

BWC Board of Directors
INVESTMENT COMMITTEE

Thursday, February 25, 2010 9:30 a.m.

William Green Building

30 West Spring Street, 2nd Floor (Mezzanine)
Columbus, Ohio 43215

Members Present: Robert Smith, Chair
Alison Falls, Vice Chair
David Caldwell
Kenneth Haffey
Larry Price
William Lhota, ex officio

Other Members Present: Charles Bryan, Jim Harris, James Hummel,
Jim Matesich, Thomas Pitts

Members Absent: None

Counsel Present: John Williams, Assistant Attorney General

CALL TO ORDER

Mr. Smith called the meeting to order at 9:36 a.m.

ROLL CALL

Roll call was taken. All Committee members were present at roll call.

APPROVE MINUTES OF THE JANUARY 21, 2010 MEETING

A motion was made by Ms. Falls, seconded by Mr. Caldwell to approve the minutes of the January 21, 2010 meeting as written. Prior to roll call, Mr. Smith noted that page 10 of the January 21, 2010 minutes had a statement that the Custodian Annual Report satisfied a statutory requirement. Mr. Smith indicated that after further review, it was determined that this report was not statutorily required, but did constitute good business practice. Roll call was taken and the motion passed 6-0.

AGENDA

In discussing the agenda, Mr. Smith clarified that the Mercer Report on Asset-Liability Modeling for the Public Work Relief Employees Fund and the Marine Industry Fund would only be a presentation on the initial results. He added that there would be an official first reading of the report during the March 2010 meeting with a second reading to follow in April 2010, if needed. Upon motion of Mr. Caldwell, seconded by Ms. Falls, the agenda was approved as written. Roll call was taken and the motion passed 6-0.

NEW BUSINESS/ACTION ITEMS:

PASSIVE INDEX MANAGER RFP FINALIST RECOMMENDATION- DISABLED WORKERS' RELIEF FUND AND COAL WORKERS' PNEUMOCONIOSIS FUND

Mr. Bruce Dunn, Chief Investment Officer, referred the Committee to the Passive Index Management RFP Process presentation dated February 25, 2010. The presentation is incorporated into the minutes by reference. This is the final presentation from the Request for Proposals (RFP) issued in July 2009. The RFP presentation covers passive investment manager recommendations for the Disabled Workers' Relief Fund (DWRF) and the Coal Workers' Pneumoconiosis Fund (Black Lung Fund or BLF) and consists of management of four different asset classes. The same RFP Evaluation Committee that reviewed prior RFP responses for the State Insurance Fund performed the review of the current RFP for DWRF and BLF. Since these two specialty funds constitute only 8% of the Bureau's total assets, the Evaluation Committee did not need to take the 50% manager concentration rule into account. The DWRF and BLF will be invested in two new asset classes—the U.S. Aggregate Fixed Income and Non-U.S. Equity-- while the benchmark for U.S. Equity will change. There will be in-kind transfers of the S&P 500 portfolios and TIPS portfolios to fund a portion of the TIPS Fixed Income and U.S. Equity mandates. The Evaluation Committee recommended a commingled fund structure for the four new mandates. The commingled fund is beneficial for a number of reasons: lower fees, trading costs efficiencies, diversity of the portfolio due to pooling, economies of scale, lower vendor and custodial fees, as well as operational ease for the accounting staff.

State Street Global Advisors (State Street or SSgA) is recommended to manage three of the four mandates for each of DWRF and BLF: The U.S. TIPS Fixed Income, the U.S. Aggregate Fixed Income and the U.S. Equities. BlackRock Institutional Trust Company (BlackRock) is recommended to manage the Non-U.S. Equities. SSgA is recommended by the RFP Evaluation Committee to manage U.S. TIPS Fixed Income for a targeted 35% of total portfolio assets (\$420 million) and for a targeted 40% of total portfolio assets (\$105 million), respectively, for the DWRF and Black Lung Fund. State Street is currently managing the Bureau's TIPS accounts for the DWRF and the BLF. The SSgA commingled fund chosen will comply with the non-ERISA and non-lending requirements of the Bureau. State Street's non-lending, non-ERISA client commingled fund, open to DWRF and BLF, has approximately \$2.0 billion of assets under management (AUM). SSgA has managed TIPS for the Bureau for more than three years. Over \$15.0 billion of U.S TIPS assets are currently managed by State Street. The Evaluation Committee also recommends that State Street become the U.S. Aggregate Index Passive Fixed Income Manager for a targeted 34% and 39% of the DWRF and BLF portfolio at market value, respectively. This amounts to an estimated \$405 million for DWRF and \$100 million for BLF. SSgA currently has over \$30 billion of AUM passively managed to the U.S. Aggregate Fixed Income. From 2005-2007, State Street passively managed over \$15.0 billion of the Bureau's assets to the U.S. Aggregate Fixed Income benchmark. Their performance and service was exceptional.

