### UTIMCO BOARD OF DIRECTORS ANNUAL MEETING AGENDA May 5, 2016

### UTIMCO 401 Congress Avenue, Suite 2800 Austin, Texas

| Tim        | Time       |    | m # Agenda Item   |  |  |  |  |  |  |  |
|------------|------------|----|---|--|--|--|--|--|--|--|
| Begin      | End        |    | · · · · · · · · · · · · · · · · · · ·   |  |  |  |  |  |  |  |
| 10:00 a.m. | 10:05 a.m. | 1  | <b>OPEN MEETING:</b><br>Call to Order of the Annual Meeting/Discussion and Appropriate Action Related to<br>Minutes of the March 2, 2016 and March 3 and 4, 2016 Meetings*  |  |  |  |  |  |  |  |
| 10:05 a.m. | 10:15 a.m. | 2  | Discussion and Appropriate Action Related to Corporate Resolutions:<br>- Election of UTIMCO Officers*<br>- Committee Assignments*,**  |  |  |  |  |  |  |  |
| 10:15 a.m. | 10:45 a.m. | 3  | Endowment and Operating Funds Update Report   |  |  |  |  |  |  |  |
| 10:45 a.m. | 11:30 a.m. | 4  | Scenario Discussion   |  |  |  |  |  |  |  |
| 11:30 a.m. | 12:00 p.m. | 5  | Educational Program for UTIMCO Directors  |  |  |  |  |  |  |  |
| 12:00 p.m. | 12:30 p.m. |    | Lunch   |  |  |  |  |  |  |  |
| 12:30 p.m. | 1:30 p.m.  | 6  | Private Investments Update  |  |  |  |  |  |  |  |
| 1:30 p.m.  | 2:00 p.m.  | 7  | UTIMCO Organization Update  |  |  |  |  |  |  |  |
| 2:00 p.m.  | 2:15 p.m.  | 8  | Report from Audit and Ethics Committee  |  |  |  |  |  |  |  |
| 2:15 p.m.  | 2:30 p.m.  | 9  | Report from Risk Committee  |  |  |  |  |  |  |  |
| 2:30 p.m.  | 2:40 p.m.  | 10 | <ul> <li>Report from Compensation Committee</li> <li>Discussion and Appropriate Action Related to Designation of Employee in Eligible<br/>Position as Participant in the UTIMCO Compensation Program for the Performance<br/>Period ending August 31, 2016*</li> <li>Discussion and Appropriate Action Related to Amendments to Appendix B of<br/>UTIMCO Compensation Program (UTIMCO Peer Group)*</li> </ul> |  |  |  |  |  |  |  |
| 2:40 p.m.  | 2:50 p.m.  | 11 | Report from Policy Committee<br>- Discussion and Appropriate Action Related to Amendments to the Delegation of<br>Authority Policy*<br>- Discussion and Appropriate Action Related to Amendments to the Short Term Fund<br>Investment Policy Statement*,**  |  |  |  |  |  |  |  |
| 2:50 p.m.  |            |    | Adjourn   |  |  |  |  |  |  |  |

\* Action by resolution required

\*\* Resolution requires further approval from the Board of Regents of The University of Texas System

By: The University of Texas Investment Management Company

Members of the Board may attend the meeting by telephone conference call pursuant to Tex. Educ. Code Ann. § 66.08(h)(2)(B). The telephone conference will be audible to the public at the meeting location specified in this notice during each part of the meeting that is required to be open to the public.

### Next Scheduled Meeting: July 21, 2016

### **RESOLUTION RELATED TO MINUTES**

RESOLVED, that the minutes of the Meetings of the Board of Directors held on **March 2, 2016** and **March 3 and 4, 2016**, be, and are hereby, approved.

#### MINUTES OF MEETING OF THE BOARD OF DIRECTORS OF THE UNIVERSITY OF TEXAS INVESTMENT MANAGEMENT COMPANY

The Board of Directors (the "Board") of The University of Texas Investment Management Company (the "Corporation") convened in an open meeting on **March 2, 2016**, at the offices of the Corporation, Suite 2800, 401 Congress Avenue, Austin, Texas, said meeting having been called by the Chairman, Jeffery D. Hildebrand, with notice provided to each member in accordance with the Bylaws. The audio portion of the meeting was electronically recorded and broadcast over the Internet. Participating in the meeting were the following members of the Board:

Jeffery D. Hildebrand, Chairman Ardon E. Moore, Vice Chairman William H. McRaven, Vice Chairman for Policy Phil Adams Kyle Bass David J. Beck R. Steven Hicks H. Lee S. Hobson

thus constituting a majority and quorum of the Board. Director John D. White did not attend the meeting. Chairman Hildebrand called the meeting to order at 3:10 p.m. Employees of the Corporation attending the meeting were Bruce Zimmerman, CEO and Chief Investment Officer; Joan Moeller, Secretary and Treasurer; Christy Wallace, Assistant Secretary; Cecilia Gonzalez, Corporate Counsel and Chief Compliance Officer; Mark Warner, Senior Managing Director - Natural Resources, Emerging Markets & Lower/Middle Markets; Uzi Yoeli, Managing Director - Risk Management; Russ Kampfe, Managing Director – Fixed Income; Ryan Ruebsahm, Managing Director – LCC; Susan Chen, Managing Director – MCC, Technology & Deal Legal; Eddie Lewis, Senior Director – Real Estate; Pat Pace, Director – Healthcare & Lower/Middle Markets; Spencer Swayze, Director – Natural Resources; and other staff members. Other attendees were Jim Phillips, Roger Starkey, Allen Hah, Terry Hull, Melanie Thompson of UT System Administration; Keith Brown of the McCombs School of Business at UT Austin; Jerry Turner and Bob Jewell of Andrews Kurth LLP. Copies of materials supporting the Board meeting agenda were previously furnished to each member of the Board.

#### **Minutes**

The first item to come before the Board was approval of the minutes of the Board of Directors Meeting held on January 15, 2016. Upon motion duly made and seconded, the following resolution was unanimously adopted by the Board:

RESOLVED, that the minutes of the Meeting of the Board of Directors held on January 15, 2016, be, and are hereby, approved.

### Endowment and Operating Funds Update

Chairman Hildebrand asked Mr. Zimmerman to present the Corporation's endowment and operating funds update. Mr. Zimmerman stated that he was presenting the same information that was provided to the UT System Board of Regents at their last meeting. He provided Assets Under Management as of December 31,

2015, reporting that the Corporation had \$34.8 billion of assets under management: \$17.4 billion in the Permanent University Fund ("PUF"), \$8.2 billion in the General Endowment Fund ("GEF"), \$1.9 billion in the Short Term Fund ("STF"), \$0.1 billion in the Separately Invested Funds, \$0.1 billion in the Debt Proceeds Fund, and \$7.1 billion in the Intermediate Term Fund ("ITF"). He then gave a detailed report of each line item in the combined PUF and GEF Exposure. He also presented returns, returns vs. market, and market performance during calendar year 2015. Mr. Zimmerman presented active management, returns and value add. He then asked colleagues to discuss each investment strategy providing one year calendar returns. Mr. Kampfe, Mr. Swayze, Mr. Warner, Mr. Ruebsahm, Mr. Lewis, Ms. Chen, Mr. Rincon and Mr. Pace discussed and reported on their respective portfolios. Mr. Zimmerman gave an update on the private investment Staff answered the Directors' questions.

#### Investment Strategy

Chairman Hildebrand asked Mr. Zimmerman to provide information to the Board regarding investment strategy. Mr. Zimmerman discussed the presentation, *Investment Strategy*, which represented staff's initial stages in the review of strategic investment performance, strategic asset allocation and various issues to create the optimal portfolio. Mr. Zimmerman answered the Directors' questions.

### Audit and Ethics Committee Report

Chairman Hildebrand asked Mr. Adams to provide a report on behalf of the Audit and Ethics Committee. Mr. Adams reported that the Committee met twice on January 15, 2016 and on February 17, 2016. At the January 15, 2016 meeting, the Committee approved minutes from their previous meeting, and on behalf of the Committee and the CEO, jointly recommended the position of Corporate Counsel and Chief Compliance Officer as an Eligible Position and Cecilia Gonzalez as a "Participant" in the UTIMCO Compensation Program for the 2015/2016 Performance Period subject to further approval by the Board. At the February 17, 2016 meeting, minutes were approved from the last meeting, and Deloitte & Touche LLP Financial Statement Audit Results and Communications and Audited Financial Statements for the Corporation were approved, subject to further approval by the Board. The Committee heard a report on the audit from Robert Cowley of Deloitte & Touche, LLP, a compliance report for the period ending November 30, 2015, from Ms. Gonzalez, received an update on ongoing audits from UT System Internal Audit, and Ms. Moeller presented the Unaudited Financial Statements for the PUF, the GEF, the PHF, the LTF, the ITF, and the Corporation for the three months ended November 30, 2015. The Committee also went into Executive Session to receive advice from counsel. On behalf of the Audit and Ethics Committee, the following resolutions were recommended for approval. Upon motion duly made and seconded, the following resolution was unanimously adopted by the Board:

RESOLVED, that Deloitte & Touche LLP's Financial Statement Audit Results and Communications on the Corporation for the year ended August 31, 2015, be, and is hereby approved in the form as presented to the Audit and Ethics Committee, subject to approval by the Corporation's Board.

And,

RESOLVED, that the annual financial statements and audit report for the Corporation for the years ended August 31, 2015, and August 31, 2014 be, and are

hereby approved in the form as presented to the Audit and Ethics Committee, subject to approval by the Corporation's Board.

#### Risk Committee Report

Chairman Hildebrand asked Mr. Bass to provide a report from the Risk Committee. Mr. Bass reported that the Committee had convened on February 16, 2016, and minutes were approved from the previous meeting. He stated that the Risk Committee approved 16 new investment mandate categorizations prepared by Staff for the period beginning November 2, 2015 and ending January 31, 2016. The Committee heard a report from Ms. Gonzalez on quarterly compliance items for the quarter ending November 30, 2015 and a report from Mr. Zimmerman on performance and risk reporting. Mr. Bass stated that there were no Board action items related to the Risk Committee report.

#### Organization Update

Chairman Hildebrand asked Mr. Zimmerman to provide the Board with an update on the organization. Mr. Zimmerman discussed the current organization chart and gave a recruiting update on new positions at the Corporation. He also discussed the budget, comparing actual to budget. Mr. Zimmerman and Mr. Warner answered the Directors' questions.

#### **Corporate Resolutions**

Chairman Hildebrand recommended Board approval of the resolution to designate the Annual Meeting of the UTIMCO Board of Directors. Upon motion duly made and seconded, the following resolution was unanimously adopted by the Board:

RESOLVED, that the Annual Meeting of the Board of Directors will be held on May 5, 2016, in Austin, Texas.

Chairman Hildebrand then recognized the distinguished service of Directors Moore and White as members of the Board, with several Board members acknowledging their outstanding knowledge and guidance. Upon motion duly made and seconded, the following resolutions were unanimously adopted by the Board:

WHEREAS, in recognition of his substantial background and expertise in business, Ardon E. Moore was appointed by the Board of Regents of The University of Texas System to the Board of Directors of The University of Texas Investment Management Company ("UTIMCO") in 2006, reappointed to a second term in 2009, and was reappointed for a third and final term in 2012; and

WHEREAS, Mr. Moore served as Vice Chairman of the Board since 2012, and served as a member of the Compensation, Policy and Risk Committees; and

WHEREAS, during his tenure on the UTIMCO Board, Mr. Moore provided invaluable insight and counsel, drawing on his many years of business and investment experience as President and CEO of Lee M. Bass, Inc.; and

WHEREAS, Mr. Moore's commitment and service as a Director of UTIMCO were exemplary, reflecting his deep devotion to the education and development of students at all levels, and further evidenced as a member of The University of Texas Development Board and the Advisory Council, The University of Texas McCombs School of Business; and

WHEREAS, Mr. Moore's unselfish contributions are also evidenced in the civic and corporate arenas by his service on numerous boards, including President of the Fort Worth Zoological Association, Past President of All-Saints Episcopal School of Fort Worth, Past Trustee of the Stanford Business School Trust, the Cook Children's Hospital Foundation Board, and the Texas Water Foundation; and

WHEREAS, during Mr. Moore's tenure on the UTIMCO Board, UTIMCO managed the Permanent University Fund and other investments of The University of Texas System with the highest standards of integrity, professionalism, and competency, earning wide praise and recognition from UTIMCO's investment beneficiaries, namely The University of Texas System and The Texas A&M University System, as well as the alumni and patrons of such Systems, the State's legislative leaders, the national credit rating agencies, capital markets, and investment community generally; and

WHEREAS, much of the credit for UTIMCO's success is directly attributable to Mr. Moore's leadership, judgment, and commitment.

NOW, THEREFORE,

BE IT RESOLVED, that the Directors of The University of Texas Investment Management Company, on behalf of the grateful people of the State of Texas, particularly the Boards of Regents and Administrators of The University of Texas System and The Texas A&M University System, do hereby express to Ardon E. Moore their sincerest appreciation for his leadership and service that contributed immeasurably to UTIMCO's success; and

BE IT FURTHER RESOLVED, that all persons who read this Resolution should know that Mr. Moore has made a lasting and fundamental contribution to improve the manner in which public university endowments are invested and managed in the State of Texas, to the benefit of all of the citizens of the State, particularly the students and faculty of The University of Texas System and The Texas A&M University System.

PASSED AND ADOPTED this 2nd day of March, 2016.

And,

WHEREAS, in recognition of his substantial background and expertise in business, John D. White was appointed by Governor Rick Perry to the Board of Regents of The Texas A&M University System from 2003 to 2009; and reappointed in 2011 for an additional four-year term, serving as chairman from 2005-2007 and vice-chairman from 2007 to 2009; and

WHEREAS, in 2014, Mr. White was appointed to the Board of Directors of The University of Texas Investment Management Company ("UTIMCO") by the Board of Regents of The Texas A&M University System; and

WHEREAS, Mr. White is a fifth generation Texas rancher, received his Bachelor of Arts degree in Political Science from Texas A&M University, a law degree from The University of Texas School of Law, and began his career in the U.S. Air Force as Judge-Advocate; and

WHEREAS, during his tenure on the UTIMCO Board, Mr. White provided invaluable insight and counsel, drawing on his immense legal experience in a variety of industry sectors, with a focus on energy, including having been elected as managing partner of three different law firms in his legal career, serving as a partner with Murphree Venture Partners LP; co-founder, Chairman of the Board and CEO for Standard Renewable Energy Group, LLC; a principal of the Southern Funds Group, LLC; and Managing Director of The Wind Alliance, a public, private, University consortium; and

WHEREAS, Mr. White's commitment and service as a Director of UTIMCO were exemplary, reflecting his deep devotion to the education and development of students at all levels, and further evidenced by his work in prior years with the Texas A&M University System Committee on Finance; the Committee on Buildings and Physical Plant; the Policy Review Committee; chair of the Committee on Audit; chair of the Public Policy and Planning Committee; service as a member of the Presidential Library Committee; and The Texas A&M University System Board of Regents' special liaison to the Texas A&M Association of Former Students, Board for Lease of University Lands, Texas A&M System Research, the Texas A&M Corps of Cadets and Texas A&M System Military Training Programs; and

WHEREAS, Mr. White's unselfish contributions are also evidenced in the corporate and civic arenas by his current service on numerous boards, including as a board member of the Houston Technology Center, The Greater Houston Partnership; The Association for Community Broadcasting; Chairman of the Board of the Ed Rachal Foundation; a fellow of the American, Texas and Houston Bar foundations; a member of the State Bar of Texas; past president of the Texas Aggie Bar Association; past member of the Texas A&M Vision 2020 Project Faculty Committee and Houston Livestock Show and Rodeo International Committee; and

WHEREAS, during Mr. White's tenure on the UTIMCO Board, UTIMCO managed the Permanent University Fund and other investments of The University of Texas System with the highest standards of integrity, professionalism, and competency, earning wide praise and recognition from UTIMCO's investment beneficiaries, namely The University of Texas System and The Texas A&M University System, as well as the alumni and patrons of such Systems, the State's legislative leaders, the national credit rating agencies, capital markets, and investment community generally; and

WHEREAS, Mr. White has provided outstanding leadership, judgment, and commitment through his dedicated service as Chairman of the Audit and Ethics Committee and Member of the Board's Policy and Risk Committees. NOW, THEREFORE,

BE IT RESOLVED, that the Directors of The University of Texas Investment Management Company, on behalf of the grateful people of the State of Texas, particularly the Boards of Regents and Administrators of The University of Texas System and The Texas A&M University System, do hereby express to John D. White their sincerest appreciation for his leadership and service that contributed immeasurably to UTIMCO's success; and

BE IT FURTHER RESOLVED, that all persons who read this Resolution should know that Mr. White has made a lasting and fundamental contribution to improve the manner in which public university endowments are invested and managed in the State of Texas, to the benefit of all of the citizens of the State, particularly the students and faculty of The University of Texas System and The Texas A&M University System.

PASSED AND ADOPTED this 2nd day of March, 2016.

There being no further business to come before the Board, the meeting was adjourned at approximately 5:45 p.m.

Secretary: \_\_\_\_

Joan Moeller

Approved:

Date:

Jeffery D. Hildebrand Chairman, Board of Directors of The University of Texas Investment Management Company

#### MINUTES OF THE 20<sup>th</sup> ANNIVERSARY CELEBRATION EVENT OF THE BOARD OF DIRECTORS OF THE UNIVERSITY OF TEXAS INVESTMENT MANAGEMENT COMPANY

The Board of Directors (the "Board") of The University of Texas Investment Management Company (the "Corporation") convened in an open meeting, for a 20<sup>th</sup> Anniversary Celebration Event, including two days of investment focused discussions, on **March 3, 2016**, at the AT&T Executive Education and Conference Center, 1900 University Avenue, Austin, Texas 78705, said meeting having been called to order by the Chairman, Jeffery D. Hildebrand, with notice provided to each member in accordance with the Bylaws. The audio portion of the meeting was electronically recorded and broadcast over the Internet. Participating in the meeting were the following members of the Board:

Jeffery D. Hildebrand, Chairman Ardon E. Moore, Vice Chairman William H. McRaven, Vice Chairman for Policy Kyle Bass David J. Beck R. Steven Hicks H. Lee S. Hobson John D. White

thus constituting a majority and quorum of the Board. Director Phil Adams did not attend the meeting. Chairman Hildebrand called the meeting to order at 8:00 a.m. Employees of the Corporation attending the meeting were Bruce Zimmerman, CEO and Chief Investment Officer; Joan Moeller, Secretary and Treasurer; Christy Wallace, Assistant Secretary; Cecilia Gonzalez, Corporate Counsel and Chief Compliance Officer; Mark Warner, Senior Managing Director - Natural Resources, Emerging Markets & Lower/Middle Markets; Russ Kampfe, Managing Director – Fixed Income; Ryan Ruebsahm, Managing Director – LCC; Susan Chen, Managing Director – MCC, Technology & Deal Legal; Eddie Lewis, Senior Director – Real Estate; Courtney Powers, Senior Director – LCC; Amanda Hopper, Senior Director – MCC; Richard Rincon, Director – Emerging Markets; Pat Pace, Director – Healthcare & Lower/Middle Markets; Spencer Swayze, Director – Natural Resources; Billy Prather, Director – Natural Resources; and other staff members. Other attendees were Jim Phillips, Allen Hah, Terry Hull, and Melanie Thompson of the UT System Administration; Keith Brown of the McCombs School of Business at UT Austin; Jerry Turner and Bob Jewell of Andrews Kurth LLP. Copies of materials supporting the Board meeting agenda were previously furnished to each member of the Board.

#### Day One

Chairman Hildebrand welcomed all attendees and opened the meeting by asking Mr. Zimmerman to begin Day One of the investment focused discussions. Jon Sather, Reva Bhalla, Mark Fleming-Williams and John Minnich from Stratfor were introduced. Mr. Warner served as moderator as the four speakers provided dialogue and answered questions on geopolitical environment. Raymond T. Dalio, Chairman and CEO of Bridgewater Associates, gave his thoughts on the global capital markets and answered questions from the audience. Next on the agenda was Robert Kaplan, President and CEO of the Federal Reserve Bank of Dallas. Mr. Kaplan spoke on Central Banks and held a short question and answer segment. Jeff Aronson of Centerbridge and Peter Briger of Fortress discussed credit markets; Ross Margolies of Stelliam Investment Management, Ricky Sandler of Eminence Capital and Jeff Ubben of Value Act Capital discussed equity markets and Chancellor William H. McRaven spoke about UT System and the team of teams approach during lunch. After lunch, Lee Ainslie of Maverick Capital, John Burbank of Passport Capital and John Griffin of Blue Ridge Capital discussed long-short equity hedge funds; David Landau of LNK Partners, Kim Marvin of American Industrial Partners and Graham Weaver of Alpine Investors led a panel discussing private equity and Puneet Agarwal of True Ventures, Bruce Ehrenberg of IA Ventures, Brad Feld of Foundry Group and Hans Tung of GGV Capital discussed venture capital. Carlos Garcia, Victoria Capital Partners, Tope Lawani, Helios Investment Partners and Sameer Sain, Everstone Capital, were on a panel to discuss emerging markets and Lei Zhang of Hillhouse Capital Management discussed China.

At 5:30 p.m., Chairman Hildebrand announced the Board would recess and would reconvene on the morning of March 4, 2016 at 8:30 a.m.

