which means. Terry Dennison: She's the one who's licensed to talk about this, I'm not. David O'Brien: I understand that. Terry Dennison: That's why I was afraid of Pearl Harboring her because I'm not sure when she woke up this morning fully prompted to talk at length about such a major decision.

Alice Taijeron: I'll answer as many questions as possible if I don't I'll get back to you. A guaranteed withdrawal you're guaranteed a withdrawal regardless of the market performance, so. Doris Flores-Brooks: How can you guarantee that. Terry Dennison: They charge a little extra. Alice Taijeron: That's what the fee is accessed 10 years prior to that. Doris Flores-Brooks: Would that work for 2020 fund because that's less than 10 years. Alice Taijeron: At 10 years and it's still being managed so in 2010 we have a 2020 funds. Doris Flores-Brooks: But if you would transfer people into the 2020 it's less than.

Alice Taijeron: If someone were to be transferred 2010 we are in 2013 now so then yes that fee will be assessed and a guaranteed withdrawal benefit will be calculated based on that individual's account balance. In 2014 if that market dips that guaranteed withdrawal remains the same it's guaranteed that's a minimum it's a base regardless if the market declines.

David O'Brien: And a guaranteed withdrawal is set at what level. Paula Blas: Depends on the account value. Alice Taijeron: It depends on the account value it's calculated based on the account value. If the account value increases with the market, the market increases in 2015 then that account value ratchets up and the person will receive that after 2020 if they decide to retire. Now, they can stay active and continue to contribute while they're actively employed but the guaranteed benefit in the event an individual decides to retiree in 2014, and the market dip they have that guaranteed withdrawal they are not locked into it they have the option to. David O'Brien: And those guaranteed withdrawals are individually calculated. Alice Taijeron: Based on individuals age, the percentage, the account value.

Paula Blas: What if somebody from the BlackRock was transferring to the 2020 now, but then come 2019 decided I really don't want to retire just yet we've already assessed the fees 7 years prior, do they have to start drawing? Alice Taijeron: No, they don't have to start drawing. Actually, what they should do if they decide not to, is move to another fund that's going to be closer to their retirement date the fees have to be accessed because that pays for the guaranteed or they can stay and what happens they continue to contribute their increasing their account balance. David O'Brien: So that would withdraw the guarantee will stay the same but would ratchet up account value.

Terry Dennison: There's a mere image to her question. Wilfred Leon Guerrero: Can we settle this thing first with Thornburg, what you want us to do?

Terry Dennison: Just ask us to do a search to look for a replacement. Wilfred Leon Guerrero: Okay. James make that move. David O'Brien: You present us option. Terry Dennison: Precisely we give you a book. Paula Blas: Just to do a search we're not changing that yet. David O'Brien: So moved. Wilfred Leon Guerrero: It's okay. You're not in the committee. David O'Brien: Oh, I'm not in the committee, darned. Wilfred Leon Guerrero: James and I. Moved to set the recommendation, right. Okay, we got that and now the other one is the bigger problem. Terry Dennison: I want to pick up from her comments there's a mere image question. If we did this you have a 2015 fund what kind of guarantee would those people get because they're only going to pay for 3 years of guarantee or 21/2 years of guarantee where other people who have been in that fund presumably been paying for 10 years, do they get any prorated guarantee? That you probably don't have an answer. David O'Brien: Or the prorated fee. Terry Dennison: Yeah, because they're only paying the premium for 2½ years where others have been paying it for 10 years, which is a mere image of Paula's question. Alice Taijeron: That I will have to get back to you. James Duenas: The BlackRock we didn't have a guarantee. Terry Dennison: No guarantee, these have been in the fund all along if people understood and looked at the same numbers you're looking at they could easily vote with their feet they go on the website or call the office upstairs and move their money.

Doris Flores-Brooks: But, most people don't do that, right. Alice Taijeron: No. David O'Brien: But there is more questions on play here one is the performance issue, second is product understanding you look at a name is the product the same so it's a lifetime 2025 it's Great West versus and have the word secure on it. So, product understanding is the second level of issue here and the third level of issue is it fit to their own portfolio which is what Terry was bringing up just a second ago because one of the points we made before was this issue of unsophisticated investor who basically is not sitting in this meeting is not as knowledgeable most likely as any of us at this table unlike the DB folks who are managed and Terry and his wisdom are managing on their own with what we tell them. Alice Taijeron: To address the issue uninformed or unknowledgeable participants we do conduct seminars now. Doris Flores-Brooks: But, how many of them attend?

David O'Brien: Alice I'm not blaming you in my statement. Alice Taijeron: I just want you to know that this is what we do to address that our experience are our younger ones coming in are becoming much more informed and wanting more information. It's those that have been in their for a long time we just don't want to think about so we do conduct education seminars many of them are pathetic about it and many of them have that thought that this is a bad plan or they want similar to the old plan where there's a guarantee.

David O'Brien: I walk around UOG all day and talk to these people and it's more than just apathy there's real concern out there as I express to you guys in the last meeting that we're managing our investment when do we jump in, when do we jump out, what am I going to do if the market tanks again. I mean these are pretty common questions so it's not that there's apathy this people actually care I think when they go into the educational sessions they may sit there and may hear but they also come out with a million questions because they bring it to me and they said this and what does that mean to me. All I'm getting at Alice is that there is multiple heads to this issue and it's not just about performance it about other things as well.

Doris Flores-Brooks: And also there is the perception Great West to Great West that you have to dispel because there also. David O'Brien: I am with Alice on that one this happens all the time and you go to a broker there going to jump you into their funds.

Terry Dennison: My understanding is that there is still an open issue regarding this ClearBridge question. Paula Blas: That's for Investments. Diana Bernardo: We can address it in Investment. Terry Dennison: Okay, fair enough. Wilfred Leon Guerrero: Right, that's it.

Respectfully Submitted:

Affirmed:

Rena Cruz/Marilyn Aguon

Recording Secretary

Investment Committee Chairman

WILFRED P. LEON GUERRERO, Ed.D.

W.P.L