The Evaluation Committee recommended BlackRock to manage the Non-U.S. Equities mandate for the DWRF and BLF for a targeted 10% (\$125 million) and 7% (\$20 million) of total portfolio market value, respectively. BlackRock is a large Non-U.S. Equity Manager with over \$350 billion AUM. BlackRock has managed developed countries equities for over 30 years and has managed emerging markets equities for over 20 years. One benefit to BlackRock is their full replication approach to benchmark indexing for the Non-U.S.

International Passive Equities. Previously, BlackRock was approved as the Finalist Target Manager for 10%, or \$1.7 billion, of the State Insurance Fund (SIF) invested assets. This week, BlackRock moved from Transition Manager to Target Manager in that capacity.

Mr. Dunn reported that two members of the Evaluation Committee, the Chief Investment Officer and the Bureau's Director of Investments, Lee Damsel, as well as the Bureau Administrator, Marsha Ryan, earlier this month performed an all day due diligence examination of the State Street firm with special focus on the firm's passive equity management approach towards the Russell 3000 U.S. equity benchmark index. They met with numerous passive U.S. equity managers in the firm, as well as high level personnel including the Chief Executive Officer and the Head of the Investment Committee. SSgA manages to the Russell 3000 index by employing a full replication strategy whereby every security in the index is purchased. State Street is able to purchase most of the smaller stocks at no cost due to cross trading. The Evaluation Committee recommended State Street to manage the U.S. Equities mandate for DWRF and BLF for a targeted 20% (\$250 million) and 13% (\$35 million) of total portfolio market value, respectively.

Mr. Dunn indicated that if the Investment Committee and Board approves each of these investment manager recommendations for the four asset class mandates, total estimated annual management fees would be an estimated \$268,000 (average 2.24 basis points) for DWRF and \$53,000 (average 2.06 basis points) for BLF. Compared to the existing separate account fee structure, Mr. Dunn indicated that BLF would save approximately \$100,000 in annual management fees and that DWRF would save \$20,000 in annual management fees.

Jordan Nault, Senior Associate with Mercer Consulting (Mercer), indicated that Mercer also supports State Street and BlackRock to manage the accounts. Mercer agrees with the decision to create commingled accounts. She added that BlackRock has sufficient AUM, reasonable fees and a good history. Mr. Smith referred the Committee to Mercer's Memo dated February 16, 2010 and entitled Disabled Workers' Relief Fund (DWRF) and Coal Workers' Pneumoconiosis Fund (CWPF) - Manager Selection which indicates the firm's support for State Street and BlackRock. The report is incorporated into the minutes by reference. Ms. Falls added that she would like a report in the future detailing BlackRock's progress in attracting additional assets under management for the new non-U.S. equity commingled fund where the Bureau will be the first investor so that the Bureau would not be responsible for paying all ongoing costs of the fund passed on to investors.