### Day Two

Chairman Hildebrand welcomed all attendees back to the second day of investment focused discussions. Mr. Zimmerman introduced Howard Marks of Oaktree. Mr. Marks discussed "The Most Important Thing". Next, Dan Och of Och-Ziff Capital Management Group, Richard Perry of Perry Capital LLC and Andrew Spokes of Farallon Capital Management enlightened the audience by discussing multi-strategy hedge funds; and Stephen Blyth, Harvard Management Company, Scott Malpass, University of Notre Dame and Neal Triplett of DUMAC, Inc. shared information from the CIO's perspective. Jon Gray of Blackstone discussed real estate and Jim Flynn of Deerfield Management, Bob Nelsen of ARCH Venture Partners and Ferran Prat from UT MD Anderson Cancer Center, discussed healthcare. Natural resources was the topic of discussion by Ivor Orchard, Kerogen Capital, Dexter Paine, Paine + Partners, L.E. Simmons, SCF Partners and Jeremy Weir of Trafigura Group; while Otavio Castello Branco of Patria Investimentos and David Russell of Equis Funds Group ended the two day event by discussing infrastructure development.

#### **Conclusion**

There being no further business to come before the Board of Directors, the 20<sup>th</sup> Anniversary Event was adjourned at approximately 3:45 p.m.

Secretary:

Joan Moeller

Approved:

Date:

Jeffery D. Hildebrand Chairman, Board of Directors of The University of Texas Investment Management Company

# Agenda Item UTIMCO Board of Directors Meeting May 5, 2016

| Agenda Item:    | Discussion and Appropriate Action Related to Corporate Resolutions:<br>- Election of UTIMCO Officers<br>- Committee Assignments   |
|-----------------|---|
| Developed By:   | Zimmerman, Gonzalez, Moeller  |
| Presented By:   | Hildebrand  |
| Type of Item:   | Action required by UTIMCO Board; Further action required by The University of Texas System Board of Regents related to the appointment of the Audit and Ethics Committee  |
| Description:    | Chairman Hildebrand will present a recommendation for the Corporate Officers. As stated in the Bylaws, a purpose of the Annual Meeting is to elect Officers for the ensuing year. Employees that are designated as Officers by the UTIMCO Board meet the definition of Key Employees in the Corporation's Code of Ethics.                   |
|                 | Chairman Hildebrand will propose new Board committee assignments. If a change is made in the composition of the Audit and Ethics Committee, Section 66.08 of the <i>Texas Government Code</i> requires that the U. T. System Board of Regents approve the appointment of the members of the Audit and Ethics Committee of the UTIMCO Board. |
| Recommendation: | Chairman Hildebrand will recommend approval of the election of Corporate Officers and approval of committee assignments.  |
| Reference:      | None  |

### **RESOLUTION RELATED TO CORPORATION OFFICERS**

RESOLVED, that the following persons are hereby appointed to the respective office or offices of the Corporation set forth opposite their names, to serve until the next Annual Meeting of the Corporation or until their resignation or removal.

Name

William H. McRaven Bruce Zimmerman Joan Moeller Mark Warner Ryan Ruebsahm Susan Chen Russ Kampfe Uzi Yoeli Uche Abalogu Christy Wallace Office or Offices Chairman Vice-Chairman for Policy Chief Executive Officer and Chief Investment Officer Senior Managing Director, Treasurer and Secretary Senior Managing Director Managing Director Managing Director Managing Director Managing Director Chief Technology Officer Assistant Secretary

### **RESOLUTION RELATED TO COMMITTEE ASSIGNMENTS**

BE IT RESOLVED, that the following Directors of the Corporation are hereby designated as the Audit and Ethics Committee of the Board of Directors:

\_\_\_\_\_

subject to approval by the Board of Regents of The University of Texas System at a future meeting, to serve until the expiration of their term, or until their successor has been chosen and qualified, or until their earlier death, resignation or removal; and

FURTHER RESOLVED, that \_\_\_\_\_\_ is hereby designated the Chair of the Audit and Ethics Committee and shall preside at its meetings.

BE IT RESOLVED, that the following Directors of the Corporation are hereby designated as the Compensation Committee of the Board of Directors:

\_\_\_\_\_

\_\_\_\_\_

to serve until the expiration of their term, or until their successor has been chosen and qualified, or until their earlier death, resignation or removal; and

FURTHER RESOLVED, that \_\_\_\_\_ is hereby designated the Chair of the Compensation Committee and shall preside at its meetings.

BE IT RESOLVED, that the following Directors of the Corporation are hereby designated as the Risk Committee of the Board of Directors:

to serve until the expiration of their term, or until their successor has been chosen and qualified, or until their earlier death, resignation or removal; and

FURTHER RESOLVED, that \_\_\_\_\_\_ is hereby designated the Chair of the Risk Committee and shall preside at its meetings.

BE IT RESOLVED, that the following Directors of the Corporation are hereby designated as the Policy Committee of the Board of Directors:

\_\_\_\_\_

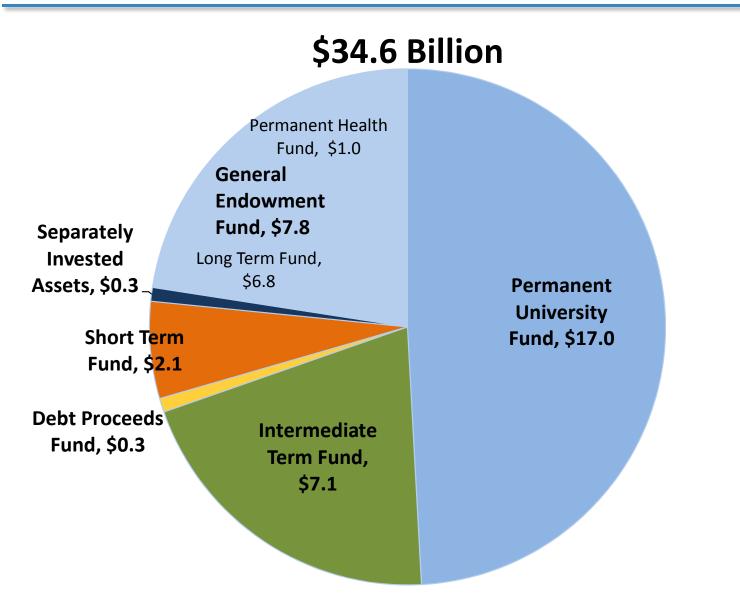
to serve until the expiration of their term, or until their successor has been chosen and qualified, or until their earlier death, resignation or removal; and

FURTHER RESOLVED, that \_\_\_\_\_ is hereby designated the Chair of the Policy Committee and shall preside at its meetings.



### UTIMCO Assets Under Management February 29, 2016





## Combined PUF and GEF Exposure

As of February 29, 2016 (in millions)



| Asset Group       | Asset Class                           | Const          | related and<br>rrained<br>J Only) | Less Co<br>and Con<br>(Hedge | strained      | Private<br>Investments |               | Total           |                |
|-------------------|---------------------------------------|----------------|-----------------------------------|------------------------------|---------------|------------------------|---------------|-----------------|----------------|
| Fixed Income      | Investment Crede                      | ¢1.000         | 0.00/                             | <u> </u>                     | 1 70/         | ድር                     | 0.00/         | <u> </u>        | 0.70/          |
|                   | Investment Grade                      | \$1,990        | 8.0%                              | \$414                        | 1.7%          | \$0                    | 0.0%          | \$2,404         | 9.7%           |
|                   | Credit-Related                        | 26             | 0.1%                              | 1,068                        | 4.3%          | 947                    | 3.8%          | 2,041           | 8.2%           |
| Fixed Income Tota |                                       | 2,016          | 8.1%                              | 1,482                        | 6.0%          | 947                    | 3.8%          | 4,445           | 17.9%          |
| Real Assets       | Real Estate<br>Natural Resources      | 562<br>1,390   | 2.3%<br>5.6%                      | 2<br>1                       | 0.0%<br>0.0%  | 1,510<br>2,070         | 6.1%<br>8.3%  | 2,074<br>3,461  | 8.4%<br>13.9%  |
| Real Assets Total |                                       | 1,952          | 7.9%                              | 3                            | 0.0%          | 3,580                  | 14.4%         | 5,535           | 22.3%          |
| Equity            | Developed Country<br>Emerging Markets | 3,060<br>2,210 | 12.3%<br>8.9%                     | 4,975<br>476                 | 20.1%<br>1.9% | 3,089<br>1,008         | 12.5%<br>4.1% | ,               | 44.9%<br>14.9% |
| Equity Total      |                                       | 5,270          | 21.2%                             | 5,451                        | 22.0%         | 4,097                  | 16.6%         | 14,818          | 59.8%          |
| Total             |                                       | <u>\$9,238</u> | <u>37.2%</u>                      | <u>\$6,936</u>               | <u>28.0%</u>  | <u>\$8,624</u>         |               | <u>\$24,798</u> | <u>100.0%</u>  |
|                   | Number of Partners                    | 2              | 19                                | 4                            | 6             | 15                     | 0             | 24              | 5              |

## Endowment Dashboard

### February 29, 2016



| <u>Underpe</u> i   | rformance      | <u>e</u>        |                 |             | <u>Transpa</u>     | •                            |                       |                            |                       |                              |
|--------------------|----------------|-----------------|-----------------|-------------|--------------------|------------------------------|-----------------------|----------------------------|-----------------------|------------------------------|
| FY2016TD           | <u>3-years</u> | 5-years         | <u>10-years</u> |             |                    | Full but                     |                       |                            |                       |                              |
| -4.3%              | 4.2%           | 4.6%            | 5.0%            |             | <u>Full</u><br>32% | <u>Lagged</u><br>36%         | <u>Partial</u><br>29% | <u>None</u><br>3%          |                       |                              |
| Markat             |                |                 |                 |             | 52%                | 30%                          | 29%                   | 370                        |                       |                              |
| <u>Market</u>      |                |                 |                 |             | Concen             | tration                      |                       |                            |                       |                              |
|                    | Beta           |                 |                 |             |                    | Man                          | ager                  | Securities                 | (Top 10)              |                              |
| <u>U.S. Equity</u> | <u>Rates</u>   | <u>Currency</u> |                 |             | <u>US</u>          | Top 10                       | <u>Top 20</u>         | Bonds                      | Stocks                |                              |
| 0.610              | (0.337)        | (0.132)         |                 |             | 55%                | 24%                          | 40%                   | 5.4%                       | 5.0%                  |                              |
| Scenarios          | 5              |                 |                 |             | Illiquid           | itv                          |                       |                            | <u>Unfunded</u>       | -                            |
|                    | US Liquidity   | China Hard      | Japan           | 50% Oil     | mquiu              | <u>cy</u>                    | <u>90 day</u>         | <u>1 year</u>              | Commit-               |                              |
| Expected           | Squeeze        | Landing         | Implosion       | Drop        |                    |                              | <u>liquidity</u>      | <u>liquidity</u>           | <u>ments</u>          |                              |
| Returns:           | -20.9%         | -21.2%          | -15.8%          | <u>1.8%</u> | Endowm             | ents                         | 36%                   | 59%                        | 25%                   |                              |
| Neturns.           | -20.370        | -21.2/0         | -10.070         | 1.070       | ITF                |                              | 60%                   | 90%                        |                       |                              |
| <u>Downside</u>    | e Volatilit    | -               |                 |             | Levera             | <u>ge</u>                    |                       |                            |                       |                              |
|                    |                | <u>1 stdev</u>  | <u>2 stdev</u>  |             |                    | LCC                          | LCC ex-FI             | <u>Endowments</u>          |                       |                              |
| Expected ret       | turns          | -5.0%           | -17.4%          |             | Gross              | 1.92                         | 1.63                  | 1.00                       |                       |                              |
| VIX:               |                | 20.             | 6%              |             | Net                | 0.40                         | 0.51                  | 1.00                       |                       |                              |
| Active Ma          | anageme        | <u>nt</u>       |                 |             | <u>Permar</u>      | nent Loss d                  | of Capital            | l                          |                       |                              |
|                    |                | 1-year          | 3-years         | 10-years    |                    |                              |                       | Anticipated/               |                       |                              |
| Value-Add          |                |                 |                 |             |                    | Invested                     | Realized              | Unrealized                 |                       | Annualized                   |
| bps                |                | (83)            | 77              | 162         |                    | Capital (\$B)                | Loss (\$M)            | Loss (\$M)                 | (\$M)                 | Loss (%)                     |
| \$                 |                | (\$245M)        | \$505M          | \$3,506M    | MCC                | \$33.7                       | \$622                 | -                          | \$622                 | 0.32%                        |
| Return/Vola        | tility         |                 |                 |             | LCC<br>PI          | 13.2                         | 240                   | 198<br>202                 | 438                   | 0.58%                        |
| Sharpe             | <u> </u>       | (1.03)          | 0.84            | 0.46        | Total              | <u>14.5</u><br><u>\$61.4</u> | <u>327</u><br>\$1,189 | <u>202</u><br><u>\$400</u> | <u>529</u><br>\$1,589 | <u>0.95%</u><br><u>0.49%</u> |
| IR .               |                | (0.34)          | 0.33            | 0.66        | iotai              | <u>-201.4</u>                | <u>71,103</u>         | <u></u>                    | <u>71,009</u>         | 0.4970                       |



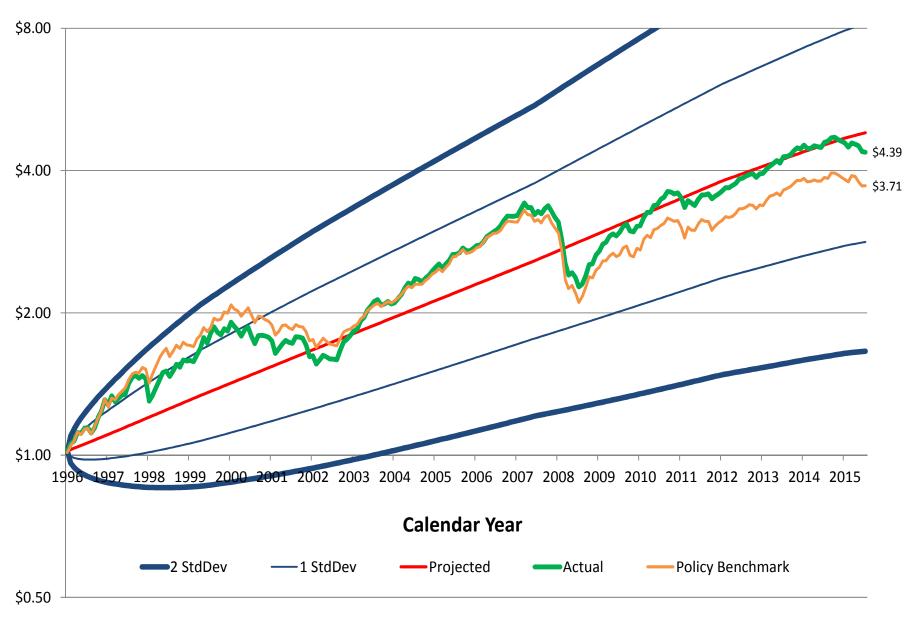
## **Underperformance Risk**





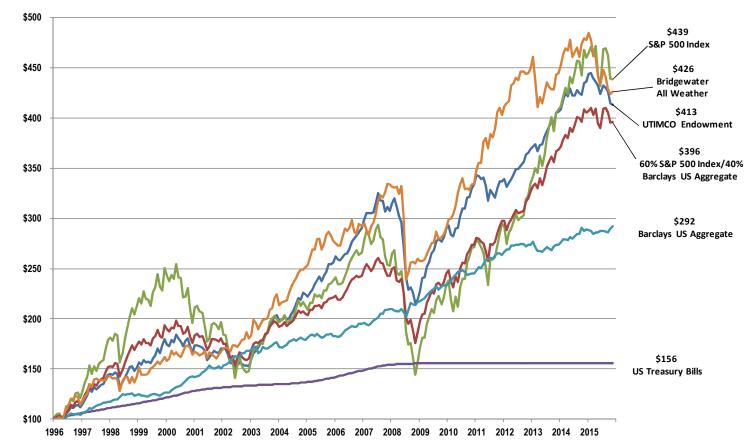
|                                 |                                   | Periods     | Ending February | 29, 2016      |              |
|---------------------------------|-----------------------------------|-------------|-----------------|---------------|--------------|
| Fund                            | Fiscal YTD<br>Six Months<br>Ended | One<br>Year | Three<br>Years  | Five<br>Years | Ten<br>Years |
| Permanent University Fund (PUF) | -4.31%                            | -4.91%      | 4.22%           | 4.60%         | 4.99%        |
| General Endowment Fund (GEF)    | -4.37%                            | -4.75%      | 4.33%           | 4.71%         | 5.10%        |
| Intermediate Term Fund (ITF)    | -4.26%                            | -7.67%      | 0.90%           | 2.10%         | 3.75%        |

## Returns vs Projected Returns



### Returns vs. Market





|                         | February 29, 2016 |        |        |        |       |                |  |  |  |
|-------------------------|-------------------|--------|--------|--------|-------|----------------|--|--|--|
|                         | One               | Three  | Five   | Seven  | Ten   | Since          |  |  |  |
|                         | Year              | Years  | Years  | Years  | Years | March 31, 1996 |  |  |  |
| UT Endowments           | -4.89%            | 4.22%  | 4.60%  | 9.73%  | 5.00% | 7.35%          |  |  |  |
| 60% Stocks / 40% Bonds  | -2.99%            | 7.43%  | 7.68%  | 12.31% | 6.04% | 7.13%          |  |  |  |
| Stocks                  | -6.19%            | 10.75% | 10.13% | 17.27% | 6.44% | 7.67%          |  |  |  |
| Bonds                   | 1.50%             | 2.22%  | 3.60%  | 4.59%  | 4.70% | 5.50%          |  |  |  |
| Bridgewater All Weather | -11.19%           | -1.41% | 4.99%  | 7.58%  | 4.18% | 7.52%          |  |  |  |
| Treasury Bills          | 0.05%             | 0.05%  | 0.06%  | 0.07%  | 1.03% | 2.25%          |  |  |  |

### Trailing Annualized Returns Period Ending

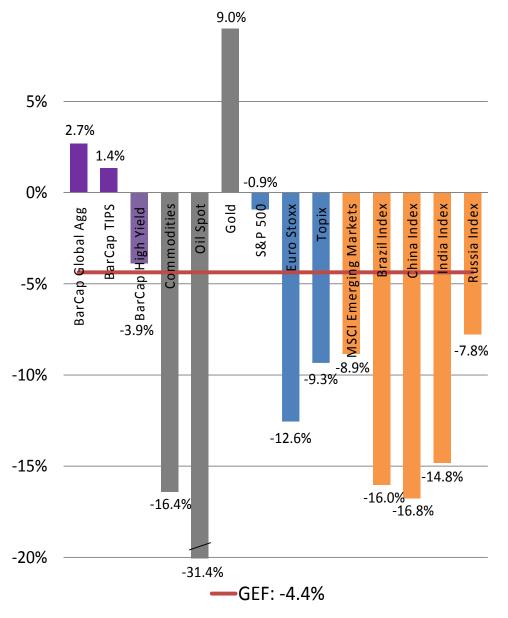


## Market Risk

### Market Performance During FY2016TD



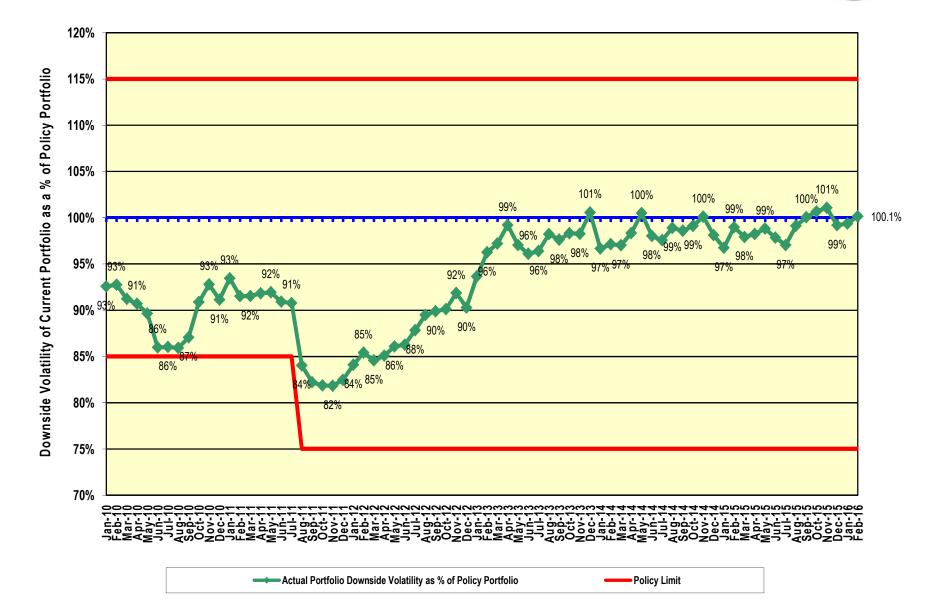
| Sensitivity Ana | lysis (beta) |
|-----------------|--------------|
| All Equities    | 0.676        |
| U.S. Equities   | 0.610        |
| Interest Rates  | (0.337)      |
| Currencies      | (0.132)      |





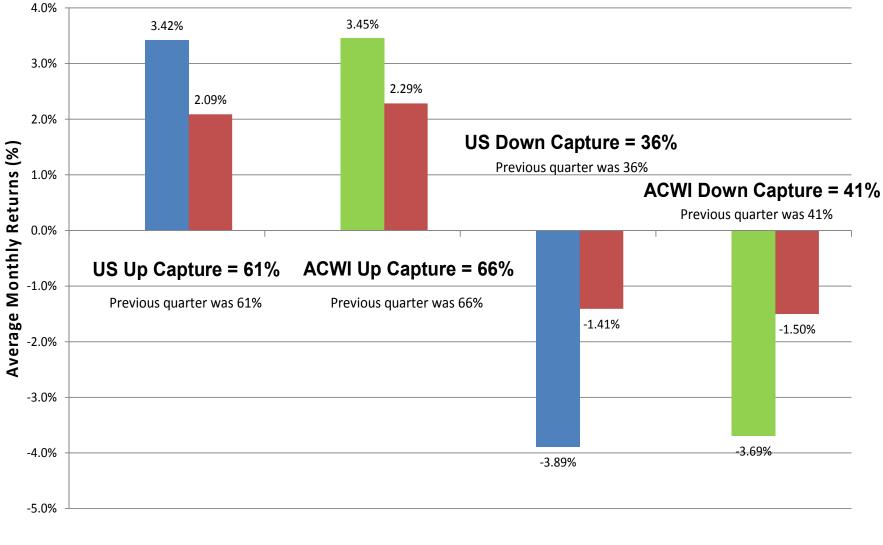
## **Downside Volatility Risk**

### Downside Volatility Utilization of GEF



### Up-Down Capture vs U.S. & World Equities







Data from 8/1996 till 2/2016. US equity had 95 down months and 140 up months; ACWI had 100 down months and 135 up months



## **Active Management Risk**



|   | Six Months<br>FYTD | One<br>Year    | Three<br>Years | Five<br>Years | Ten<br>Years   |
|---|--------------------|----------------|----------------|---------------|----------------|
| <u>Value Add</u><br>Basis Points<br>\$                        | -143<br>-\$360     | -83<br>-\$245  | 77<br>\$505    | 92<br>\$994   | 162<br>\$3,506 |
| <u>Return/Volatility</u><br>Sharpe Ratio<br>Information Ratio |                    | -1.03<br>-0.34 | 0.84<br>0.33   | 0.82<br>0.37  | 0.46<br>0.66   |

### Active Management Value Add Attribution Periods Ending February 29, 2016



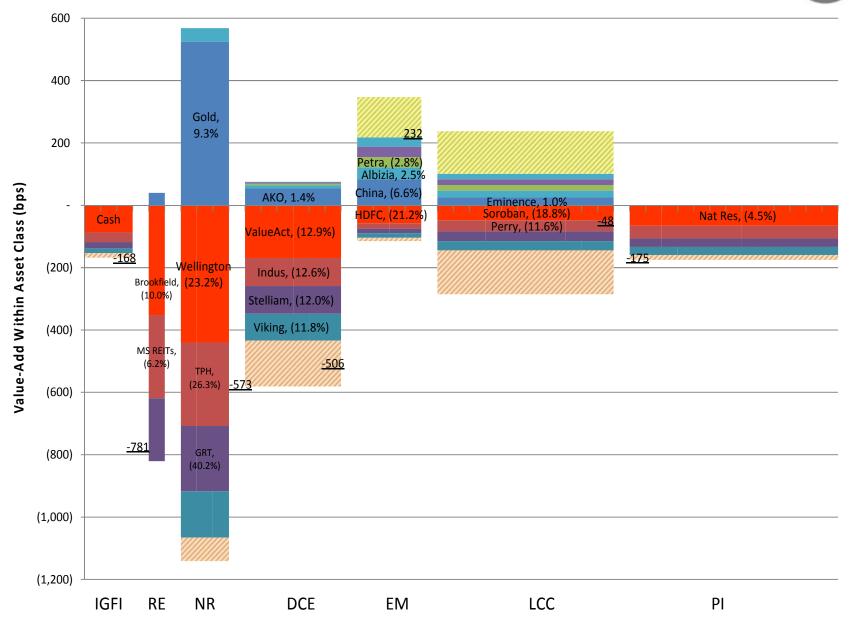
|                           | Six Month |          |             |                   |
|---------------------------|-----------|----------|-------------|-------------------|
|                           | FYTD      | One Year | Three Years | <b>Five Years</b> |
| External Manager          |           |          |             |                   |
| MCC                       | -1.17%    | -0.36%   | 0.58%       | 0.77%             |
| LCC                       | -0.09%    | 0.04%    | 0.83%       | 1.02%             |
| Private Markets           | -0.31%    | -0.43%   | -0.26%      | -0.31%            |
| Total External Manager    | -1.57%    | -0.75%   | 1.15%       | 1.48%             |
| Tactical Allocation:      |           |          |             |                   |
| Gold                      | 0.00%     | 0.00%    | -0.39%      | -0.24%            |
| Other                     | 0.14%     | -0.06%   | 0.04%       | -0.07%            |
| Total Tactical Allocation | 0.14%     | -0.06%   | -0.35%      | -0.31%            |
| Insurance Hedges          | 0.00%     | -0.02%   | -0.03%      | -0.25%            |
| Total Value Add           | -1.43%    | -0.83%   | 0.77%       | 0.92%             |

## **Current Tactical Allocation**

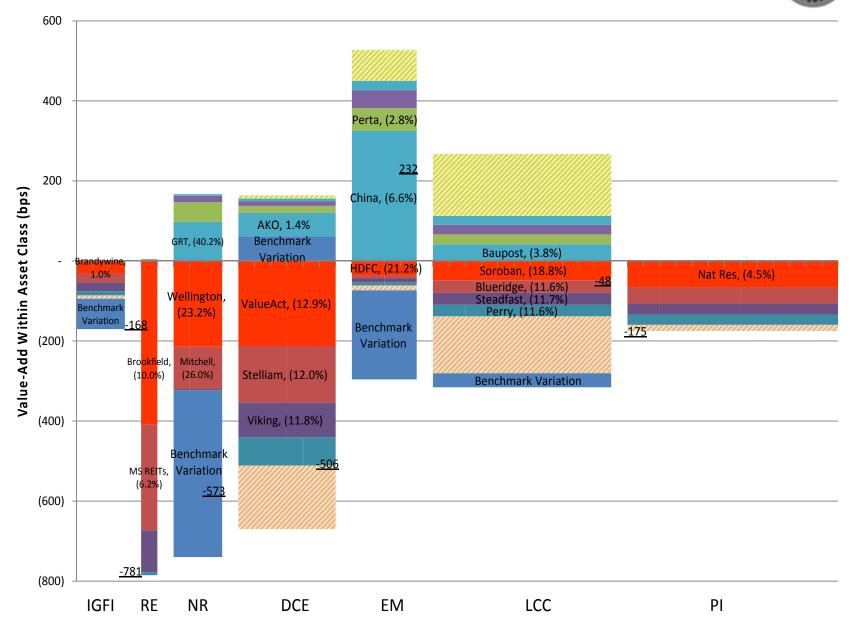


|                | Underweight | Overweight  | Net Tactical<br>Position |
|----------------|-------------|-------------|--------------------------|
| MCCIGFI        |             | 1.6%        | 1.6%                     |
| LCC            | 1.0%        | -           | (1.0%)                   |
| PI Credit      | -           | 0.3%        | 0.3%                     |
| <u>RE</u>      |             |             |                          |
| MCC            | 0.2%        | -           | (0.2%)                   |
| Privates       |             | <u>0.6%</u> | <u>0.6%</u>              |
| TOTAL          | <u>0.2%</u> | <u>0.6%</u> | <u>0.4%</u>              |
| <u>Nat Res</u> |             |             |                          |
| MCC-NRE        | _           | 0.1%        | 0.1%                     |
| Commodities    | 1.7%        | -           | (1.7%)                   |
| Gold           | 0.3%        | -           | (0.3%)                   |
| Privates       |             | <u>0.8%</u> | <u>0.8%</u>              |
| TOTAL          | <u>2.0%</u> | <u>0.9%</u> | <u>(1.1%)</u>            |
| <u>DCE</u>     |             |             |                          |
| MCC            | 1.7%        | -           | (1.7%)                   |
| Privates       |             | <u>1.5%</u> | <u>1.5%</u>              |
| TOTAL          | <u>1.7%</u> | <u>1.5%</u> | <u>(0.2%)</u>            |
| <u>EM</u>      |             |             |                          |
| MCC            | 0.6%        | -           | (0.6%)                   |
| Privates       |             | <u>0.6%</u> | <u>0.6%</u>              |
| TOTAL          | <u>0.6%</u> | <u>0.6%</u> | <u>0.0%</u>              |
| TOTAL          | <u>5.5%</u> | <u>5.5%</u> | <u>0.0%</u>              |

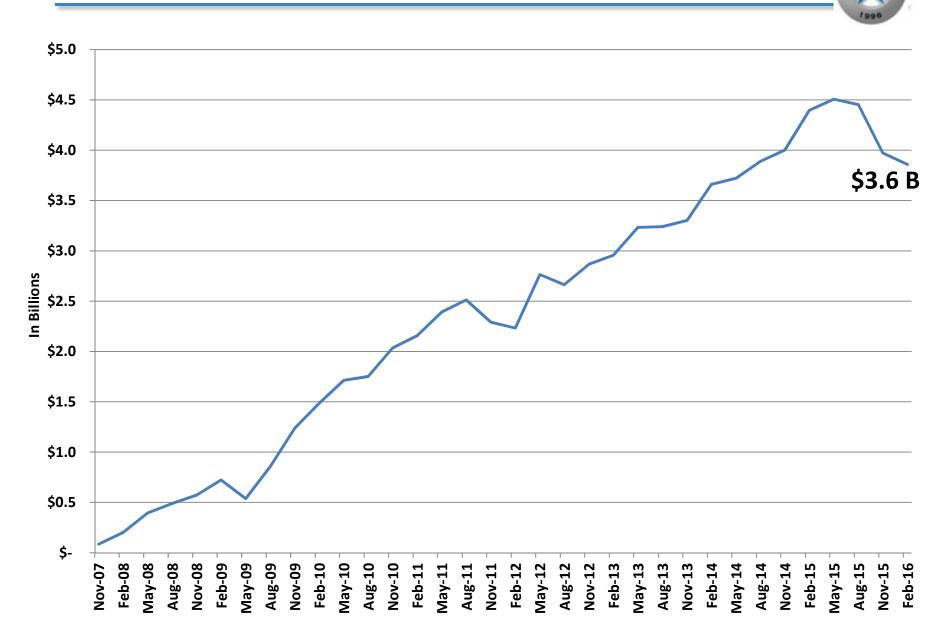
### Value-Add Breakdown for H1 of FY2016



### Value-Add Breakdown for H1 of FY2016



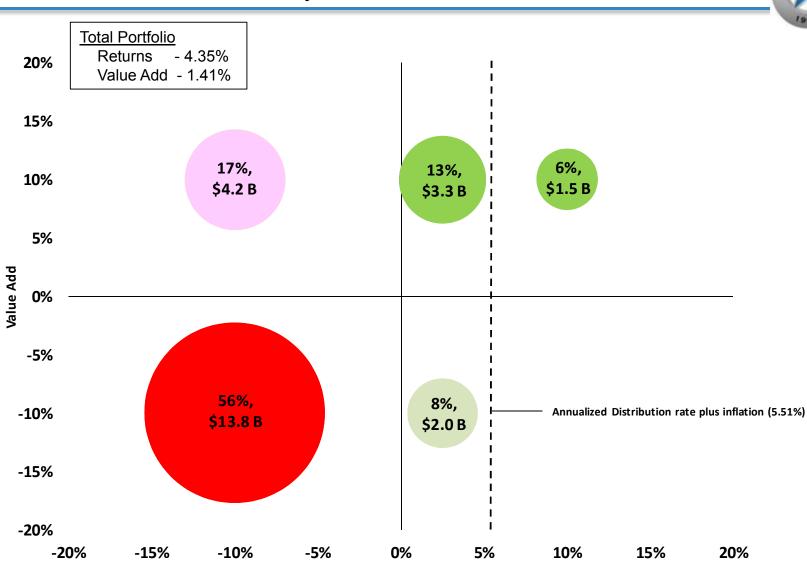
### **Cumulative Value Add**





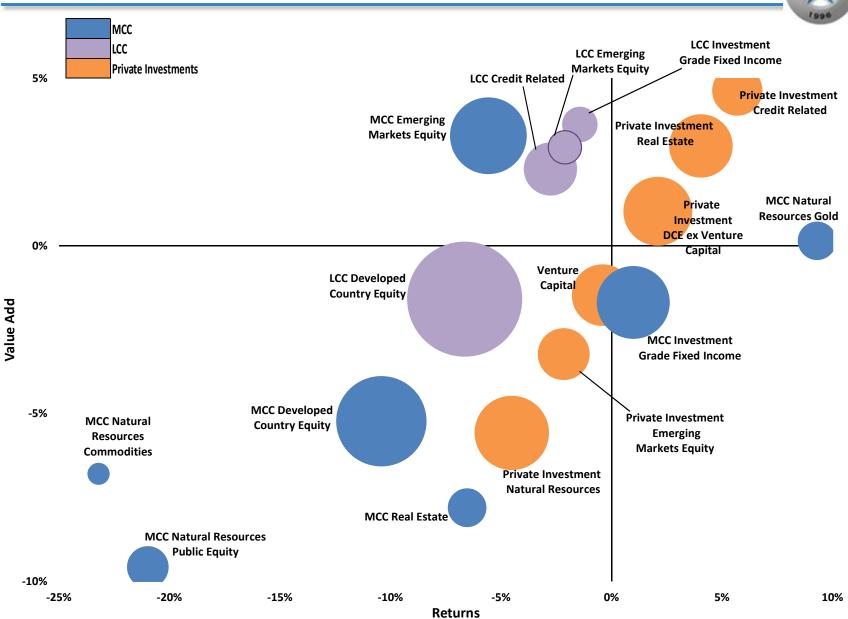
| 20%              |    |          |                         |     | 1    |      |    |                      |     | _   |
|------------------|----|----------|-------------------------|-----|------|------|----|----------------------|-----|-----|
| 15%              |    |          |                         |     |      |      |    |                      |     |     |
| 10%              |    | •        | tive Actu<br>tive Value |     | າຣ   | •    |    | Actual R<br>Value Ac |     |     |
| 5%<br>B          |    |          |                         |     |      |      |    |                      |     |     |
| а<br>90%         |    |          |                         |     |      |      |    |                      |     |     |
| Value Add<br>-5% |    | <u>.</u> |                         |     |      |      | D  |                      |     |     |
| -10%             |    |          | tive Actu               |     | 15   | •    |    | Actual R<br>Value A  |     |     |
| -15%             |    |          |                         |     |      |      |    |                      |     |     |
| -20%             |    |          |                         |     |      |      |    |                      |     |     |
| -2               | 0% | -15%     | -10%                    | -5% | 0%   |      | 5% | 10%                  | 15% | 20% |
|                  |    |          |                         |     | Retu | ırns |    |                      |     |     |

### Returns and Value Add Six Months Ended February 29, 2016



Returns

### Returns and Value Add Six Months Ended February 29, 2016





## **Transparency Risk**



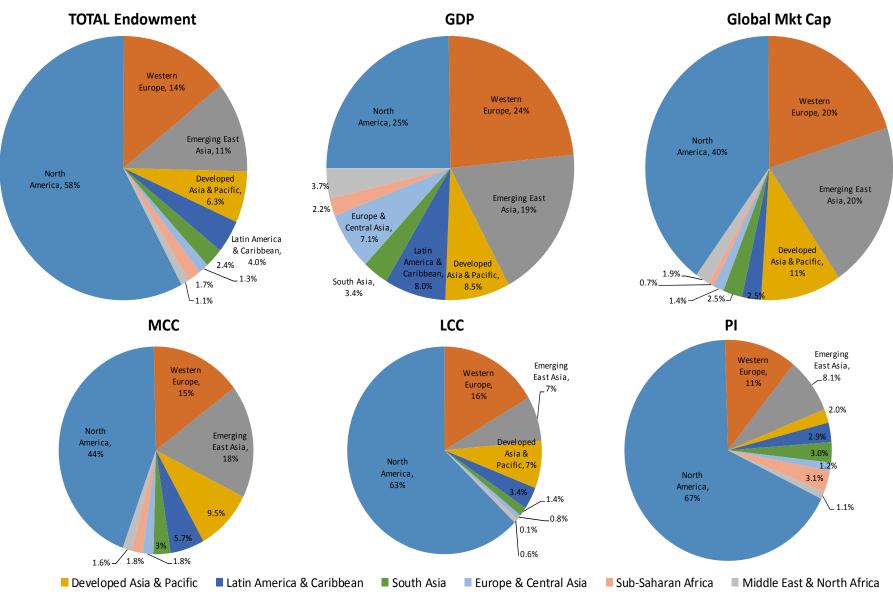
|                 | Fixed<br>Income | MCC<br>Real<br>Assets | Equities | TOTAL | LCC | Privates | TOTAL |
|-----------------|-----------------|-----------------------|----------|-------|-----|----------|-------|
| Full & Timely   | 100%            | 94%                   | 74%      | 83%   |     |          | 31%   |
| Full but lagged |                 |                       | 8%       | 5%    |     | 99%      | 35%   |
| Partial         |                 | 6%                    | 11%      | 8%    | 95% |          | 31%   |
|                 |                 |                       |          |       |     |          |       |
| No Transparency |                 |                       | 7%       | 4%    | 5%  | 1%       | 3%    |



### **Concentration Risk**

#### Geographic Exposure As of December 31, 2015





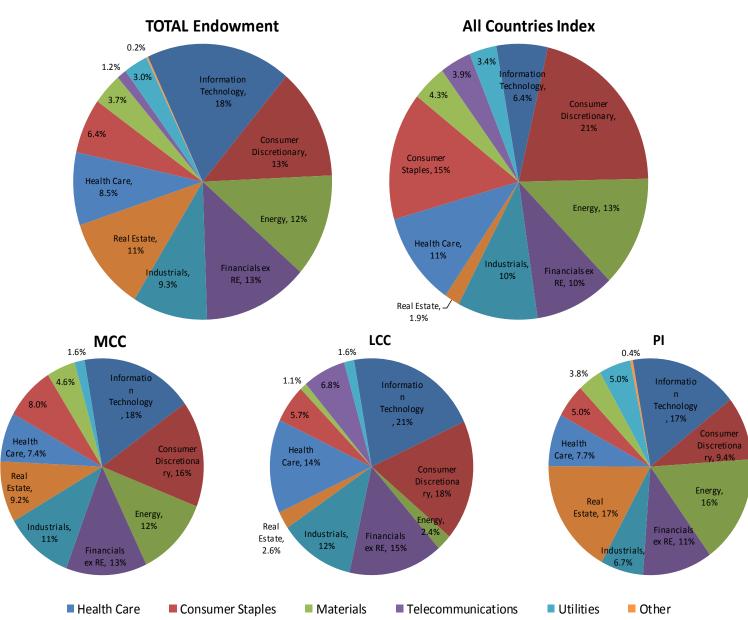
#### Largest Country Exposures As of December 31, 2015



|                   | МСС   | LCC   | PI    | TOTAL | GDP   | Global Mkt<br>Cap |
|-------------------|-------|-------|-------|-------|-------|-------------------|
| 1) United States  | 41.8% | 61.7% | 62.8% | 55.2% | 22.5% | 37.2%             |
| 2) China          | 7.2%  | 5.2%  | 5.0%  | 5.8%  | 13.4% | 8.7%              |
| 3) Japan          | 6.5%  | 5.9%  | 0.3%  | 4.2%  | 5.9%  | 8.0%              |
| 4) United Kingdom | 4.7%  | 2.4%  | 5.1%  | 4.1%  | 3.8%  | 5.4%              |
| 5) Canada         | 1.7%  | 1.1%  | 3.8%  | 2.3%  | 2.3%  | 2.7%              |
| 6) India          | 2.6%  | 1.4%  | 2.6%  | 2.2%  | 2.7%  | 2.4%              |
| 7) Brazil         | 2.9%  | 1.0%  | 1.9%  | 2.0%  | 3.0%  | 0.7%              |
| 8) South Korea    | 3.9%  | 1.1%  | 0.0%  | 1.7%  | 1.8%  | 2.0%              |
| 9) Australia      | 1.1%  | 1.3%  | 1.1%  | 1.2%  | 1.9%  | 1.7%              |
| 10) Hong Kong     | 1.8%  | 0.7%  | 0.9%  | 1.2%  | 0.4%  | 6.0%              |
| 11) France        | 2.1%  | 0.5%  | 0.6%  | 1.1%  | 3.6%  | 3.1%              |
| 12) Mexico        | 2.2%  | 0.4%  | 0.0%  | 0.9%  | 1.7%  | 0.6%              |
| 13) Germany       | 0.4%  | 0.7%  | 1.1%  | 0.7%  | 5.0%  | 2.9%              |
| 14) Spain         | 0.9%  | 0.0%  | 1.1%  | 0.7%  | 1.8%  | 1.0%              |
| 15) Switzerland   | 1.3%  | 0.3%  | 0.1%  | 0.6%  | 0.9%  | 2.4%              |
| 16) Indonesia     | 0.8%  | 0.0%  | 0.9%  | 0.6%  | 1.1%  | 0.6%              |
| 17) Rep of Congo  | 0.0%  | 0.0%  | 1.7%  | 0.6%  | 0.0%  | 0.0%              |
| 18) Singapore     | 0.9%  | 0.1%  | 0.5%  | 0.5%  | 0.4%  | 0.7%              |
| 19) Netherlands   | 0.6%  | 0.0%  | 0.8%  | 0.5%  | 1.1%  | 0.7%              |
| 20) Thailand      | 0.7%  | 0.0%  | 0.8%  | 0.5%  | 0.5%  | 0.6%              |
| 21) Italy         | 0.7%  | 0.3%  | 0.3%  | 0.5%  | 2.8%  | 0.9%              |
| 22) Russia        | 0.8%  | 0.2%  | 0.3%  | 0.4%  | 2.4%  | 0.6%              |

# Sector Exposure – $\beta$ adjusted As of December 31, 2015

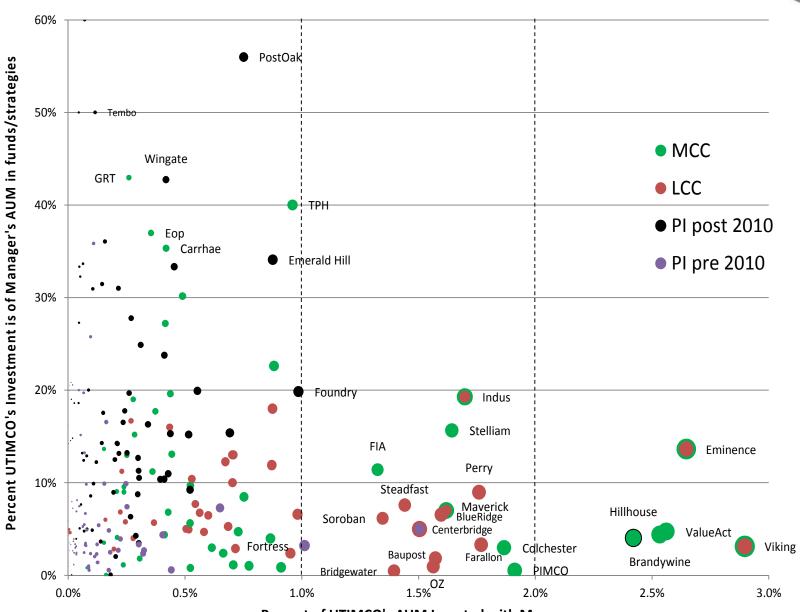
#### Endowments, excluding Fixed Income and NR commodities