At this point, the representatives for State Street entered the room and were introduced: Larry Carlson, Senior Managing Director of SSgA and Head of Relationship Management for U.S. Institutional Clients, Paul Brakke, a Senior Managing Director of SSgA and Head of the Global Structured Products Group and Jim Thorsen, Vice President of State Street and a Senior Relationship Manager. He is also a Public Funds Team Leader. Mr. Thorsen noted that State Street has a five year history with the Bureau. He pointed out the experience of the firm, as well as their integrity of procedure and the regular communication between the parties, including consistent quarterly formal review meetings. State Street manages a significant amount of AUM for clients based in Ohio. Mr. Thorsen pointed out that SSgA has had some challenges in the past, but added that changes have been made. The firm has a new CEO, Scott Powers, who joined the firm two years ago. Rick Lacaille works as the Global Chief Investment Officer. A new risk area was added for additional checks and balances. SSgA has four different Committees: Fiduciary Committee which reports to the Board of

Directors, Operations and Compliance Committee, Investments Committee, and Product Committee. State Street provides internal transparency as well as external transparency to their clients. Paul Brakke has been with SSgA since 1992 and heads the passive equities management team at SSgA. The equity indexing group has worked for SSgA for an average of 14 years, providing a stable and experienced team. State Street has almost \$83 million in AUM in Russell indexes. The firm shows growth in equity assets of over \$60 billion in average net new assets in the last five years. SSgA uses economies in scale to reduce costs by matching buyers with sellers. The firm also tracks the Russell 3000 index closely and works to keep costs down. For the Russell 3000, State Street owns approximately 3,000 stocks in their appropriate weights, allowing tight tracking.

Mr. Smith asked about incentive payments, inquiring specifically how managers are compensated. Mr. Thorsen answered that managers get salaries plus bonuses based on the performance of the firm, rather than individual performance. Mr. Smith asked if tracking error is part of the consideration. Paul Brakke replied that the managers do not want to outperform or underperform the benchmark. Their goal is to construct and manage a process efficiently. Performance is determined by how well they track the benchmark. Mr. Thorsen indicated that State Street was honored to be considered as a BWC investment manager and thanked the Committee for their time. Mr. Smith also commented that in light of SSgA's comments about improved governance and transparency that it appears that like the Ohio BWC SSgA is a learning organization. The SSgA representatives exited the room at this point.

A Motion of the Investment Committee to Approve Investment Asset Class Mandates and Investment Managers for the Disabled Workers' Relief Fund was made by Ms. Falls and seconded by Mr. Haffey as follows: I move that the Investment Committee of the Workers' Compensation Board of Directors recommend to the Board that it approve the investment asset class mandates for the Disabled Workers' Relief Fund, and the Investment Managers for each such mandate, as follows:

- For the Passively Managed U.S. Aggregate Fixed Income Mandate, approve State Street Global Advisors ("State Street") as Manager for this mandate under a commingled fund structure, representing a targeted thirty-four percent (34%) of total invested assets; and
- For the Passively Managed U.S. TIPS Fixed Income Mandate, approve State Street as manager for this mandate under a commingled fund structure, representing a targeted thirty-five percent (35%) of total invested assets; and
- For the Passively Managed U.S. Equities Mandate, approve State Street as Manager for this mandate under a commingled fund structure, representing a targeted twenty percent (20%) of total invested assets; and
- For the Passively Managed Non-U.S. International Equities Mandate, approve BlackRock Institutional Trust Company ("BlackRock") as manager of this mandate under a commingled fund structure, representing a targeted ten percent (10%) of total invested assets,

All of the above recommendations being based upon the Presentation for the Passive Index Management RFP Process prepared by the BWC Investment Division dated February 25, 2010, and also the memorandum prepared by Mercer Investment Consultants dated February 16, 2010, and upon such terms as are outlined in the responses of both State Street and BlackRock to the Request for Proposals issued July 2, 2009, and such other terms as are favorable to the Bureau. Roll call was taken and the motion passed 6-0.

A Motion of the Investment Committee to Approve Investment Asset Class Mandates and Investment Managers for the Coal Workers' Pneumoconiosis Fund was made by Ms. Falls and seconded by Mr. Caldwell as follows: I move that the Investment Committee of the Workers' Compensation Board of Directors recommend to the Board that it approve the investment class asset mandates for the Coal Workers' Pneumoconiosis Fund, and the Investment Managers for each mandate, as follows:

- For the Passively Managed U.S. Aggregate Fixed Income Mandate, approve State Street Global Advisors ("State Street") as Manager for this mandate under a commingled fund structure, representing a targeted thirty-nine percent (39%) of total invested assets; and
- For the Passively Managed U.S. TIPS Fixed Income Mandate, approve State Street as Manager for this mandate under a commingled fund structure, representing a targeted forty percent (40%) of total invested assets, and
- For the Passively Managed U.S. Equities Mandate, approve State Street as Manager for this mandate under a commingled fund structure, representing a targeted thirteen percent (13%) of total invested assets; and
- For the Passively Managed Non-U.S. International Equities Mandate, approve BlackRock Institutional Trust Company ("BlackRock") as manager of this mandate under a commingled fund structure, representing a targeted seven percent (7%) of total invested assets,

All of the above recommendations being based upon the presentation for the Passive Index Management RFP Process prepared by the BWC Investment Division dated February 25, 2010, and also the Memorandum prepared by Mercer Investment Consultants dated February 16, 2010, and upon such terms as are outlined in the responses of both State Street and BlackRock to the Request for Proposals issued July 2, 2009, and such other terms as are favorable to the Bureau. Roll call was taken and the motion passed 6-0.

DISCUSSION ITEMS:

PORTFOLIO PERFORMANCE

Ms. Nault reviewed the Ohio Bureau of Workers Compensation Investment Performance Fourth Quarter 2009 report. The report is incorporated into the minutes by reference. The fourth quarter 2009 Gross Domestic Product was estimated at 5.7%. Interest rates continued to remain low but the yield curve moved higher over the fourth quarter of 2009 and widened by 41 basis points between the 2 and 30 year Treasury maturities. Unemployment for

December 2009 was 10.0% with Ohio being higher at approximately 10.7%. The fourth quarter 2009 had positive returns in all domestic equity indices. EAFE gained 2.2% and emerging markets gained 8.6% in the same period. U.S. High Yield Index returned a positive 58.0% through 2009. The BarCap U.S. Aggregate Fixed Income benchmark was nearly flat in the fourth quarter 2009 while the BarCap Long Government Credit index had a negative 2.6% return over this period. Total market value of the Bureau's accounts was \$18.5 billion with the SIF making up almost 92% of the total value. State Street currently has the majority of the total asset allocation at 59.5%, but that percentage will be changing. The SIF asset allocation transition to new targeted asset class mandates is completed. The Long Duration Credit allocation is currently overweighted while Long Duration Government is underweighted versus the benchmark.

Fund performances were shown ending December 31, 2009. The BWC total fund performance was positive 1.1% for the three month period, positive 8.6% for the one year period and positive 4.1% for the three year period ending December 31, 2009. The SIF bond composite showed a negative 0.6% three month return while the SIF U.S. Long Government had a negative 5.2% return and the U.S. Aggregate was flat during the same period. For the Long U.S. Credit portfolio, State Street and BGI underperformed the benchmark by 0.5% and 0.6%, respectively; however this was due to pricing differences between the custodian and the manager. The U.S. Equity three month return was positive 5.3% and the one year positive return was almost 26.0% percent. The U.S. International Equity returned positive 3.5% in the three month period ending December 31, 2009 with a transition toward the target manager. Ms. Falls asked for an explanation of the Miscellaneous Holdings Account. Mr. Dunn responded that it contained straggler securities and the Freddie Mac preferred stock issue inherited from previously terminated investment managers. The SIF cash three month return was flat. The Black Lung fund returned negative 0.1% and positive 8.2% for the prior three month and one year time period respectively. The PWRF and MIF were both invested in cash and intermediate duration fixed income. Both returned 0.3% for the three month period ending December 31, 2009. The PWRF returned 4.9% in one year period ending December 31, 2009 and the MIF returned 4.8% in the same period. The SIEGF had a three month flat return and a positive 0.3% one year return ending December 31, 2009. Mr. Smith asked about the tracking differences. Ms. Nault explained that they were pricing differences between the custodian and the manager that would be balance out over time.