43

29

#### Concentration Analysis As of December 31, 2015



Percent of UTIMCO's AUM Invested with Manager



#### **Top Ten Fixed Income and Equity**

| Fixed Income          | \$ (M)         | % of<br>AUM  |
|-----------------------|----------------|--------------|
| U.S. Government       | \$486          | 1.52%        |
| Japanese Sovereign    | 258            | 0.81%        |
| Mexican Sovereign     | 194            | 0.61%        |
| Argentinian Debt      | 186            | 0.58%        |
| Australian Sovereign  | 148            | 0.46%        |
| New Zealand Sovereign | 123            | 0.39%        |
| Malaysian Sovereign   | 88             | 0.28%        |
| Brazilian Sovereign   | 82             | 0.26%        |
| Italian Sovereign     | 77             | 0.24%        |
| Norwegian Sovereign   | <u>61</u>      | <u>0.19%</u> |
| TOTAL                 | <u>\$1,703</u> | <u>5.33%</u> |

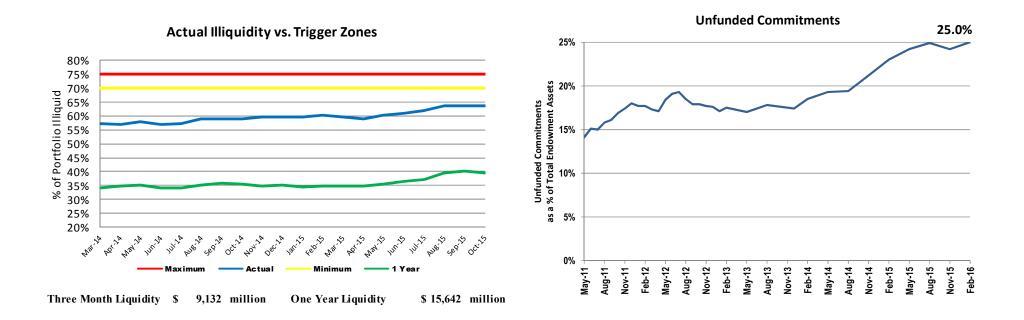
| Equity            | \$ (M)         | % of<br>AUM  |
|-------------------|----------------|--------------|
| Google (Alphabet) | \$226          | 0.71%        |
| Autodesk          | 207            | 0.65%        |
| Microsoft         | 195            | 0.61%        |
| Allergan PLC      | 175            | 0.55%        |
| JD.com            | 152            | 0.48%        |
| Time Warner Cable | 137            | 0.43%        |
| Recent IPO        | 134            | 0.42%        |
| Private consumer  |                |              |
| company           | 131            | 0.41%        |
| Amazon            | 131            | 0.41%        |
| Broadcom          | <u>113</u>     | <u>0.35%</u> |
| TOTAL             | <u>\$1,602</u> | <u>5.02%</u> |



## Illiquidity Risk

#### Endowment Fund Liquidity As of February 29, 2016





#### Private Investments Portfolio Rollforward Six Months Ended February 29, 2016



|                                    |                       | Beg FY 9/1/           | 15         |                |               |                        |             | FY'16 New ( | Commitments  | End                   | 2/29/16               |
|------------------------------------|-----------------------|-----------------------|------------|----------------|---------------|------------------------|-------------|-------------|--------------|-----------------------|-----------------------|
| \$ in millions                     | NAV                   | Unfunded              | #Funds     | Calls          | Distributions | Change in<br>Valuation | %<br>Return | # Funds     | \$ Committed | NAV                   | Unfunded              |
| Credit-Related Fixed Income        | \$958                 | \$371                 | 39         | \$119          | \$154         | \$23                   | 2.5%        | 0           | \$25         | \$946                 | \$353                 |
| Real Estate                        | 1,261                 | 1,487                 | 55         | 365            | 174           | 58                     | 4.1%        | 4           | 157          | 1,510                 | 1,286                 |
| Natural Resources                  | 1,911                 | 1,971                 | 70         | 369            | 119           | (90)                   | -4.7%       | 5           | 265          | 2,071                 | 1,858                 |
| Venture                            | 1,329                 | 588                   | 60         | 126            | 145           | (6)                    | -0.4%       | 4           | 69           | 1,304                 | 532                   |
| Other Developed Country Equity     | 1,863                 | 1,012                 | <u>94</u>  | <u>122</u>     | <u>238</u>    | <u>38</u>              | <u>2.1%</u> | <u>1</u>    | <u>95</u>    | <u>1,785</u>          | 1,035                 |
| Total Developed Country Equity     | 3,192                 | 1,600                 | 154        | 248            | 383           | 32                     | 1.0%        | 5           | 164          | 3,089                 | 1,567                 |
| Emerging Markets Equity            | <u>959</u>            | <u>703</u>            | <u>31</u>  | <u>105</u>     | <u>35</u>     | <u>(21)</u>            | -2.2%       | <u>5</u>    | <u>200</u>   | <u>1,008</u>          | <u>802</u>            |
| TOTAL<br>% of Endowment (PUF+ GEF) | <u>\$8,281</u><br>32% | <u>\$6,132</u><br>24% | <u>349</u> | <u>\$1,206</u> | <u>\$865</u>  | <u>\$2</u>             | 0.0%        | <u>19</u>   | <u>\$811</u> | <u>\$8,624</u><br>35% | <u>\$5,866</u><br>24% |

### **Co-Investment Pipeline and Portfolio**



|                                      | MC       | C         | LCO      | ;         | Real Es  | tate      | Natural Res | sources   | Private M | larkets   | Tot      | al        |
|--------------------------------------|----------|-----------|----------|-----------|----------|-----------|-------------|-----------|-----------|-----------|----------|-----------|
| FYTD 2016                            | <u>#</u> | <u>\$</u> | <u>#</u> | <u>\$</u> | <u>#</u> | <u>\$</u> | <u>#</u>    | <u>\$</u> | <u>#</u>  | <u>\$</u> | <u>#</u> | <u>\$</u> |
| <u>Pipeline:</u>                     |          |           |          |           |          |           |             |           |           |           |          |           |
| Reviewed                             | 3        | \$140     | 3        | \$175     | 9        | \$186     | 60          | \$1,558   | 7         | \$75      | 82       | \$2,134   |
| Interest                             | 2        | 90        | 2        | 150       | 7        | 166       | 11          | 333       | 3         | 37        | 25       | 776       |
| Committed                            | 2        | 90        | 0        | 0         | 2        | 31        | 1           | 50        | 2         | 17        | 7        | 188       |
| In Process                           | 0        | 0         | 0        | 0         | 0        | 0         | 8           | 233       | 1         | 3         | 9        | 236       |
| Since Inception                      | <u>#</u> | <u>\$</u> | <u>#</u> | <u>\$</u> | <u>#</u> | <u>\$</u> | <u>#</u>    | <u>\$</u> | <u>#</u>  | <u>\$</u> | <u>#</u> | <u>\$</u> |
| <u>Pipeline:</u>                     |          |           |          |           |          |           |             |           |           |           |          |           |
| Reviewed                             | 8        | \$390     | 11       | \$675     | 46       | \$1,111   | 173         | \$4,644   | 48        | \$1,010   | 286      | \$7,830   |
| Interest                             | 3        | 140       | 7        | 500       | 28       | 569       | 59          | 1,719     | 20        | 507       | 117      | 3,435     |
| Committed                            | 3        | 140       | 1        | 75        | 15       | 214       | 24          | 711       | 14        | 216       | 57       | 1,356     |
| In Process                           | 0        | 0         | 0        | 0         | 1        | 50        | 8           | 233       | 1         | 3         | 10       | 286       |
| Portfolio Returns (Since Inception): |          |           |          |           |          |           |             |           |           |           |          |           |
| Invested                             | 3        | \$136     | 1        | \$75      | 15       | \$176     | 24          | \$476     | 14        | \$206     | 57       | \$1,069   |
| Realized Proceeds                    | 0        | 0         | 0        | 0         | 6        | 41        | 2           | 166       | 2         | 26        | 10       | 233       |
| Total Value                          |          | 144       |          | 85        |          | 174       |             | 484       |           | 276       |          | 1,163     |
| Multiple                             |          | 1.06x     |          | 1.13x     |          | 1.22x     |             | 1.37x     |           | 1.47x     |          | 1.31x     |
| IRR                                  |          | 6.4% (1)  |          | 9%        |          | 10%       |             | 23%       |           | 17%       |          | 21%       |

(1) Return not annualized as holding period is less than one year.



## Leverage Risk

### Non-Insurance Related Internal Derivatives As of February 29, 2016 (in millions)



| Manager                  | Derivative Strategy  | Net Notional<br>Value<br>(\$ millions) | Activity from<br>previous report<br>(12/31/2015)<br>(\$ millions) |
|--------------------------|--|--|---|
| Developed Country Equity |  | <u> </u>                               |   |
| Japan Forw ards          | Sale of Japanese Yen forw ards to hedge the currency exposure in the MCC accounts                | (319)                                  | (153)   |
| Emerging Markets Equity  |  |  |   |
| MSCI Taiw an Sw ap       | Long MSCI Sw ap to increase exposure to Taiw an  | -                                      | (35)  |
| Hillhouse QFII FX hedges | China Forwards: Sale of Chinese Yuan forwards to hedge the currency exposure in the MCC accounts | (247)                                  | (4)   |

### External Manager Agency Account Derivatives As of February 29, 2016 (in millions)



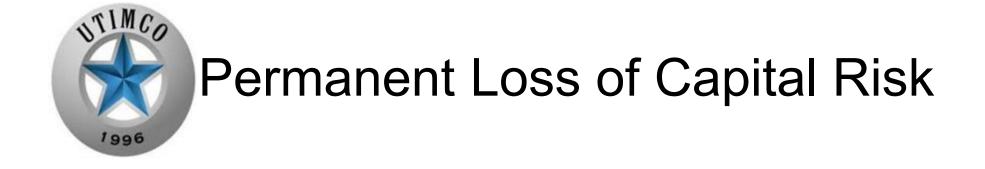
|                                       |  | Net Notional<br>Value |
|---------------------------------------|--|-----------------------|
| Manager<br>Investment Grade Fixed Inc | Derivative Strategy  | (\$ millions)         |
|                                       |  |                       |
| Brandywine                            | Currency forw ards used to hedge foreign currency exposure                                       | 142                   |
| Colchester                            | Currency forw ards used to hedge foreign currency exposure                                       | (19)                  |
| First International Advisors          | Currency forw ards used to hedge foreign currency exposure                                       | 98                    |
| PIMCO Global Bonds                    | Currency forw ards used to underw eight the US dollar  | 43                    |
|                                       | Long US and Non-US futures used to overw eight duration in Eurozone                              | 188                   |
|                                       | Long futures used to overw eight front end of US and UK yield curves                             | (29)                  |
|                                       | Receive Interest rate sw aps used to overw eight duration in the Eurozone and                    |                       |
|                                       | underw eight intermediate portion of the Japanese yield curve                                    | 437                   |
|                                       | Pay Interest rate sw aps used to overw eight duration in the Eurozone and                        |                       |
|                                       | underw eight intermediate portion of the Japanese yield curve                                    | (524)                 |
|                                       | Interest rate sw aps used to overw eight front end of US and UK yield curves                     | 47                    |
|                                       | Short/Written credit default swaps used to overweight credit risk                                | 254                   |
|                                       | Long/Purchased credit default sw aps used to underw eight credit risk                            | (19)                  |
|                                       | Written options used to increase portfolio yield   | (132)                 |
|                                       | Purchased options used to increase portfolio yield   | 60                    |
| Natural Resources                     |  |                       |
| Wellington Commodities SPV            | Exchange-traded commodity futures, options and/or swaps  | 241                   |
| Developed Equity                      |  |                       |
| Cantillon                             | Currency forw ard contracts for hedging purposes or to provide efficient<br>investment exposure. | (26)                  |
| Freinsen                              | Currency forw ard contracts for hedging purposes or to provide efficient                         |                       |
| Eminence                              | investment exposure.   | (81)                  |
| International Value Advisors          | Currency forw ard contracts for hedging purposes or to provide efficient<br>investment exposure. | (4)                   |
| Non-US Emerging Equity                |  |                       |
|                                       | Written covered call and put options to increase portfolio income and purchased                  |                       |
| Dynamo                                | put options to hedge portfolio   | 275                   |
| Saga Tree                             | Currency forw ard contracts for hedging purposes or to provide efficient investment exposure.    | (61)                  |
|                                       |  | (31)                  |

### OTC Derivative Counterparty Report As of February 29, 2016 (in millions)



\$ millions

|                                     |   |   |   | \$ m i                   | llions                      |  |                                 |  |
|-------------------------------------|---|---|---|--------------------------|-----------------------------|--|---------------------------------|--|
| Counterparty                        | S & P / Moody<br>Counterparty<br>Rating | Mark-to-<br>Market<br>Owed by<br>Broker | Mark-to-<br>Market<br>Owed by<br>UTIMCO | Total Mark-<br>to-Market | (Held)/Posted<br>Collateral | Total Mark-<br>to-Market<br>net of<br>Collateral | Percentage<br>of Total<br>Funds |  |
| BANK OF AMERICA                     | A-                                      | \$ 43.5                                 | \$ (41.8)                               | \$ 1.7                   | \$ (2.0)                    | \$ (0.3)   | 0.00%                           |  |
| CITIBANK NY                         | A-                                      | 25.5                                    | (26.8)                                  | (1.3)                    | (0.6)                       | (1.9)  | -0.01%                          |  |
| GOLDMAN SACHS                       | A-                                      | 24.4                                    | (24.7)                                  | (0.3)                    | (2.1)                       | (2.4)  | -0.01%                          |  |
| BNP PARIBAS                         | А                                       | 23.7                                    | (25.0)                                  | (1.3)                    | 1.0                         | (0.3)  | 0.00%                           |  |
| BANK OF NEW YORK                    | А                                       | 13.3                                    | (6.5)                                   | 6.8                      | -                           | 6.8  | 0.02%                           |  |
| BARCLAYS                            | A-                                      | 11.2                                    | (10.7)                                  | 0.5                      | (0.8)                       | (0.3)  | 0.00%                           |  |
| HSBC BK USA, NEW YORK               | А                                       | 10.0                                    | (3.4)                                   | 6.6                      | (6.1)                       | 0.5  | 0.00%                           |  |
| CITIBANK NA, LONDON                 | A-                                      | 7.4                                     | (5.0)                                   | 2.4                      | -                           | 2.4  | 0.01%                           |  |
| MACQUARIE BANK LTD, SYDNEY          | A-                                      | 6.5                                     | (6.9)                                   | (0.4)                    | 0.3                         | (0.1)  | 0.00%                           |  |
| MORGAN STANLEY                      | A-                                      | 2.1                                     | (0.3)                                   | 1.8                      | (2.4)                       | (0.6)  | 0.00%                           |  |
| DEUTSCHE BANK AG                    | А                                       | 0.7                                     | (0.1)                                   | 0.6                      | (1.0)                       | (0.4)  | 0.00%                           |  |
| CHASE MANHATTAN                     | A-                                      | 0.4                                     | (0.4)                                   | -                        | -                           | -  | 0.00%                           |  |
| J P MORGAN, CHASE                   | A-                                      | 0.3                                     | (0.4)                                   | (0.1)                    | -                           | (0.1)  | 0.00%                           |  |
| UBS AG, STAMFORD                    | А                                       | 0.3                                     | (0.3)                                   | -                        | 0.1                         | 0.1  | 0.00%                           |  |
| STANDARD & CHARTERED BK, LONDON     | A-                                      | 0.2                                     | (3.5)                                   | (3.3)                    | 2.4                         | (0.9)  | 0.00%                           |  |
| MELLON BANK                         | А                                       | 0.2                                     | (0.3)                                   | (0.1)                    | -                           | (0.1)  | 0.00%                           |  |
| CREDIT SUISSE FIRST                 | А                                       | 0.2                                     | (0.6)                                   | (0.4)                    | -                           | (0.4)  | 0.00%                           |  |
| ROYAL BANK OF SCOTLAND PLC          | AA-                                     | 0.1                                     | -                                       | 0.1                      | -                           | 0.1  | 0.00%                           |  |
| SOCIETE GENERALE, PARIS             | А                                       | -                                       | (0.1)                                   | (0.1)                    | -                           | (0.1)  | 0.00%                           |  |
| SOCIETE GENERALE, NEW YORK          | А                                       | -                                       | -                                       | -                        | -                           | -  | 0.00%                           |  |
| UBS A G, ZURICH                     | А                                       | -                                       | -                                       | -                        | -                           | -  | 0.00%                           |  |
| NOMURA GLOBAL FINANCIAL, NEW YORK   | A-                                      | -                                       | -                                       | -                        | -                           | -  | 0.00%                           |  |
| BARCLAYS CAPITAL, LONDON (BARCGB33) | A-                                      | -                                       | -                                       | -                        | -                           | -  | 0.00%                           |  |
| AUSTRALIA & NZ BANK LTD             | AA-                                     | -                                       | -                                       | -                        | -                           | -  | 0.00%                           |  |
| ROYAL BANK OF CANADA                | AA-                                     | -                                       | -                                       | -                        | -                           | -  | 0.00%                           |  |
| CS FIRST BOSTON GBL FOREIGN EXCH    | А                                       |   |   |                          |                             | -  | 0.00%                           |  |
| Grand Total                         |   | \$ 170.0                                | \$ (156.8)                              | \$ 13.2                  | \$ (11.2)                   | \$ 2.0   | 0.01%                           |  |



#### Permanent Loss of Capital As of December 31, 2015



|                                    |             |                      |             | <b>Dollars Invested</b> |            |               |                     |                  |
|------------------------------------|-------------|----------------------|-------------|-------------------------|------------|---------------|---------------------|------------------|
|                                    |             |                      | Investments | in Those                |            |               |                     | Annualized       |
|                                    | Total       | <b>Total Dollars</b> | Made        | Generating              | Realized   | Unrealized    |                     | Total Losses as  |
|                                    | Investments | Invested             | Generating  | Losses                  | Losses (in | Losses        | <b>Total Losses</b> | Percentage of    |
|                                    | Made        | (in Billions)        | Losses      | (in Billions)           | Millions)  | (in Millions) | (in Millions)       | Invested Capital |
| Cumulative through August 31, 2015 |             |                      |             |                         |            |               |                     |                  |
| More Correlated and Constrained    | 154         | \$33.8               | 31          | \$7.0                   | -\$978     | \$0           | -\$978              | 0.53%            |
| Less Correlated and Constrained    | 107         | 13.5                 | 22          | 1.6                     | -\$240     | -\$219        | -\$459              | 0.53%            |
| Private Investments                | 462         | 15.3                 | 99          | 1.9                     | -\$319     | -221          | -540                | 0.97%            |
| Total                              | 723         | \$62.6               | 152         | \$10.5                  | -\$1,537   | -\$440        | -\$1,977            | 0.61%            |
| Total                              | 723         | \$62.6               | 152         | \$10.5                  |            | -\$440        | -\$1,977            | 0.61%            |

### **Endowment Returns and Ratios**

Periods Ending February 29, 2016



|                                    |               |         |                |               | Weight        | ed Endov         | vment Re      | 1             | 1 year         |              | :                | 3 year        |              | 5 year           |               |              | 10 year          |              |              |                 |              |              |
|------------------------------------|---------------|---------|----------------|---------------|---------------|------------------|---------------|---------------|----------------|--------------|------------------|---------------|--------------|------------------|---------------|--------------|------------------|--------------|--------------|-----------------|--------------|--------------|
|                                    | Net A         | Asset   |                |               |               |                  |               |               |                |              |                  |               |              |                  |               |              |                  |              |              |                 |              |              |
|                                    |               | lue     |                | <u>vs.</u>    |               |                  |               | <u>vs.</u>    |                | <u>vs.</u>   |                  | <u>Sharpe</u> | <u>Info</u>  | <u>Standard</u>  | <u>Sharpe</u> | <u>Info</u>  |                  | Sharpe       | <u>Info</u>  | <u>Standard</u> |              |              |
| Endowments                         | <u>(in mi</u> | llions) | <u>1 year</u>  | <u>Bench</u>  | <u>3 year</u> | <u>vs. Bench</u> | <u>5 year</u> | <u>Bench</u>  | <u>10 year</u> | <u>Bench</u> | <u>Deviation</u> | <u>Ratio</u>  | <u>Ratio</u> | <u>Deviation</u> | <u>Ratio</u>  | <u>Ratio</u> | <u>Deviation</u> | <u>Ratio</u> | <u>Ratio</u> | Deviation       | <u>Ratio</u> | <u>Ratio</u> |
| More Correlated and Constrained    |               |         |                |               |               |                  |               |               |                |              |                  |               |              |                  |               |              |                  |              |              |                 |              |              |
| Fixed Income                       |               |         |                |               |               |                  |               |               |                |              |                  |               |              |                  |               |              |                  |              |              |                 |              |              |
| Investment Grade                   | \$            | 1,990   | -3.09%         | -3.92%        | -1.09%        | -0.98%           | 1.20%         | -0.17%        | 3.00%          | -0.97%       | 2.92%            | (1.08)        | (2.39)       | 3.07%            | (0.37)        | (0.54)       | 3.57%            | 0.31         | (0.10)       | 4.72%           | 0.37         | (0.41        |
| Credit Related                     |               | 26      | -1.77%         | 3.21%         | 1.46%         | 0.66%            | 6.34%         | 2.04%         | N/A            | N/A          | 7.10%            | (0.26)        | 0.93         | 8.22%            | 0.17          | 0.15         | 9.24%            | 0.68         | 0.36         | N/A             | N/A          | N/A          |
| Real Assets                        |               |         |                |               |               |                  |               |               |                |              |                  |               |              |                  |               |              |                  |              |              |                 |              |              |
| Real Estate                        |               | 562     | -15.96%        | -7.42%        | -0.69%        | -3.76%           | 2.57%         | -2.96%        | 2.13%          | 0.00%        | 12.97%           | (1.24)        | (1.84)       | 12.25%           | (0.06)        | (1.04)       | 15.57%           | 0.16         | (0.89)       | 22.21%          | 0.04         | 0.00         |
| Natural Resources                  |               | 836     | -35.67%        | -17.78%       | -19.52%       | -10.00%          | -15.21%       | -6.40%        | -6.00%         | -3.13%       | 21.46%           | (1.66)        | (1.77)       | 17.23%           | (1.14)        | (1.24)       | 18.08%           | (0.85)       | (0.97)       | 21.74%          | (0.33)       | (0.53)       |
| Equity                             |               |         |                |               |               |                  |               |               |                |              |                  |               |              |                  |               |              |                  |              |              |                 |              |              |
| Developed Markets                  |               | 3,060   | -13.75%        | -2.75%        | 7.55%         | 2.23%            | 8.15%         | 3.23%         | 4.90%          | 1.39%        | 12.83%           | (1.08)        | (0.67)       | 10.95%           | 0.68          | 0.57         | 12.01%           | 0.67         | 0.87         | 15.35%          | 0.24         | 0.37         |
| Emerging Markets                   |               | 2,210   | -15.83%        | 7.59%         | -3.04%        | 5.87%            | <u>-0.87%</u> | 4.54%         | 2.73%          | 0.90%        | 16.16%           | (0.98)        | 1.57         | 13.62%           | (0.23)        | 1.28         | 15.96%           | (0.06)       | 1.02         | 21.67%          | 0.07         | 0.20         |
| MCC subtotal                       |               | 8,684   | -15.18%        | <u>-2.00%</u> | <u>-0.83%</u> | <u>1.14%</u>     | <u>0.87%</u>  | <u>1.38%</u>  | <u>N/A</u>     | N/A          | 10.55%           | (1.44)        | (0.62)       | 8.97%            | (0.10)        | 0.42         | 10.51%           | 0.08         | 0.50         | N/A             | N/A          | N/A          |
| Less Correlated and Constrained    |               |         |                |               |               |                  |               |               |                |              |                  |               |              |                  |               |              |                  |              |              |                 |              |              |
| Fixed Income                       |               |         |                |               |               |                  |               |               |                |              |                  |               |              |                  |               |              |                  |              |              |                 |              |              |
| Investment Grade                   |               | 414     | -6.98%         | -1.01%        | 0.33%         | -1.26%           | 2.78%         | 1.70%         | N/A            | N/A          | 9.96%            | (0.71)        | (0.13)       | 7.50%            | 0.04          | (0.21)       | 7.32%            | 0.37         | 0.24         | N/A             | N/A          | N/A          |
| Credit Related                     |               | 1,068   | -4.99%         | 0.99%         | 3.19%         | 1.60%            | 5.16%         | 4.07%         | N/A            | N/A          | 4.51%            | (1.12)        | 0.30         | 4.31%            | 0.73          | 0.50         | 4.52%            | 1.12         | 1.38         | N/A             | N/A          | N/A          |
| Real Assets                        |               |         |                |               |               |                  |               |               |                |              |                  |               |              |                  |               |              |                  |              |              |                 |              |              |
| Real Estate                        |               | 2       | 1.48%          | 7.46%         | 3.73%         | 2.14%            | 2.68%         | 1.60%         | N/A            | N/A          | 1.48%            | 0.97          | 1.63         | 5.52%            | 0.67          | 0.46         | 5.76%            | 0.45         | 0.29         | N/A             | N/A          | N/A          |
| Natural Resources                  |               | 1       | -57.77%        | -51.79%       | -37.13%       | -38.71%          | -30.53%       | -31.61%       | N/A            | N/A          | 35.50%           | (1.63)        | (1.44)       | 26.46%           | (1.41)        | (1.44)       | 21.98%           | (1.39)       | (1.38)       | N/A             | N/A          | N/A          |
| Equity                             |               |         |                |               |               |                  |               |               |                |              |                  |               |              |                  |               |              |                  |              |              |                 |              |              |
| Developed Markets                  |               | 4,975   | -7.01%         | -1.04%        | 5.09%         | 3.50%            | 5.23%         | 4.15%         | N/A            | N/A          | 6.26%            | (1.13)        | (0.38)       | 6.05%            | 0.83          | 1.23         | 5.89%            | 0.87         | 1.55         | N/A             | N/A          | N/A          |
| Emerging Markets                   |               | 476     | <u>1.95%</u>   | 7.93%         | <u>5.63%</u>  | 4.04%            | <u>3.10%</u>  | 2.01%         | N/A            | N/A          | 7.01%            | 0.27          | 1.48         | 6.54%            | 0.85          | 0.73         | 5.81%            | 0.52         | 0.41         | N/A             | N/A          | N/A          |
| LCC subtotal                       |               | 6,936   | <u>-6.20%</u>  | <u>-0.22%</u> | <u>4.20%</u>  | <u>2.62%</u>     | <u>4.65%</u>  | <u>3.57%</u>  | <u>5.55%</u>   | <u>5.43%</u> | 5.73%            | (1.09)        | (0.10)       | 5.27%            | 0.79          | 1.28         | 4.99%            | 0.92         | 1.91         | 6.23%           | 0.69         | 2.31         |
| Private Investments                |               |         |                |               |               |                  |               |               |                |              |                  |               |              |                  |               |              |                  |              |              |                 |              |              |
| Fixed Income                       |               |         |                |               |               |                  |               |               |                |              |                  |               |              |                  |               |              |                  |              |              |                 |              |              |
| Investment Grade                   |               | -       | N/A            | N/A           | N/A           | N/A              | N/A           | N/A           | N/A            | N/A          | N/A              | N/A           | N/A          | N/A              | N/A           | N/A          | N/A              | N/A          | N/A          | N/A             | N/A          | N/A          |
| Credit Related                     |               | 947     | 6.35%          | -5.26%        | 10.66%        | -3.30%           | 10.51%        | -3.43%        | N/A            | N/A          | 2.26%            | 2.79          | (0.63)       | 2.55%            | 4.16          | (0.63)       | 3.63%            | 2.87         | (0.59)       | N/A             | N/A          | N/A          |
| Real Assets                        |               |         |                |               |               |                  |               |               |                |              |                  |               |              |                  |               |              |                  |              |              |                 |              |              |
| Real Estate                        |               | 1,510   | 17.79%         | 6.18%         | 17.41%        | 3.46%            | 11.36%        | -2.58%        | N/A            | N/A          | 5.92%            | 3.00          | 0.87         | 6.82%            | 2.55          | 0.49         | 6.45%            | 1.75         | (0.37)       | N/A             | N/A          | N/A          |
| Natural Resources                  |               | 2,070   | -5.27%         | -16.89%       | 5.46%         | -8.50%           | 13.29%        | -0.66%        | N/A            | N/A          | 4.39%            | (1.21)        | (1.80)       | 6.81%            | 0.79          | (1.07)       | 10.11%           | 1.31         | (0.06)       | N/A             | N/A          | N/A          |
| Equity                             |               |         |                |               |               |                  |               |               |                |              |                  |               |              |                  |               |              |                  |              |              |                 |              |              |
| Developed Markets                  |               | 3,089   | 20.04%         | 8.42%         | 19.09%        | 5.13%            | 17.22%        | 3.27%         | N/A            | N/A          | 11.63%           | 1.72          | 0.87         | 7.91%            | 2.41          | 0.73         | 6.79%            | 2.52         | 0.52         | N/A             | N/A          | N/A          |
| Emerging Markets                   |               | 1,008   | 3.23%          | -8.38%        | 2.93%         | -11.03%          | 2.00%         | -11.94%       | N/A            | N/A          | 7.65%            | 0.42          | (0.76)       | 5.41%            | 0.53          | (1.52)       | 5.13%            | 0.37         | (1.78)       | N/A             | N/A          | N/A          |
| Private Investment subtotal        |               | 8,624   | <u>9.88%</u>   | <u>-1.74%</u> | <u>12.94%</u> | <u>-1.02%</u>    | <u>12.70%</u> | <u>-1.25%</u> | <u>11.61%</u>  | 0.31%        | 5.85%            | 1.68          | (0.24)       | 4.54%            | 2.84          | (0.20)       | 4.26%            | 2.96         | (0.25)       | 6.41%           | 1.62         | 0.05         |
| Total Before Insurance, Tactical,  |               |         |                |               |               |                  |               |               |                |              |                  |               |              |                  |               |              |                  |              |              |                 |              |              |
| Hedging Derivatives and Gold       | 2             | 4,244   | <u>-4.97%</u>  | <u>-1.06%</u> | <u>4.79%</u>  | <u>1.23%</u>     | <u>5.35%</u>  | <u>1.56%</u>  | 5.36%          | <u>1.93%</u> | 4.89%            | (1.03)        | (0.37)       | 5.09%            | 0.93          | 0.55         | 5.72%            | 0.92         | 0.71         | 8.22%           | 0.50         | 0.84         |
| Insurance, Tactical and Hedging    |               |         |                |               |               |                  |               |               |                |              |                  |               |              |                  |               |              |                  |              |              |                 |              |              |
| Derivatives Impact on Total Return |               | -       | -0.01%         | -0.01%        | -0.12%        | -0.12%           | -0.48%        | -0.48%        | -0.23%         | -0.23%       |                  |               |              |                  |               |              |                  |              |              |                 |              |              |
| Gold Impact on Total Return        |               | 554     | 0.12%          | 0.12%         | -0.41%        | -0.41%           | -0.23%        | -0.23%        | -0.10%         | -0.10%       |                  |               |              |                  |               |              |                  |              |              |                 |              |              |
|                                    | <u> </u>      |         |                |               |               |                  |               |               |                |              | 4 700/           | (1.02)        | (0.24)       | F 0394           | 0.04          | 0.22         | F F30/           | 0.02         | 0.27         | 0.15%           | 0.40         | 0.00         |
| Grand Total                        | \$2           | 4,798   | - <b>4.86%</b> | <u>-0.94%</u> | 4.26%         | <u>0.70%</u>     | <u>4.63%</u>  | <u>0.85%</u>  | <u>5.03%</u>   | <u>1.60%</u> | 4.78%            | (1.03)        | (0.34)       | 5.02%            | 0.84          | 0.33         | 5.57%            | 0.82         | 0.37         | 8.15%           | 0.46         | 0.66         |



### ITF

## ITF Returns and Ratios

#### Periods Ending February 29, 2016

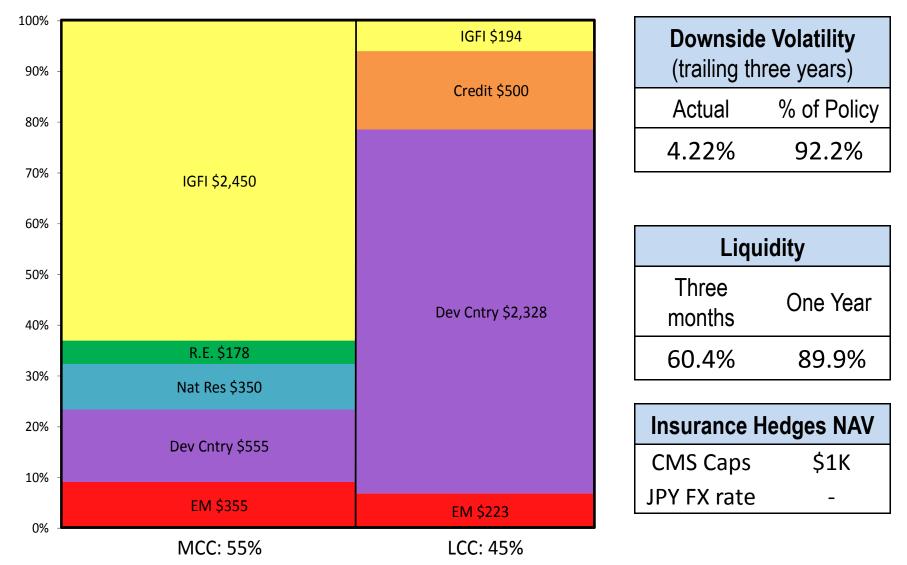


| r                                  |    |          | ITF Returns   |                     |               |                     |               |                     |                |                     | 1 year    |        |        | 2voar     |        |        | Eveer     |        |        | 10 year   |        |        |
|------------------------------------|----|----------|---------------|---------------------|---------------|---------------------|---------------|---------------------|----------------|---------------------|-----------|--------|--------|-----------|--------|--------|-----------|--------|--------|-----------|--------|--------|
|                                    |    |          |               |                     |               | ITF Re              | turns         |                     |                |                     |           | 1 year |        | 3         | year   |        | 5         | 5 year |        | 1         | 0 year |        |
|                                    |    | Asset    |               | 1/5                 |               | VC                  |               | VC                  |                |                     | Standard  | Sharpo | Info   | Standard  | Sharpo | Info   | Standard  | Sharpe | Info   | Standard  | Sharpo | Info   |
| ITF                                | -  | illions) | <u>1 year</u> | <u>vs.</u><br>Bench | <u>3 year</u> | <u>vs.</u><br>Bench | <u>5 year</u> | <u>vs.</u><br>Bench | <u>10 year</u> | <u>vs.</u><br>Bench | Deviation |        | Ratio  | Deviation | Ratio  | Ratio  | Deviation | Ratio  | Ratio  | Deviation | Ratio  | Ratio  |
| More Correlated and Constrained    |    |          |               |                     |               |                     |               |                     |                |                     |           |        |        |           |        |        |           |        |        |           |        |        |
| Fixed Income                       |    |          |               |                     |               |                     |               |                     |                |                     |           |        |        |           |        |        |           |        |        |           |        |        |
| Investment Grade                   | \$ | 2,450    | -2.60%        | -3.43%              | -0.37%        | -0.26%              | 2.21%         | 0.85%               | 4.06%          | 0.09%               | 3.39%     | (0.78) | (2.55) | 3.65%     | (0.11) | (0.16) | 3.81%     | 0.56   | 0.55   | 5.31%     | 0.75   | 0.05   |
| Credit Related                     |    | -        | N/A           | N/A                 | N/A           | N/A                 | N/A           | N/A                 | N/A            | N/A                 | N/A       | N/A    | N/A    | N/A       | N/A    | N/A    | N/A       | N/A    | N/A    | N/A       | N/A    | N/A    |
| Real Assets                        |    |          |               |                     |               |                     |               |                     |                |                     |           |        |        |           |        |        |           |        |        |           |        |        |
| Real Estate                        |    | 178      | -15.95%       | -7.40%              | -0.66%        | -3.74%              | 2.60%         | -2.93%              | 1.94%          | -0.18%              | 12.97%    | (1.23) | (1.83) | 12.25%    | (0.06) | (1.03) | 15.65%    | 0.16   | (0.87) | 22.07%    | 0.08   | (0.06) |
| Natural Resources                  |    | 210      | -35.71%       | -17.82%             | -19.51%       | -10.00%             | -15.17%       | -6.35%              | -5.44%         | -2.57%              | 21.44%    | (1.67) | (1.77) | 17.19%    | (1.14) | (1.24) | 17.98%    | (0.85) | (0.97) | 21.31%    | (0.26) | (0.47) |
| Equity                             |    |          |               |                     |               |                     |               |                     |                |                     |           |        |        |           |        |        |           |        |        |           |        |        |
| Developed Markets                  |    | 555      | -13.68%       | -2.68%              | 7.60%         | 2.28%               | 8.18%         | 3.26%               | 5.73%          | 2.33%               | 12.82%    | (1.07) | (0.65) | 10.96%    | 0.69   | 0.58   | 11.99%    | 0.68   | 0.87   | 15.07%    | 0.37   | 0.69   |
| Emerging Markets                   |    | 356      | -15.55%       | 7.86%               | <u>-3.29%</u> | <u>5.62%</u>        | <u>-0.97%</u> | 4.44%               | <u>2.45%</u>   | 0.62%               | 17.03%    | (0.92) | 1.53   | 13.44%    | (0.25) | 1.12   | 15.94%    | (0.07) | 0.95   | 21.84%    | 0.11   | 0.14   |
| MCC subtotal                       |    | 3,749    | <u>-9.21%</u> | <u>-2.41%</u>       | <u>-0.81%</u> | <u>0.35%</u>        | <u>1.13%</u>  | <u>0.74%</u>        | <u>N/A</u>     | N/A                 | 5.98%     | (1.55) | (1.28) | 5.75%     | (0.15) | 0.21   | 6.96%     | 0.15   | 0.46   | N/A       | N/A    | N/A    |
| Less Correlated and Constrained    |    |          |               |                     |               |                     |               |                     |                |                     |           |        |        |           |        |        |           |        |        |           |        |        |
| Fixed Income                       |    |          |               |                     |               |                     |               |                     |                |                     |           |        |        |           |        |        |           |        |        |           |        |        |
| Investment Grade                   |    | 194      | -6.98%        | -1.01%              | 0.33%         | -1.26%              | 2.79%         | 1.70%               | N/A            | N/A                 | 9.96%     | (0.71) | (0.13) | 7.50%     | 0.04   | (0.21) | 7.32%     | 0.37   | 0.24   | N/A       | N/A    | N/A    |
| Credit Related                     |    | 500      | -4.99%        | 0.99%               | 3.19%         | 1.60%               | 5.16%         | 4.07%               | N/A            | N/A                 | 4.51%     | (1.12) | 0.30   | 4.31%     | 0.73   | 0.50   | 4.52%     | 1.12   | 1.38   | N/A       | N/A    | N/A    |
| Real Assets                        |    |          |               |                     |               |                     |               |                     |                |                     |           |        |        |           |        |        |           |        |        |           |        |        |
| Real Estate                        |    | 1        | 1.48%         | 7.46%               | 3.73%         | 2.14%               | 2.68%         | 1.60%               | N/A            | N/A                 | 1.48%     | 0.97   | 1.63   | 5.52%     | 0.67   | 0.46   | 5.76%     | 0.45   | 0.29   | N/A       | N/A    | N/A    |
| Natural Resources                  |    | -        | -57.77%       | -51.79%             | -37.13%       | -38.71%             | -30.53%       | -31.61%             | N/A            | N/A                 | 35.50%    | (1.63) | (1.44) | 26.46%    | (1.41) | (1.44) | 21.98%    | (1.39) | (1.38) | N/A       | N/A    | N/A    |
| Equity                             |    |          |               |                     |               |                     |               |                     |                |                     |           |        |        |           |        |        |           |        |        |           |        |        |
| Developed Markets                  |    | 2,328    | -7.06%        | -1.08%              | 5.03%         | 3.44%               | 5.19%         | 4.11%               | N/A            | N/A                 | 6.26%     | (1.14) | (0.39) | 6.05%     | 0.82   | 1.21   | 5.89%     | 0.87   | 1.54   | N/A       | N/A    | N/A    |
| Emerging Markets                   |    | 222      | <u>1.95%</u>  | <u>7.93%</u>        | 5.63%         | <u>4.04%</u>        | <u>3.10%</u>  | 2.02%               | <u>N/A</u>     | N/A                 | 7.01%     | 0.27   | 1.48   | 6.54%     | 0.85   | 0.73   | 5.81%     | 0.52   | 0.41   | N/A       | N/A    | N/A    |
| LCC subtotal                       |    | 3,245    | <u>-6.23%</u> | <u>-0.26%</u>       | <u>4.17%</u>  | <u>2.58%</u>        | <u>4.62%</u>  | <u>3.54%</u>        | <u>5.58%</u>   | 5.46%               | 5.72%     | (1.10) | (0.12) | 5.27%     | 0.78   | 1.25   | 4.99%     | 0.91   | 1.89   | 6.29%     | 0.88   | 2.31   |
| Total Before Insurance, Tactical,  |    |          |               |                     |               |                     |               |                     |                |                     |           |        |        |           |        |        |           |        |        |           |        |        |
| Hedging Derivatives and Gold       |    | 6,994    | <u>-7.82%</u> | <u>-1.45%</u>       | <u>1.31%</u>  | <u>1.26%</u>        | <u>2.60%</u>  | <u>1.79%</u>        | <u>3.87%</u>   | <u>2.00%</u>        | 4.89%     | (1.61) | (0.94) | 4.90%     | 0.26   | 0.82   | 5.71%     | 0.44   | 1.25   | 8.28%     | 0.46   | 1.29   |
| Insurance, Tactical and Hedging    |    |          |               |                     |               |                     |               |                     |                |                     |           |        |        |           |        |        |           |        |        |           |        |        |
| Derivatives Impact on Total Return |    | -        | -0.01%        | -0.01%              | -0.02%        | -0.02%              | -0.27%        | -0.27%              | -0.13%         | -0.13%              |           |        |        |           |        |        |           |        |        |           |        |        |
| Gold Impact on Total Return        |    | 140      | <u>0.16%</u>  | <u>0.16%</u>        | <u>-0.39%</u> | <u>-0.39%</u>       | <u>-0.23%</u> | <u>-0.23%</u>       | <u>0.00%</u>   | <u>0.00%</u>        |           |        |        |           |        |        |           |        |        |           |        |        |
| Grand Total                        | \$ | 7,134    | <u>-7.67%</u> | <u>-1.30%</u>       | <u>0.90%</u>  | <u>0.85%</u>        | <u>2.10%</u>  | <u>1.30%</u>        | <u>3.75%</u>   | <u>1.87%</u>        | 4.78%     | (1.62) | (0.98) | 4.82%     | 0.18   | 0.60   | 5.64%     | 0.36   | 0.91   | 8.26%     | 0.44   | 1.22   |