With the manager updates, Ms. Nault explained that BlackRock acquired BGI on December 1, 2009. The Bureau Investment Staff and the Mercer Consultants were impressed with the merger integration process employed. The new combined firm has over 8,000 employees. State Street has settled the lawsuits dealing with their actively managed fixed income strategy. Mr. Smith asked how much progress had been made to correct the problems. Ms. Nault replied that better risk controls had been implemented and new management had been hired. Guy Cooper, Principal of Mercer, noted that Scott Powers, the new CEO, is a dynamic leader. Ms. Ryan added that she personally spent a significant amount of time with Mr. Powers and other senior management during her visit to the State Street offices several weeks ago. State Street has implemented new procedures to stop miscommunications. New methods of communication with clients have been added, as well. Mr. Smith noted that the Administrator has accompanied RFP Evaluation Committee members on several recent due diligence trips. He pointed out that the Administrator has a different and unique perspective to provide. Ms. Falls mentioned the management challenge to BlackRock, indicating that this type of change has been historically cataclysmic. She added that their

future turnover needs to be monitored, as well as other areas that would indicate potential problems. Mr. Cooper added that the Bureau has the majority of its money with two firms that have issues, but assured the Committee that both firms have outstanding histories. He noted the size of the two other passive managers approved by the Bureau are significantly smaller in terms of client assets under management. He indicated to the Committee that State Street and BlackRock would be monitored on an on-going basis.

MONTHLY AND FISCAL YEAR TO DATE PORTFOLIO VALUE COMPARISONS

Mr. Dunn referred the Committee to the Invested Assets Market Value Comparison- Total Funds Chart. The chart is incorporated into the minutes by reference. In January 2010, net investment income was virtually flat with a negative net investment income of \$3.0 million. Mr. Dunn indicated that equities had a tough market in January 2010 with concerns about the European Union and about the Federal Reserve tightening interest rates, but the returns showed a normal correction. The BWC equities portfolio had a negative 4.0% return in January 2010 while the bond portfolio returned a positive 1.7% in the same period. Net investment income in fiscal year 2010 through January 31, 2010 had a positive return of 9.0%. The BWC equity portfolio had a positive net return of 16.7% over this period.

MONTH-END PORTFOLIO ASSET ALLOCATION VALUES

Mr. Dunn referred the Committee to the Investment Asset Allocation- Combining Schedule as of January 31, 2009 and as of December 31, 2009 charts. The charts are incorporated into the minutes by reference. He noted that the SIF equities position was 1.0% above the target allocation at the end of December 2009, but was on target as of the end of January 2010 at 29.9%. As of January 31, 2010, bonds constituted 68.6% of the total SIF investment allocation.

Mr. Dunn referred the Committee to the BWC Invested Assets as of February 24, 2010 report. The report is incorporated into the minutes by reference. In February 2010, the market value of bonds plus equities increased by positive \$12.0 million through yesterday. This amount constituted a positive 0.1% return in February 2010 month to date.

CIO REPORT- JANUARY 2010

Mr. Dunn referred the Committee to the CIO Report, January 2010. The report is incorporated into the minutes by reference. He indicated that the in-kind transfer of the SIF Long Government fixed income portfolio from State Street to BlackRock, in the amount of \$522 million was completed at the end of January 2010. BlackRock became the exclusive manager of the U.S. Long Government SIF portfolio now totaling approximately \$1.25 billion. The Investment Division has completed all four phases of the transition to 10% asset allocation into non-U.S. equities. For the TIPS, \$2.07 billion was transferred from State Street to BlackRock, representing 12% of total SIF invested assets. State Street will manage less than 50% of the Bureau's total AUM after this large asset class transfer.

MERCER REPORT ON ASSET-LIABILITY MODELING- INITIAL RESULTS PUBLIC WORK-RELIEF EMPLOYEES' FUND MARINE INDUSTRY FUND

Mr. Cooper reviewed the Strategic Asset Allocation Analysis- Marine Industry Fund and Public Work Relief Employees' Fund report dated February 2010. The report is incorporated into the minutes by reference. The purpose of the Marine Industry Fund (MIF) is to cover employees who are hurt on water, as required by the Federal Longshoreman and Harbor Workers' Act. As of June 30, 2009, the fund had over \$17.0 million in assets. The present value of liabilities for the fund is \$1.7 million. The duration of liabilities is approximately 10 years with a continued conservative investing approach. Mercer determined that the funding status is healthy.