ITF

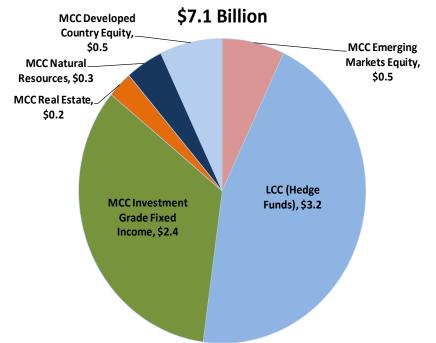


ITF NAV: \$7,134M

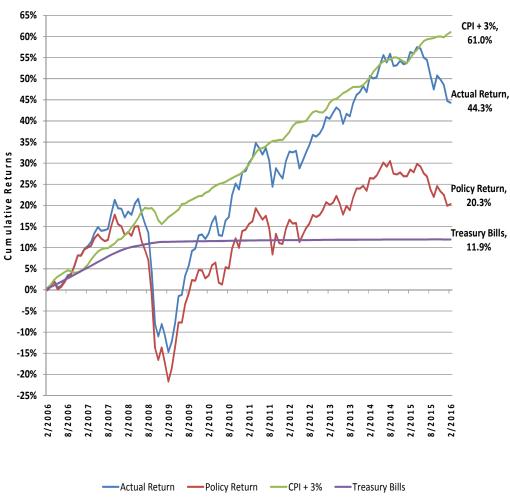


ITF





| Investment Returns        |              |              |             |         |             |  |  |  |
|---------------------------|--------------|--------------|-------------|---------|-------------|--|--|--|
|                           | FYTD         | 1 Year       | 3 Years     | 5 Years | 7 Years     |  |  |  |
| Actual Return             | -4.3%        | -7.7%        | 0.9%        | 2.1%    | 3.8%        |  |  |  |
| Benchmark Return          | <u>-2.8%</u> | <u>-6.4%</u> | <u>0.1%</u> | 0.8%    | <u>1.9%</u> |  |  |  |
| Value Add                 | -1.5%        | -1.3%        | 0.8%        | 1.3%    | 1.9%        |  |  |  |
| Actual Standard Deviation |              | 4.8%         | 4.8%        | 5.6%    | 8.3%        |  |  |  |
| Sharpe Ratio              |              | -1.6         | 0.2         | 0.4     | 0.4         |  |  |  |
| Information Ratio         |              | -1.0         | 0.6         | 0.9     | 1.2         |  |  |  |



Statistics for periods longer than a year are annualized



## **Contract Update**



#### February 1, 2016 through April 15, 2016 New Contracts, Leases, and Other Commercial Arrangements (Total Obligation per Agreement greater than \$50,000)

| Agreement   | Purpose  | Contract Term   | Annual<br>Amount                  |
|---|--|---|-----------------------------------|
| Burgiss Group   | Private i - Portfolio management system for Private Markets  | 4/12/2016 - 4/11/2017                                     | \$66,950                          |
| Cambridge Associates, LLC   | Access to proprietary database, research reports and working<br>papers on investment and financial issues, and other<br>miscellaneous communications and inquiries | 1/18/2016 - 1/17/2017                                     | \$52,500                          |
| AT&T Executive Eduation and<br>Conference Center - The<br>University of Texas at Austin | UTIMCO's 20th Anniversary Banquet Event Order  | 3/3/2016 - 3/4/2016                                       | \$63,563                          |
| Jamesbeck   | Conduct search for Investment Professionals  | Six month agreement<br>(agreement dated<br>February 2016) | \$75,000 retainer for each search |
| Ferguson Partners   | Conduct search for Investment Professionals  | Four month agreement<br>(agreement dated March<br>2016)   | \$75,000 retainer for each search |
| Nunnally & Company  | Consultation for Mission, Vision and Value initiative  | Completion of project                                     | \$53,300 + travel<br>expenses     |

#### Agenda Item UTIMCO Board of Directors Meeting May 5, 2016

| Agenda Item:  | Scenario Discussion  |
|---------------|--|
| Developed By: | Zimmerman, Yoeli   |
| Presented By: | Zimmerman, Yoeli   |
| Type of Item: | Information Item   |
| Description:  | Mr. Zimmerman and Dr. Yoeli will discuss with the Board various Scenarios. |
| Reference:    | Scenario Discussion presentation   |



#### Scenario Discussion May 5, 2016

### Summary



It's tough to make predictions, especially about the future - Yogi Berra

- Staff utilizes projections in the construction of strategic asset allocation (Policy Portfolio) and ongoing portfolio management
- While a "base case" projection is the starting point for decision making, various alternative scenarios are systematically assessed
- In evaluating different scenarios, various dimensions need to be considered:
  - Probability
  - Severity
  - Onset
  - Duration
- A fundamental challenge with different scenarios is that the optimal portfolio for each scenario is typically quite different, and the ability to quickly move the portfolio is limited

### Agenda



- I. Base Case
- II. Economic Environments
  - All-Weather Portfolio
- III. Backward-Looking scenarios
  - Past unfavorable economic environments
  - A long bear market
  - Past short-term large shocks
- IV. Forward-Looking scenarios
  - Probable / possible unfavorable economic environments
  - Short-term large shocks

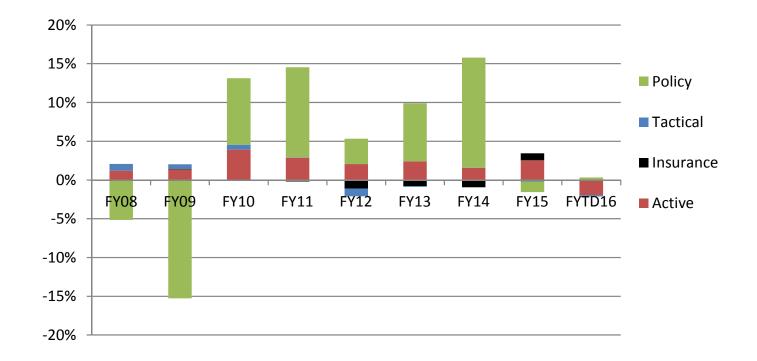


### Base Case

Importance of a Correct Asset Mix



• Getting the correct long-term asset mix, which is reflected in the Policy Portfolio, is responsible for 76% of annual returns on average.



#### Market Return Projections: (Three-year horizon; Real Returns)

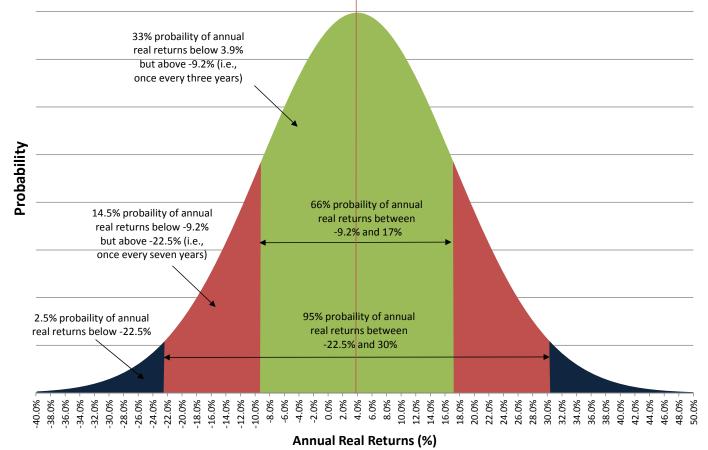


| Asset Class  |             | 45 year      | -    | UTIMCO<br>2015 | UTIMCO<br>2016 | UTIMCO Staff |       |                |
|--------------|-------------|--------------|------|----------------|----------------|--------------|-------|----------------|
|              |             | Actual       |      |                |                | Median       | Range |                |
|              | IGFI        | US Inv Grade | 3.4% | 0.5%           | 0.75%          | 0.75%        | 0.2%  | (2.3%) - 1.2%  |
| Fixed Income | Credit      | Public       | 0.3% |                | 2.0%           | 2.0%         | 1.2%  | (1.3%) - 3.2%  |
|              |             | Private      |      |                | 5.5%           | 5.0%         | 5.2%  | (0.3%) - 6.7%  |
| Real Assets  | Real Estate | Public       | 4.6% |                | 3.75%          | 3.75%        | 2.2%  | (1.8%) - 6.2%  |
|              |             | Private      |      | 5.5%           | 6.5%           | 6.5%         | 5.2%  | 1.2% - 8.2%    |
|              | Commodities | Commodities  | 1.7% |                | 2.0%           | 1.5%         | 1.7%  | (1.8%) - 2.9%  |
|              | NR Equity   | Public       |      |                | 3.25%          | 3.25%        | 2.7%  | (0.8%) - 7.2%  |
|              |             | Private      |      | 6.6%           | 7.0%           | 6.5%         | 5.2%  | 2.2% - 13.2%   |
| Equity       | Dev Equity  | Public       | 5.1% | 6.0%           | 3.25%          | 2.5%         | 2.2%  | (1.8%) - 4.2%  |
|              |             | Private      |      | 12.8%          | 6.75%          | 5.75%        | 5.2%  | (0.8%) - 10.2% |
|              | EM Equity   | Public       | 6.5% | 7.5%           | 4.5%           | 4.0%         | 3.2%  | (0.8%) - 6.5%  |
|              |             | Private      |      |                | 6.75%          | 6.75%        | 4.7%  | 2.2% - 9.2%    |
| LCC          | LCC         | LCC          |      | 4.8%           | 3.75%          | 3.25%        | 1.7%  | (1.5%) - 4.3%  |

- The Base Case assumptions for each asset class result in expected real returns of 3.9% for the FY2016 Policy portfolio, or 5.4% nominal returns, as we assume an inflation rate of 1.5%
  - The range of Staff's nominal estimates was between 1.7% and 6.8%, with the median being 4.7%
  - Using 2015 assumptions, nominal expected returns would have been 5.8%
- This does not include staff's value-add



While the projected returns in the base case are 3.9% real (or 5.4% nominal) the range of probable outcomes in any given year is very wide

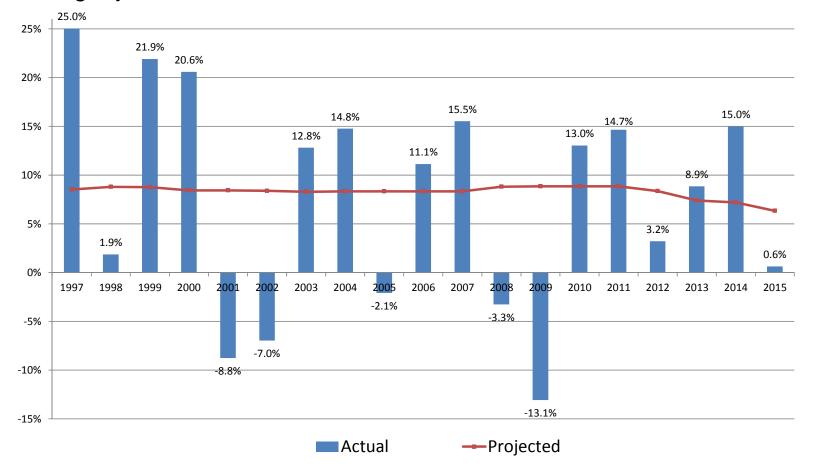


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8

 Over the past nineteen fiscal years, actual returns have exceeded projected returns in eleven years and lagged projected returns in eight years

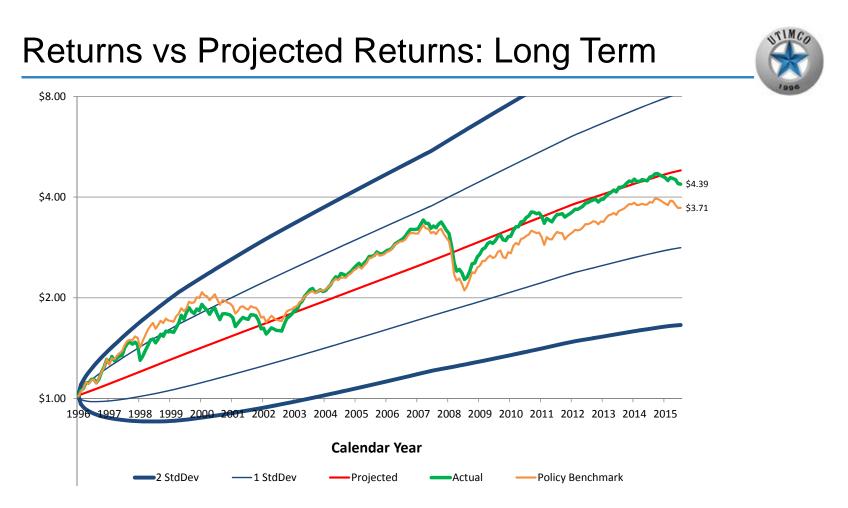


#### Market Return Projections: (Ten-year horizon; Real Returns)



| Asset Class  |             | JP Morgan    | GMO       | 45 year | Yale | UTIMCO Staff |       |                |
|--------------|-------------|--------------|-----------|---------|------|--------------|-------|----------------|
|              |             | JF MOIYAII   | (7 years) | Actual  |      | Median       | Range |                |
|              | IGFI        | US Inv Grade | 1.0%      | -2.6%   | 3.4% | 0.5%         | 0.5%  | (1.6%) - 1.9%  |
| Fixed Income | Credit      | Public       | 4.0%      | 2.4%    | 0.3% |              | 2.5%  | 0.4% - 3.4%    |
|              |             | Private      |           |         |      |              | 5.5%  | (1.1%) - 7.4%  |
|              | Real Estate | Public       | 3.8%      |         | 4.6% |              | 3.5%  | 0.4% - 6.4%    |
| Real Assets  |             | Private      | 3.8%      |         |      | 5.5%         | 6.5%  | 0.4% - 7.4%    |
|              | Commodities | Commodities  | 1.0%      |         | 1.7% |              | 1.5%  | (0.6%) - 3.9%  |
|              | NR Equity   | Public       |           |         |      |              | 3.5%  | (0.6%) - 7.4%  |
|              |             | Private      |           | 4.8%    |      | 6.6%         | 7.0%  | (0.1%) - 14.9% |
| Equity       | Dev Equity  | Public       | 5.25%     | 0.2%    | 5.1% | 6.0%         | 3.5%  | (1.1%) - 6.4%  |
|              |             | Private      | 6.25%     |         |      | 12.8%        | 7.5%  | (0.6%) - 10.9% |
|              | EM Equity   | Public       | 7.75%     | 4.6%    | 6.5% | 7.5%         | 4.0%  | 1.4% - 5.9%    |
|              |             | Private      |           |         |      |              | 4.8%  | 1.4% - 9.9%    |
| LCC          | LCC         | LCC          | 3.0%      |         |      | 4.8%         | 2.0%  | (1.4%) - 3.7%  |

- Using UTIMCO Staff's median assumptions for each asset class result in expected real returns of 3.8% for the FY2016 Policy portfolio, or 6.3% nominal returns, as we assume an inflation rate of 2.5%
  - This is before any Value-Add
  - The range of Staff's estimates was between 2.3% and 8.1% nominal returns



- The expected performance, even for a 20-year window, is also very wide
- The 66% confidence interval is having annual returns between 5.4% and 11.3% (between 3.2% and 9.1% above the risk-free rate)
- The Policy portfolio is currently ½ standard deviation away from expectations in two out of three cases it would have been further away from the red line

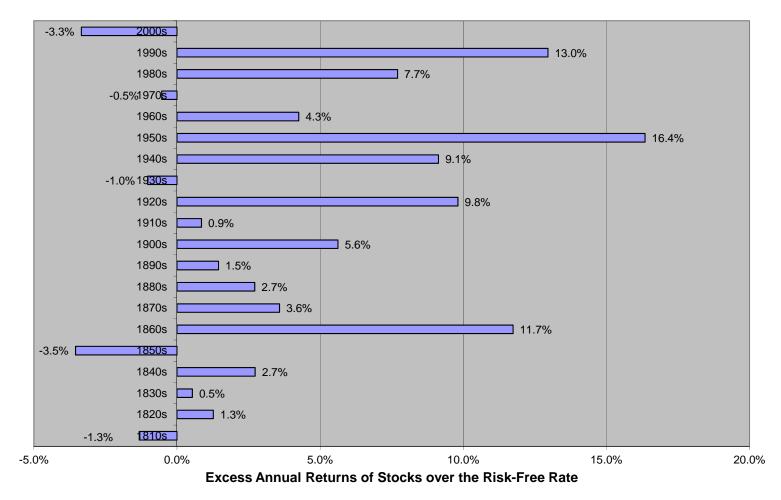


- As long-term investors, we care about expected terminal value (say, value of an investment in 10 years) and the uncertainty about this terminal value
  - Finance tends to use volatility, which is how much prices change over time, as a proxy for the uncertainty in terminal value; however, these two concepts are not the same
- It is hard to predict returns for most investments even on an aggregate level for an entire asset class, and even on a relatively long (10 year) horizon
  - In the past 200 years, US stock returns ranged from -45% real to 58% real
  - In 25% of the years, returns were less than -6.5% real, and in 25% of the years, they were more than 16.6%
  - Using 10-year horizons reduces the uncertainty, but the range is still very wide

#### Real Returns of US Stocks per Decade



• While US stocks have produced 4% real returns "on average", in 5 of 20 decades they have generated negative real returns over the entire decade





# **Economic Environments**

#### **Economic Environments**

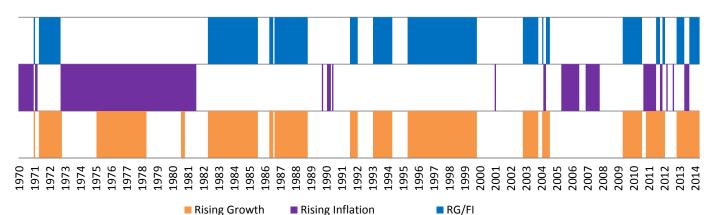


- Common sense suggests that the economic environment affects the returns of different asset classes. There is also substantial empirical evidence supporting this view.
- Research pioneered by Bridgewater suggests that two key variables are the growth rate and the inflation rate; furthermore, what really matters is not the absolute level of growth or inflation, but rather how they are changing – i.e., whether growth is rising and falling and whether inflation is rising or falling (specifically, are they above or below their ten-year trailing average).

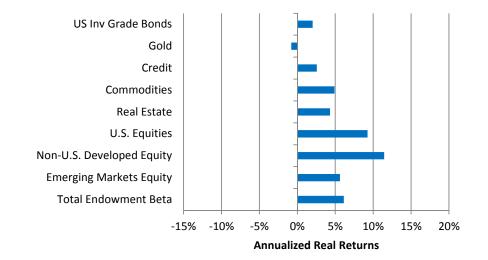
|                                   | % of Time        |                  |  |  |
|-----------------------------------|------------------|------------------|--|--|
| Economic Environment              | <u>1923-2015</u> | <u>1970-2015</u> |  |  |
| Rising Growth, Falling Inflation  | 29%              | 40%              |  |  |
| Rising Growth, Rising Inflation   | 21%              | 11%              |  |  |
| Falling Growth, Falling Inflation | 28%              | 28%              |  |  |
| Falling Growth, Rising Inflation  | 22%              | 21%              |  |  |

## Rising Growth with Falling Inflation (RG/FI)



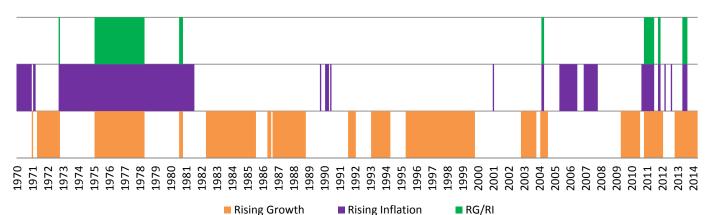


- RG/FI was the most common combination, occurring 40% of the time during the time period sampled
- Endowment beta real return would have been 6.1% on average in those periods
- All asset classes had positive real returns, with equity being the best asset class

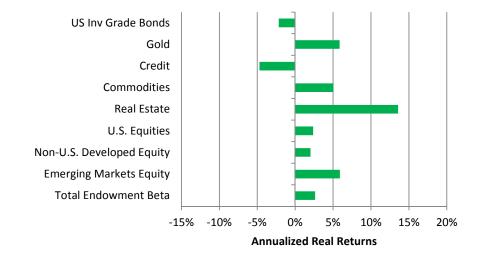


## Rising Growth with Rising Inflation (RG/RI)



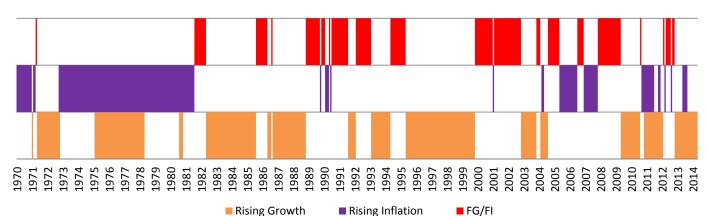


- RG/RI was the least common combination, occurring only 11% of the time in the 1970-2015 period
- Based on history, endowment beta real returns would have been 2.6%
- Real Assets seem to be the best asset class in this environment

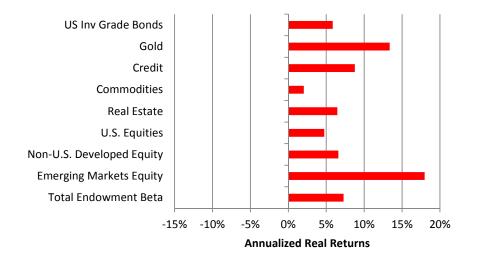


## Falling Growth with Falling Inflation (FG/FI)



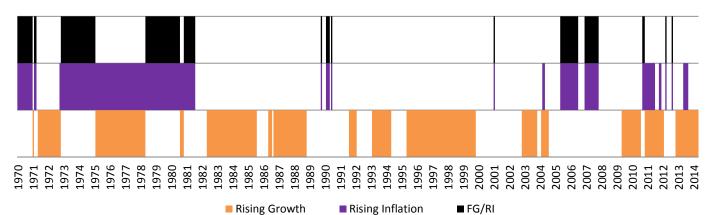


- FG/FI occurred 28% of the time period measured
- Based on history, FG/FI is the best investment environment, as all asset classes had positive real returns and Endowment beta real returns would have been 7.3%
- However, this is just on average; some of the worst periods for US stock markets were in FG/FI environments:
  - Most of the Great Depression: 3/1930 2/1933
  - Most of the Financial Crisis: 10/2008 3/2009

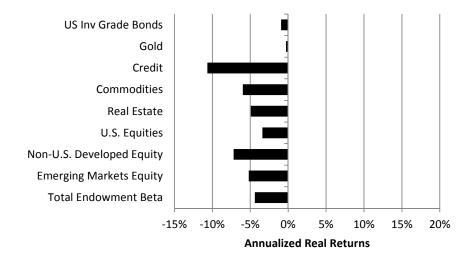


## Falling Growth with Rising Inflation (FG/RI)





- FG/RI occurred 21% of the time period measured
- Endowment beta real returns would have been negative (4.4%) on average in those periods
- Based on history, no asset class had positive real returns – the best places to "hide" were gold and high-quality fixed income, both with slightly negative real returns





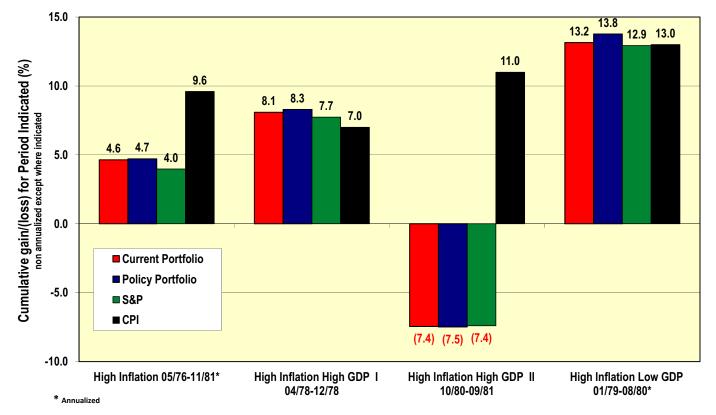
- One approach to reduce uncertainty is to use multiple independent sources of returns, from relatively uncorrelated asset classes. Since some asset classes have low returns and low volatility, leverage is used to "scale up" their returns; this is called "Risk Parity"
- Risk Parity can further be used to construct a portfolio that has the same expected returns in rising growth as in falling growth, and the same expected returns in rising inflation as in falling inflation. This is an "All-Weather" portfolio, pioneered by Bridgewater
- However, since in the combination of falling growth and rising inflation there is nowhere to hide, the All-Weather portfolio is helpless in this scenario; its worst drawdown, in the 2008-2009 Financial crisis, was 29% (compared to a drawdown of 51% for US stocks and 34% for the UT Endowments)
- All-Weather is a beta-only portfolio, which uses leverage to capture betas of different asset classes. In contrast, the Endowments do not use leverage, and use the same dollar to capture a beta premium, an alpha premium, and an illiquidity premium – three independent and relatively uncorrelated sources of returns
- Moving into All-Weather has a major timing bet, as one would be selling down equity exposure, and buying huge amounts of bonds, which is where most of the leverage is used in an All-Weather approach
- It is important to emphasize that Risk Parity involves large amounts of leverage risk



#### Backward-Looking Scenarios: High Inflation



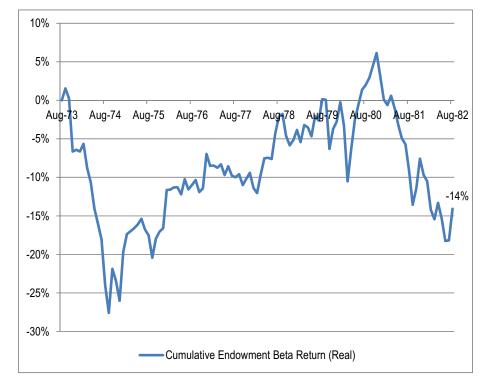
- While these are not large and swift shocks, high inflation environments are very bad for long-term investors
- The "high inflation" period lasted between 1976 and 1981. During these 5½ years the Endowments would have lost 5% annually in real terms (before any distributions)
- During this period the corpus would have shrunk by close to 40% in real terms after distributions



### Long Bear Market Scenario (9/73-8/82)



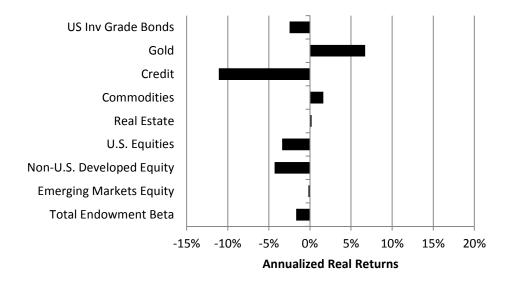
- During the nine-year period between the fall of 1973 and the summer of 1982, U.S. equities averaged a loss of (3.4%) a year (real).
- The Endowments would have averaged a (1.7%) a year (real) policy portfolio loss during this period.
- US Equities and the endowment's real return over the decade, however, would not have been a "steady ride".
- This period included real annual returns ranging from 13% to (29%), and suffered (19%) and (29%) drawdowns.



#### Long Bear Market Scenario (9/73-8/82)

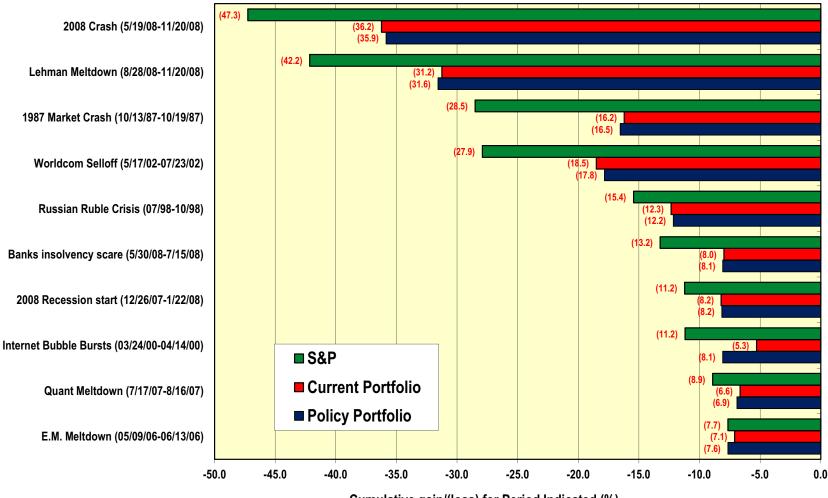


- This nine-year period was a bear market for fixed income, real estate, and equities. Commodities and gold returns were positive.
- Given the defensive nature of our managers (higher value add in down markets), the (1.7%) real market returns should result in roughly break-even overall endowment returns.
- However, a 4.5% annual distribution during a nine-year period of zero real returns would have resulted in a fund 34% below its starting value.



#### Backward-Looking Scenarios: Large and swift negative shocks





Cumulative gain/(loss) for Period Indicated (%)



#### **Parametric Stress Scenarios**



- One approach to forward-looking scenarios is parametric stressing. This involves making some basic assumptions about changes to stock prices, interest rates, or foreign exchange rates, and modeling their impact on the portfolio.
- Given the portfolio's equity orientation, a significant drop in equity prices would have the largest effect.

| Test   | Effect on Endowment |
|--|---------------------|
| <ul> <li>S&amp;P-500 drops 20%</li> </ul>            | (12.19%)            |
| <ul> <li>Rates rise 100bp</li> </ul>                 | (0.34%)             |
| <ul> <li>Yield curve flattens – Bull case</li> </ul> | 0.32%               |
| <ul> <li>Yield curve flattens – Bear case</li> </ul> | (0.06%)             |
| <ul> <li>Yield curve steepens – Bull case</li> </ul> | 0.06%               |
| <ul> <li>Yield curve steepens – Bear case</li> </ul> | e (0.28%)           |
| <ul> <li>Dollar strengthens 5%</li> </ul>            | (0.62%)             |
| <ul> <li>Dollar weakens 5%</li> </ul>                | 0.69%               |

#### Forward-Looking Scenarios: Large shocks, most likely not long-term in nature



|                                   | Scenario                   |                       |                     |                    |                        |                            |                               |                              |  |  |
|-----------------------------------|----------------------------|-----------------------|---------------------|--------------------|------------------------|----------------------------|-------------------------------|------------------------------|--|--|
|                                   | US<br>Liquidity<br>Squeeze | China Hard<br>Landing | Eurozone<br>Breakup | Japan<br>Implosion | Currency<br>Debasement | Eurozone<br>Lost<br>Decade | Mideast<br>War / Oil<br>shock | Oil supply<br>shock<br>(50%) |  |  |
| Expected Policy Returns (nominal) | (22.4%)                    | (23.9%)               | (17.8%)             | (18.4%)            | (15.1%)                | (4.1%)                     | (2.9%)                        | 0.5%                         |  |  |
| Gain from tactical positions      | (0.3%)                     | 0.6%                  | 0.0%                | 0.1%               | (0.2%)                 | 0.1%                       | (0.2%)                        | 0.3%                         |  |  |
| Gain from current hedges          | 0.0%                       | 0.0%                  | 0.0%                | 0.0%               | 0.1%                   | 0.0%                       | 0.0%                          | 0.0%                         |  |  |
| Gain from manager's alpha         | 1.8%                       | 2.1%                  | 2.8%                | 2.5%               | 1.9%                   | 2.3%                       | 1.4%                          | 1.0%                         |  |  |
| Estimated Endowment Returns       | (20.9%)                    | (21.2%)               | (15.0% <b>)</b>     | (15.8%)            | (13.3%)                | (1.7%)                     | (1.7%)                        | 1.8%                         |  |  |

- Some of these scenarios are likely to end up as "V" shaped i.e., a large and swift decline will be followed by a recovery, with no permanent loss of capital
  - Recoveries take longer than crashes (typically a few years), but should not be a problem for a long-term investor. In fact, the trough of these shocks can present great opportunities for unlevered long-term investors.
  - However, this is all clear only with hindsight. During a crisis, nothing ever seems clear.

#### Liquidity Crunch Scenario



- This scenario assumes a crisis hits after the Endowments are at a steady state of 45% in Privates. Endowments' NAV is assumed to be \$25bn.
- The scenario has Public Markets drop by 50%, and LCC drop by 20%. Distributions from Private Investments drop to zero, while calls from commitments with no opt-out option continue at their normal pace. Private Investments, while not marked down initially, are marked down by 15% by the end of the first year.
- UTIMCO reacts to the crisis by stopping all new commitments to Private Investments

| Asset Class / Investment Type | \$             | Percent of<br>Total |  |  |  |  |  |
|-------------------------------|----------------|---------------------|--|--|--|--|--|
| Investment Grade Fixed Income | \$1.2B         | 6.6%                |  |  |  |  |  |
| Gold                          | 0.5            | 2.5%                |  |  |  |  |  |
| Public Equity and Commodities | <u>2.4</u>     | <u>13.2%</u>        |  |  |  |  |  |
| MCC                           | 4.1            | 22.3%               |  |  |  |  |  |
| LCC                           | 3.8            | 20.2%               |  |  |  |  |  |
| PI                            | <u>10.6</u>    | <u>57.5%</u>        |  |  |  |  |  |
| TOTAL                         | <u>\$18.5B</u> | <u>100.0%</u>       |  |  |  |  |  |

At the end of year 1 of the crisis, the Endowments asset allocation would be:

| At the end of year 2 of the crisis, the Endowments |
|--|
| asset allocation would be:                         |

| Asset Class / Investment Type | \$             | Percent of<br>Total |
|-------------------------------|----------------|---------------------|
| Investment Grade Fixed Income | \$1.1B         | 5.9%                |
| Gold                          | 0.4            | 2.3%                |
| Public Equity and Commodities | <u>2.1</u>     | <u>11.8%</u>        |
| MCC                           | 3.6            | 20.0%               |
| LCC                           | 3.3            | 18.1%               |
| PI                            | <u>11.2</u>    | <u>61.9%</u>        |
| TOTAL                         | <u>\$18.1B</u> | <u>100.0%</u>       |

#### Forward-Looking Unfavorable Economic Scenarios



- Near-zero growth for an extended time is a reasonably probable bad scenario i.e., it is on the left side of the distribution, but not an extreme left tail event
  - Demographics, at least in the high-GDP parts of the world, will result in a smaller workforce, and thus less consumption goods can be produced in the future
  - The large debt overhang, at least in some parts of the world, reduces the ability to consume and to further borrow, which in turn reduces the propensity to invest in future production
- Negative real rates are reasonably likely in this scenario
  - The equilibrium interest rate for moving consumption from years of "feast" to years of "famine" is negative
  - Near-zero growth will trigger further stimulus, i.e., near-zero nominal rates. Any further stimulus (such as "helicopter money") will push up inflation. Furthermore, some inflation is a positive from a political point of view, as it helps debt-heavy households and debt-heavy nations. The combination of near-zero nominal rates and inflation results in negative real rates
  - Negative real rates of 3% (0% nominal rates with 3% inflation) are quite possible; negative real rates of 5%-6% are less likely, but are still not an extreme left-tail event
- All risk premia (such as the equity risk premium and the illiquidity risk premium) are likely to compress as the supply of long-term, risk-tolerant, capital will grow faster than demand
- All this will result in significant headwinds to creating positive real returns
- There are two basic schools of thought on how to deal with this environment:
  - 1. Go out on the risk curve expecting higher returns, or
  - 2. Stay the course, accept the lower returns for now, and wait for better opportunities

#### Agenda Item UTIMCO Board of Directors Meeting May 5, 2016

Agenda Item: Educational Program for UTIMCO Directors **Developed By:** Turner **Presented By:** Turner Type of Item: Information item Description: The Investment Management Services Agreement between the Board of Regents of The University of Texas System ("Board of Regents") and UTIMCO requires that UTIMCO provide training and education to members of the UTIMCO Board of Directors as may be determined in consultation with U.T. System staff to assure that all duties required of directors under the Texas Non-Profit Corporation Act and that matters related to the legal and fiduciary responsibilities of the Directors, including current regulations for determining reasonable compensation, are outlined and discussed fully. Board training is provided through an orientation session when new members of the Board are selected by the Board of Regents. This agenda item serves as an update for current Board members. Discussion: Jerry Turner of Andrews Kurth LLP, fiduciary counsel of UTIMCO, will present the "Educational Program for UTIMCO Directors." **Recommendation:** None **Reference:** Presentation to be handed out

#### Agenda Item UTIMCO Board of Directors Meeting May 5, 2016

| Agenda Item:  | Private Investment Update                                     |
|---------------|---|
| Developed By: | Staff   |
| Presented By: | Staff   |
| Type of Item: | Information Item  |
| Description:  | Staff will discuss Private Investments with the UTIMCO Board. |
| Reference:    | Private Investment Update presentation                        |



# The University of Texas Investment Management Company

### **Private Investment Strategy Update**

May 2016



- The most significant change in UTIMCO's investment strategy over the last decade has been the increase in Private Investments, and the change in approach with the investment style
- Private Investments have grown substantially, both in absolute dollars and as a percentage of total assets
- Private Investments give rise to illiquidity risk and, therefore, should earn a premium over their liquid alternative, which UTIMCO's portfolio has earned
- Private Investment illiquidity risk exposure should be limited to the fund's liquidity needs during times of stress. UTIMCO's illiquidity levels appear well within required limits and are below peer averages
- UTIMCO's Private Investment portfolio is much more diversified than its traditional, historical portfolio, and it currently includes Credit, Real Estate, Natural Resources, Buyout/Growth, Venture, and Emerging Markets assets across the globe
- UTIMCO's initiatives including Strategic Partnerships and Co-Investments further alters the portfolio's construction, providing the potential for higher returns

# Agenda





#### Performance

- vs. Public Markets
- vs. Desired
- vs. Peers





### IV. Asset Class Detail





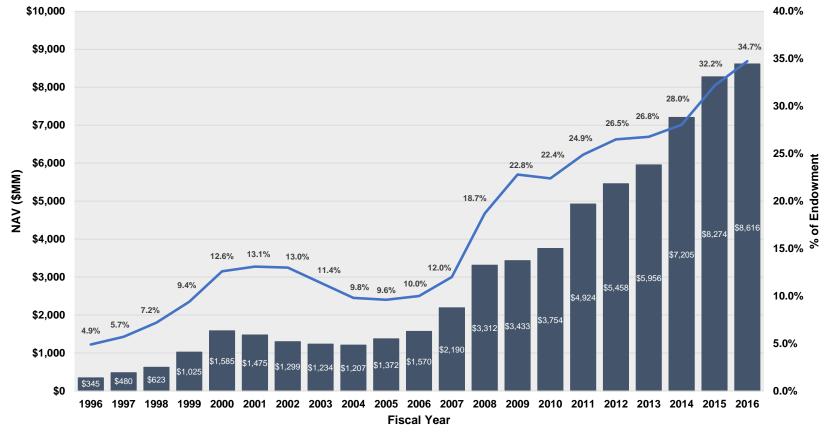
# Performance

Private Investments | 4

# **Historical Net Asset Value**

as of February 29, 2016

Exposure increased from \$345 million (4.9%) in 1996 to \$1.6 billion (10.0%) in 2006 to \$8.6 billion (34.7%) in March 2016



NAV ——% of Endowment

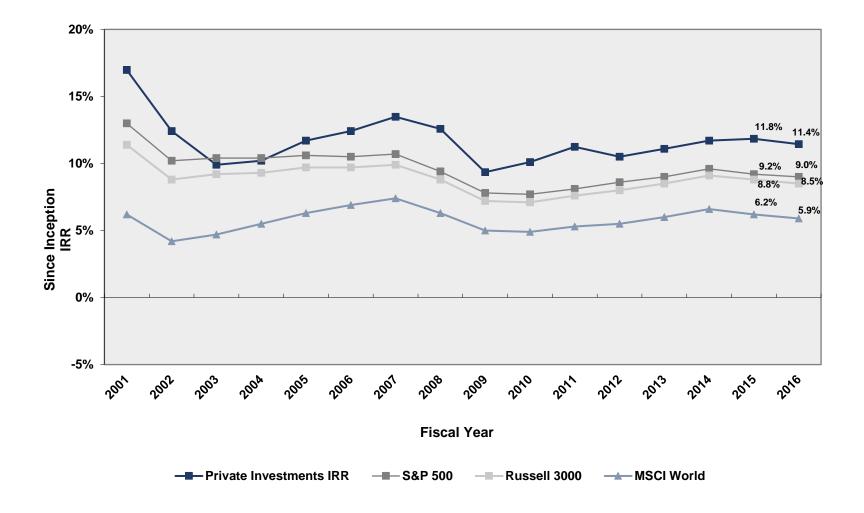


# **UTIMCO** Performance vs. Public Markets (Since Inception)



as of February 29, 2016

 UTIMCO's Private Investment portfolio has generated 11-12% Since Inception Returns, besting Public Markets by 2.4-5.5%



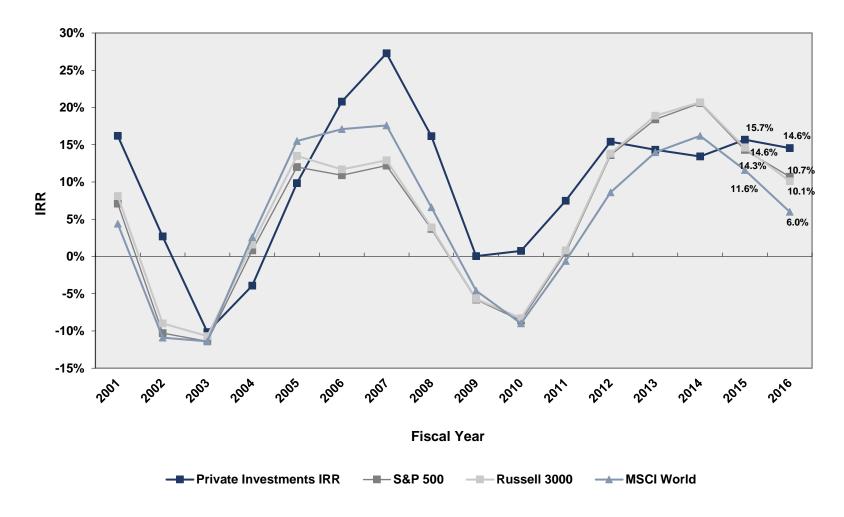
Notes: Private Investments returns are IRR calculations; Public Markets returns are time-weighted calculations

# UTIMCO Performance vs. Public Markets (3 Year Rolling)



as of February 29, 2016

 UTIMCO's Private Investment portfolio has generated Rolling Three Year 14-16% returns, currently besting Public Markets by 3.9-8.6%



Notes: Private Investments returns are IRR calculations; Public Markets returns are time-weighted calculations

# **Required Illiquidity Premium**



 Since Inception returns have been near, but slightly below desired private investment returns while current Three Year Rolling Returns are above desired returns

| Asset Class          | Liquid Alternative <sup>(1)</sup> | Desired Illiquidity<br>Premium | Desired Private<br>Investment Returns |  |
|----------------------|-----------------------------------|--------------------------------|---------------------------------------|--|
| Credit               | 6.0% - 7.5%                       | 4.4%                           | 10.5% - 12.0%                         |  |
| Real Estate          | 7.8% - 9.0%                       | 4.1%                           | 12.0% - 13.0%                         |  |
| Natural Resources    | 8.0% - 8.1%                       | 4.6%                           | 12.5% - 13.0%                         |  |
| Buyout/Growth        | 8.1% - 9.5%                       | 4.8%                           | 13.0% - 14.5%                         |  |
| Venture              | 8.1% - 9.5%                       | 5.6%                           | 14.0% - 15.0%                         |  |
| Emerging Markets     | 9.5% - 11.0%                      | 5.4%                           | 15.0% - 16.5%                         |  |
| Total <sup>(2)</sup> | 8.0% - 9.2%                       | 4.8%                           | 13.0% - 14.0%                         |  |

#### Notes:

1) Liquid alternative low end of the range is with short-term assumptions, and the high end of the range is for long term assumptions. Both include expected alpha of the MCC alternative.