In the report, the base case is the most likely outcome. The report also shows the results with high inflation and strong growth. Mix A shows the current investment strategy of 100% in Intermediate Fixed Income bonds. Mix B has 100% invested in the Aggregate Index with longer duration bonds and Mix C has 50% invested in the Aggregate Index and 50% invested in TIPS. With the current allocation, the long term expected return is 4.7% with Mix B at 4.9% and Mix C at 4.8%. Mix B has a higher standard deviation at 5.5% with the other mixes resulting in a 4.5% standard deviation. Mr. Price asked if the fund must remain in a separate account. Mr. Dunn responded in the affirmative. The projected funding ratio was shown. Even with the current mix, in ten years time, the funding ratio will be between 18-27 times liabilities. Even under the worst recession scenario, the account is expected to have 18 times its liabilities in ten years' time. After studying the alternative mixes, Mercer supports Mix A (the current strategy), stating that it avoids significant additional work for marginal improvement in returns.

The Public Work Relief Employees' Fund (PWRF) as of June 30, 2009 was \$23.4 million with \$4.0 million in funded liabilities. The duration of the liabilities is currently 10 years. Mr. Cooper indicated that the study of the fund found the funding status to be healthy. Mix A shows the current allocation with 100% in Intermediate Duration Bonds. Mix B would allocate 100% of the fund in Aggregate Fixed Income and Mix C would invest 50% in TIPS and 50% in Aggregate Fixed Income. The long term expected return for the current mix is 4.7% with Mix B at 4.9% and Mix C at 4.8%. The 10 year projected funding ratio for the current strategy is 600%-700% of the current ratio. The current funding ratio is 585% of the current liabilities. Based on the projected funding ratio, Mercer recommends that the Bureau keep Mix A for the PWRF.

Mr. Smith indicated that recommendations are likely to be made next month for MIF or PWRF, and he hopes to have a vote on the investment mix for Board consideration. Ms. Falls asked Mr. Dunn which firm manages the funds. Mr. Dunn replied that SSgA manages the Intermediate Fixed Income commingled accounts.

ECONOMIST PRESENTATION- STATE OF U.S. ECONOMY

Professor Sam Thomas, Senior Lecturer of Banking and Finance of the Weatherhead School of Management at Case Western Reserve University was introduced to discuss the global business cycle. Dr. Thomas has three Master's Degrees and one Doctorate degree. Mr. Haffey pointed out he and Dr. Thomas are colleagues at the Weatherhead School of Management. Dr. Thomas began by defining the Gross Domestic Product as the total economic activity of a given country including personal consumption (durables, nondurables and services), private investment expenditures (business, residential and inventory change), government expenditures (federal, state and local), and net exports (exports minus imports).

In 2009, personal consumption was \$9.2 trillion (71% of the total economy), private expenditures were \$1.5 trillion (12% of the total economy), government expenditures were \$2.5 trillion (20% of the total economy) and net exports were negative \$354 billion (negative 3.0% of the total economy). Mr. Smith pointed out that from 1945-2008, government expenditures were 26% of the total economy. Most recently, Dr. Thomas explained, the consumption side began to shrink because of problems with credit. A chart with the business cycle shows the economy's growth to the "peak" and then falling to its lowest point, which signifies the "end of the recession" where it begins to rise again during the "recovery" until it reaches the amount equal to the "prior peak". The U.S. economy typically has grown in a straight line since 1987 to the present with the exception of the 1991 recession, the 2000-2001 flat recession and the current recession. There has been significant quarterly growth in the last two quarters. There are two ways to control recessions: through fiscal policy (stimulus spending, increased insurance programs, reducing taxes or providing tax rebates) or monetary policy (increased money supply). At some point, after the recovery begins, the stimulus must be taken back. Traditionally, this is done two years after the recovery because small slowdowns occur as the stimulus begins to be removed. Despite significant rhetoric in the media to encourage the Administration as well as the Federal Reserve to begin withdrawing the stimulus, Dr. Thomas stated it is premature based on past business cycles. In the last four quarters during the recession, there was a significant reduction in the real GDP rate and personal consumption.

There are two types of factors affecting the current business cycle: endogenous (secular) and exogenous (noncyclical). Endogenous factors include globalization of commerce and capitalization, monetary and financial systems being out of equilibrium, global markets growing quickly without the support of financial systems and a shortage of global riskless assets. Mr. Pitts asked for a definition of global riskless assets. Dr. Thomas replied Treasury bonds are examples. Exogenous factors include Y2K, 9/11, hurricanes, sub-prime mortgage problems with securitization mistakes and marginal demand shock due to the 2008 Olympic Games in China.

Dr. Thomas indicated that the U.S. saw rapid growth in the late 1990s. There was increased production due to increased purchases. When Y2K passed, a recession began. After that recession, growth increased until the most recent real estate problems. The U.S. unemployment rate had always remained cyclical until the most recent crisis where it exceeded 10%. Now unemployment is starting to decrease. The money supply graph shows that the money supply was high until Y2K despite a booming economy. This was done in case there was a run on banks. The money supply was then reduced until 9/11 when it was increased again. In 2005-2006, the growth in the money supply stopped which began a recession. The money supply then began growing rapidly. Before Y2K, there was extreme growth, and after Y2K, overproduction. This caused the NASDAQ to increase until the money was taken away, which caused it to drop. Despite the drop in the NASDAQ, homebuilding went up significantly until the current recession, when it dropped significantly. Dr. Thomas noted that the macro economy is important to monitor.

There are many key features in 2009 that caused the downturn. There was a full blown U.S. recession due to the credit crisis, deleveraging of the credit risk sensitive sectors and risk aversion entered the boardroom. In addition, there was collapse of leveraged financial intermediaries. This uncertainty led to tighter lending standards which were accompanied by high unemployment which increased rapidly from 4.5% to 10%. This also caused high levels

of social pain. The Federal Reserve and U.S. Treasury responded by trying to balance macro fiscal and monetary policy with its banking crisis management policy. The recession caused a cascading credit crisis with residential real estate and commercial real estate. There are still possible hidden credit issues in areas such as Dubai or Greece that are awaiting discovery. From this recession, investors learned that they were not as diversified as previously thought and their investments were based on leveraged action. They also learned about alternative asset classes and illiquid long duration classes. The recession also caused hedge, private equity and sovereign wealth funds to reduce their leverage. In leading up to the current recession, the Federal funds rate decreased during the prior recession, but continued to remain low after the economy improved. This is called "being behind the curve." The low rates caused capital to go into real estate on a highly leveraged basis. When subprime loans defaulted, this accelerated real estate problems. Since then, short-term borrowing rates have been lowered and remain at low rates. Despite these low rates, high unemployment has kept purchases from increasing.

Dr. Thomas noted that there are signs that the recession is ending. He pointed to the purchasing manager's manufacturing survey and the nonmanufacturing survey. Both surveys are over 50, which indicates growth. Short term interest rates remain close to zero. The trend in unemployment from 1989-2010 was discussed. Unemployment fell until 2000 when it increased, only to fall again in 2004-2005. It significantly increased in 2008, to peak in 2009 and began to decline in 2010. Dr. Thomas noted that hopefully the unemployment rate will average 9.5% or 9.6% for the year if the government continues to respond. Dr. Thomas predicted that the reaction to the current stimulus will cause significant investment returns, but cautioned that they are not necessarily realistic or long term. He added that he recommended taking some risk. In a risk climate chart where Dr. Thomas monitors approximately 300 variables, he found that investors should have been risk adverse in November 2007 until early fall 2009. Mr. Smith thanked Dr. Thomas for his presentation, noting that it was very well received. Mr. Lhota added that it was an excellent presentation and asked about the U.S. acting as the repository for global funds while its debt escalates from use of those funds. Dr. Thomas responded that globalization is taking place so the U.S. should be spending money on global projects rather than struggling to keep the money in diminishing U.S. projects. He added that the investors need treasury markets around the world, so that they are not reliant on only the U.S. banking system.

COMMITTEE CALENDAR

Mr. Smith referred the Committee to the 12-Month Investment Committee Calendar. The calendar is incorporated into the minutes by reference. There were no changes to the calendar.

ADJOURN

A motion was made by Ms. Falls and seconded by Mr. Haffey to adjourn the meeting at 12:07 p.m. Roll call was taken and the motion passed 6-0.

Prepared by: Linda Byron, Staff Attorney, Legal Division, March 3, 2010