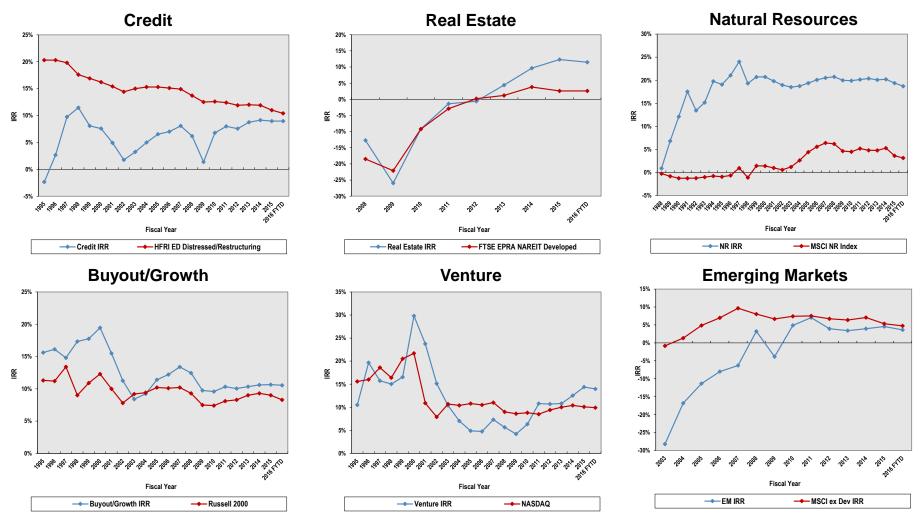
2) Assumes weights of: Credit (10%), Real Estate (20%), Natural Resources (20%), Buyouts and growth (20%), Venture (15%), and Emerging Markets (15%)

# Performance vs. Public Markets – by Strategy (Since Inception)

NTIMCO 1996

as of February 29, 2016

- Since Inception Credit and Emerging Markets private investment returns have lagged public market returns
- All other private investment asset class returns have bested their public market asset class return



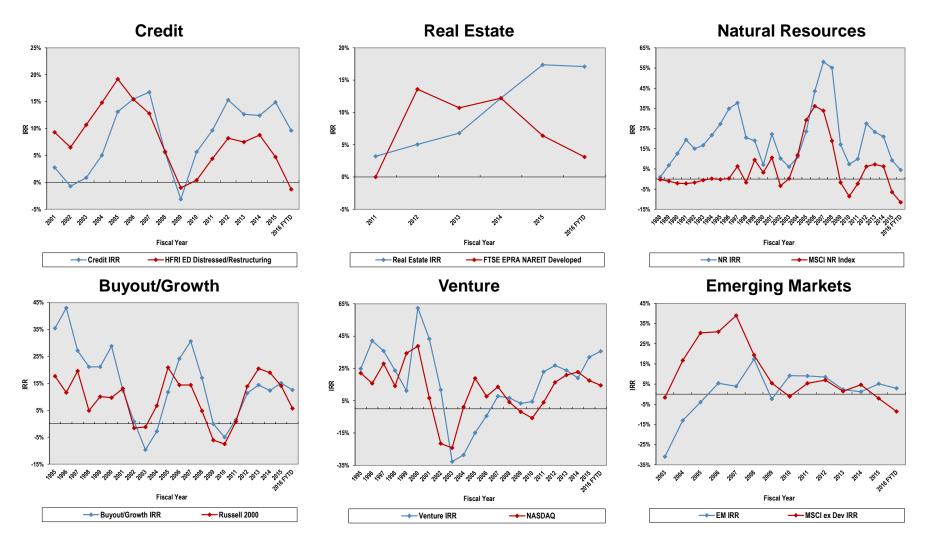
Notes: Asset class IRR's use Private I IRR data

Private Investments | 9

# Performance vs. Public Markets – by Strategy (3 Year Rolling)

as of February 29, 2016

 More recent private investment portfolios performance are positive versus public markets for all asset classes



Notes: Asset class IRR's use Private I IRR data

Private Investments | 10

# Performance vs. Private Benchmark



as of February 29, 2016

- With the exception of Emerging Markets, medium-term Real Estate vintages, and older buyout/growth vintages, UTIMCO's private investment portfolios have out-performed their asset class specific benchmarks
- UTIMCO's total private investment portfolio has underperformed its general benchmark over the past five years, however, due to the difference in asset class mix between UTIMCO's portfolio and the benchmark, primarily due to the amount of Natural Resources in UTIMCO's portfolio and that asset class' performance over the past three years

|                   |                  | One    | Year                  |           |                  | Three         | e Years               |           |                  | Five          | Years                 |           |                  | Seve          | n Years               |           |
|-------------------|------------------|--------|-----------------------|-----------|------------------|---------------|-----------------------|-----------|------------------|---------------|-----------------------|-----------|------------------|---------------|-----------------------|-----------|
|                   | UTIMCO<br>Weight | UTIMCO | Specific<br>Benchmark | Value Add | UTIMCO<br>Weight | <b>UTIMCO</b> | Specific<br>Benchmark | Value Add | UTIMCO<br>Weight | <b>UTIMCO</b> | Specific<br>Benchmark | Value Add | UTIMCO<br>Weight | <b>UTIMCO</b> | Specific<br>Benchmark | Value Add |
| Credit            | 11%              | 6.3%   | 0.2%                  | 6.2%      | 18%              | 10.7%         | 7.3%                  | 3.3%      | 27%              | 10.5%         | 8.2%                  | 2.3%      | 33%              | 14.8%         | 14.5%                 | 0.3%      |
| Real Estate       | 18%              | 17.8%  | 11.3%                 | 6.5%      | 13%              | 17.4%         | 13.4%                 | 4.0%      | 5%               | 11.4%         | 11.6%                 | (0.2%)    | 3%               | 8.3%          | 8.2%                  | 0.1%      |
| Natural Resources | 24%              | (5.3%) | (15.7%)               | 10.4%     | 18%              | 5.5%          | (5.5%)                | 10.9%     | 11%              | 13.3%         | (0.2%)                | 13.4%     | 8%               | 14.1%         | 4.2%                  | 9.8%      |
| Buyout/Growth     | 21%              | 13.1%  | 6.5%                  | 6.6%      | 28%              | 12.5%         | 10.5%                 | 2.0%      | 33%              | 12.4%         | 10.1%                 | 2.3%      | 40%              | 10.9%         | 13.9%                 | (3.0%)    |
| Venture           | 15%              | 31.5%  | 7.2%                  | 24.3%     | 14%              | 31.1%         | 19.9%                 | 11.3%     | 15%              | 26.6%         | 15.0%                 | 11.6%     | 10%              | 25.4%         | 14.4%                 | 11.0%     |
| Emerging Markets  | 12%              | 3.2%   | (0.6%)                | 3.8%      | 10%              | 2.9%          | 9.4%                  | (6.4%)    | 9%               | 2.0%          | 7.2%                  | (5.2%)    | 6%               | 5.7%          | 13.6%                 | (7.9%)    |
| Total             | 100%             | 9.9%   | 11.6%                 | (1.7%)    | 100%             | 12.9%         | 13.8%                 | (0.9%)    | 100%             | 12.7%         | 13.9%                 | (1.2%)    | 100%             | 13.6%         | 10.3%                 | 3.3%      |

Notes: Total benchmark returns are based on the General Private Investment Benchmark Asset class returns use Mellon time-weighted data



# **Expected Performance**

# Portfolio Maturity & "J-Curve"



as of February 29, 2016

 UTIMCO's Private Investment portfolio, particularly in growing areas like Real Estate, Natural Resources, and Emerging Markets, is still largely "unseasoned"

|                   | Maturity and the "J-Curve"   |   |  |  |  |  |  |  |
|-------------------|------------------------------|---|--|--|--|--|--|--|
| Asset Class       | UTIMCO Weighted Average Life | Mature Portfolio Weighted<br>Average Life |  |  |  |  |  |  |
| Credit            | 5.2                          | 5.6                                       |  |  |  |  |  |  |
| Real Estate       | 3.2                          | 6.1                                       |  |  |  |  |  |  |
| Natural Resources | 3.0                          | 5.1                                       |  |  |  |  |  |  |
| Buyout/Growth     | 5.4                          | 6.7                                       |  |  |  |  |  |  |
| Venture           | 5.2                          | 6.8                                       |  |  |  |  |  |  |
| Emerging Markets  | 3.8                          | 6.1                                       |  |  |  |  |  |  |
| Total             | 4.0                          | 6.3                                       |  |  |  |  |  |  |

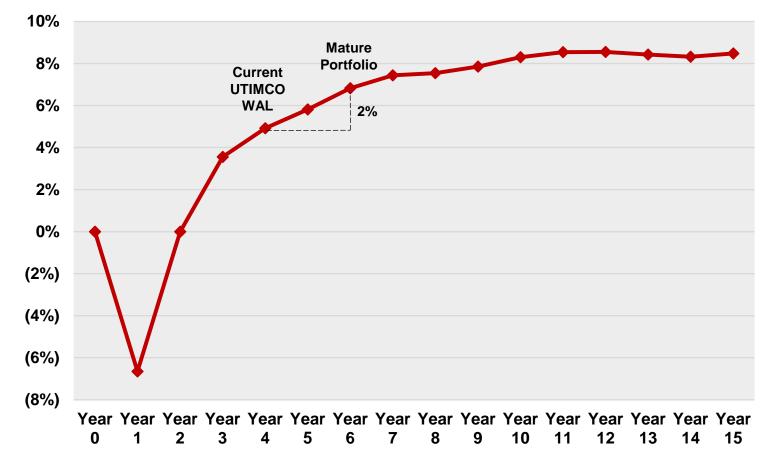
\*Weighted average life calculated based on exposure by vintage year

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# Portfolio Maturity & "J-Curve"



- A less mature portfolio generally demonstrates lower returns, on average 2%, due to:
  - Fees on committed, but not invested capital
  - Few investment mark-ups or realizations



#### **Typical J-Curve**

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- UTIMCO's Private Investments portfolio has generated 11.4% annual returns since inception and 14.6% over the past three rolling years
- Unfunded commitments as a percentage of NAV are expected to decline from 70% to 40% as the portfolio reaches steady-state
  - About two thirds of the decline is the result of slowing down the portfolio's growth and one third of the decline is the effect of the co-invest program
  - This should result in approximately 40bps in reduced fee drag (i.e., improved performance)
- The co-invest program is expected to be 10% of NAV by FYE2019 and 15% of NAV by FY2024
  - Assuming 4% better performance (which is the difference between median and top quartile), due to "sizing up" our best partners' best ideas, this would add another 40-60bps to the Private Investment overall performance
- Going forward, we might expect as much as an additional 250bps in returns



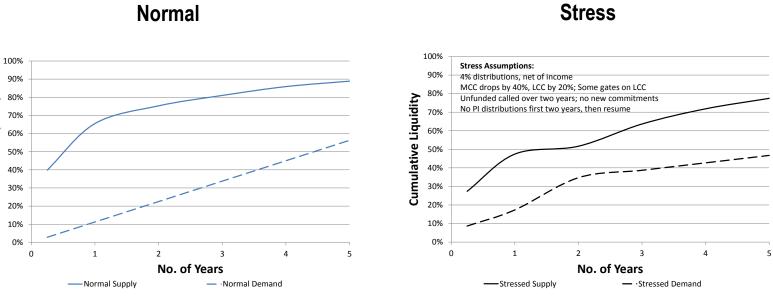
# Illiquidity Risk Capacity

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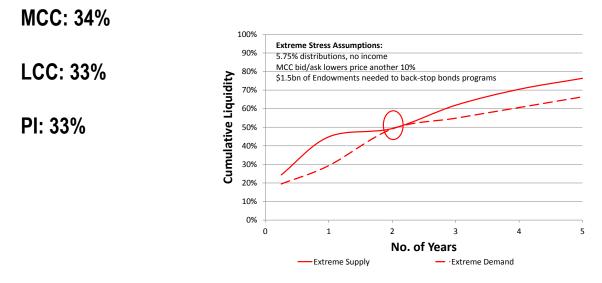
### Illiquidity Constraints: Supply and Demand

**Cumulative Liquidity** 





**High Stress** 



Private Investments | 17

### **Stress Testing with Privates at 45%**



- This scenario assumes a crisis hits after the Endowments are at a steady-state of 45% in Privates. Endowments' NAV is assumed to be \$25bn
- The scenario has Public Markets drop by 50%, and LCC drop by 20%. Distributions from Private Investments drop to zero, while calls from commitments with no opt-out option continue at their normal pace. Private Investments, while not marked down initially, are marked down by 15% by the end of the first year
- UTIMCO reacts to the crisis by stopping all new commitments to Private Investments

### At the end of year 1 of the crisis, the Endowments asset allocation would be:

At the end of year 2 of the crisis, the Endowments asset allocation would be:

| Asset Class / Investment Type | \$             | Percent of<br>Total | Asset Class / Investment Type | \$              | Percent of<br>Total |
|-------------------------------|----------------|---------------------|-------------------------------|-----------------|---------------------|
| Investment Grade Fixed Income | \$1.2B         | 6.6%                | Investment Grade Fixed Income | \$1.1B          | 5.9%                |
| Gold                          | 0.5            | 2.5%                | Gold                          | 0.4             | 2.3%                |
| Public Equity and Commodities | <u>2.4</u>     | <u>13.2%</u>        | Public Equity and Commodities | <u>2.1</u>      | <u>11.8%</u>        |
| MCC                           | 4.1            | 22.3%               | MCC                           | 3.6             | 20.0%               |
| LCC                           | 3.8            | 20.2%               | LCC                           | 3.3             | 18.1%               |
| PI                            | <u>10.6</u>    | <u>57.5%</u>        | PI                            | <u>11.2</u>     | <u>61.9%</u>        |
| TOTAL                         | <u>\$18.5B</u> | <u>100.0%</u>       | TOTAL                         | <u> \$18.1B</u> | <u>100.0%</u>       |

# **Peer Illiquidity**



 As has been noted previously, UTIMCO has a lower percentage of its assets in private investments than its peers

|             | June 30, 2015 |                 |  |  |  |  |  |
|-------------|---------------|-----------------|--|--|--|--|--|
| Institution | Privates (%)  | Hedge Funds (%) |  |  |  |  |  |
| UTIMCO      | 29%           | 30%             |  |  |  |  |  |
| Тор 10      |               |                 |  |  |  |  |  |
| Average     | 40%           | 21%             |  |  |  |  |  |
| Max         | 52%           | 31%             |  |  |  |  |  |



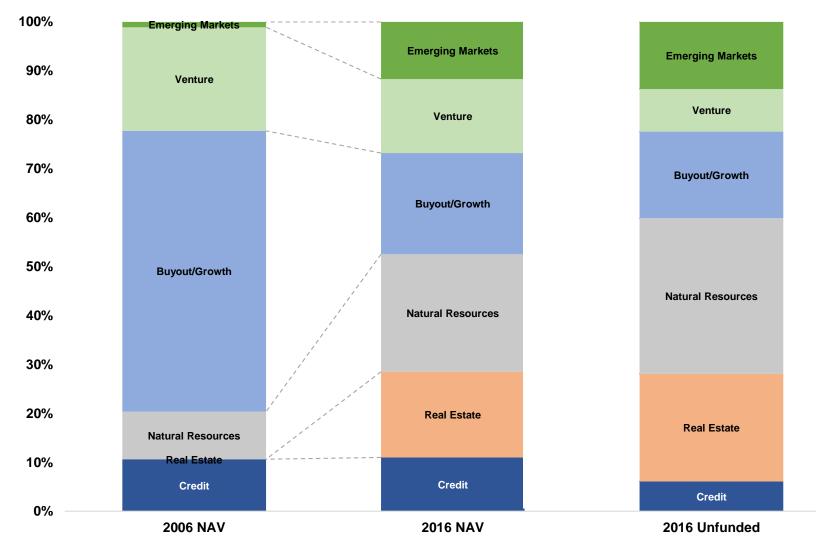
# Asset Class Detail

Private Investments | 20

### **Diversified Portfolio**

as of February 29, 2016

 UTIMCO's portfolio is transitioning from one of buyout/growth and venture to a much more diversified portfolio





Private Investments | 21

### **Non-Core Portfolio**

STIMC0 7996

as of February 29, 2016

- UTIMCO's shift in strategy away from large buyout and growth toward a more diversified, targeted portfolio produces a legacy or non-core portfolio
- While the non-core portfolio's returns are not expected to be as strong as current strategy investments, they are expected to be satisfactory

|                   |         | Non-Core Portfolio |                  | Core    | Portfolio |
|-------------------|---------|--------------------|------------------|---------|-----------|
| Asset Class       | NAV     | Unfunded           | Expected Returns | NAV     | Unfunded  |
| Credit            | \$114   | \$19               | 7%               | \$832   | \$338     |
| Real Estate       | 152     | 38                 | 8%               | 1,359   | 1,248     |
| Natural Resources | 111     | 64                 | 8%               | 1,956   | 1,792     |
| Buyout/Growth     | 1,030   | 129                | 10%              | 750     | 906       |
| Venture           | 420     | 49                 | 11%              | 885     | 478       |
| Emerging Markets  | 221     | 48                 | 4%               | 787     | 754       |
| Total             | \$2,047 | \$347              | 9%               | \$6,569 | \$5,516   |

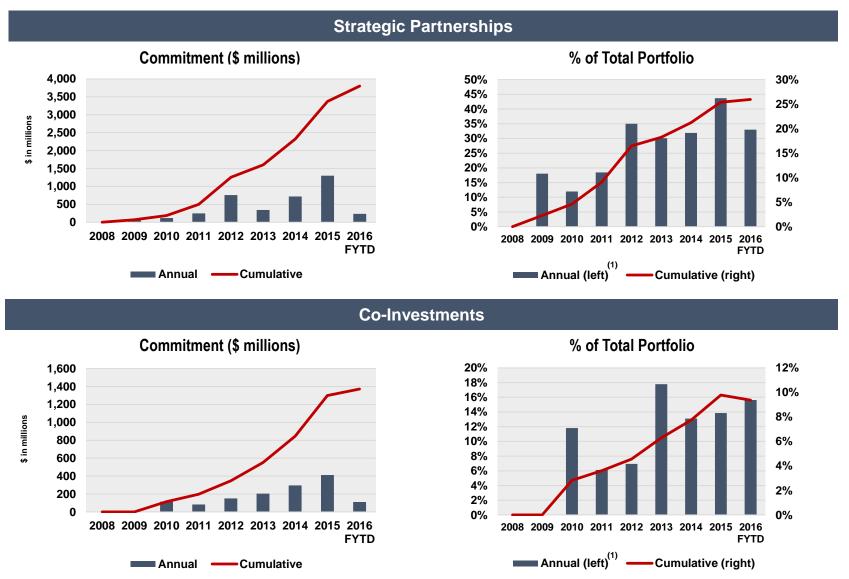
# **Strategic Partnerships and Co-Investments**

UTIMC0 F996

as of February 29, 2016

(1) % of total annual commitments

Strategic partnership and co-investments are both growing elements of the Private Investments strategy



Private Investments | 23

### **Blended Fees by Asset Class**



as of February 29, 2016

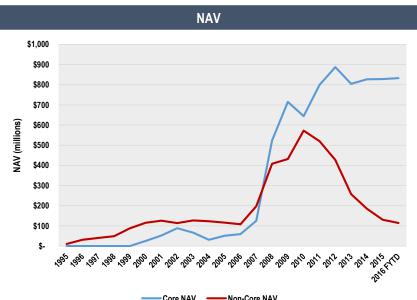
- UTIMCO has been successful in reducing fees when committing to new partners, particularly in our newer Real Estate, Natural Resources and Emerging Markets portfolios
- Co-investment opportunities, most of which are fee-free, are becoming a larger part of the Private Investments portfolio which should serve to further reduce fees

|   | Blended Ma | nagement Fee | Blended Carry |          |  |  |
|---|------------|--------------|---------------|----------|--|--|
| Asset Class                                 | Core       | Non Core     | Core          | Non Core |  |  |
| Credit                                      | 1.6%       | 1.6%         | 19.8%         | 19.2%    |  |  |
| Real Estate                                 | 1.6%       | 1.5%         | 17.6%         | 18.5%    |  |  |
| Natural Resources                           | 1.6%       | 1.6%         | 15.2%         | 19.6%    |  |  |
| Buyout/Growth                               | 2.1%       | 1.7%         | 19.5%         | 19.7%    |  |  |
| Venture                                     | 2.0%       | 2.1%         | 18.7%         | 18.0%    |  |  |
| Emerging Markets                            | 1.6%       | 2.1%         | 18.4%         | 20.0%    |  |  |
| Total Funds                                 | 1.7%       | 1.8%         | 17.8%         | 19.4%    |  |  |
| Fees After Expected<br>Effect of Co-Invests | 1.6%       | 1.8%         | 16.3%         | 19.3%    |  |  |

Private Investments | 24

### Credit





| Investment Returns              |                  |            |         |         |  |  |  |  |  |
|---------------------------------|------------------|------------|---------|---------|--|--|--|--|--|
| Asset Class                     | 1 Year           | 3 Years    | 5 Years | 7 Years |  |  |  |  |  |
| UTIMCO - Credit                 | 6.3%             | 10.7%      | 10.5%   | 14.8%   |  |  |  |  |  |
| Specific Benchmark              | 0.2%             | 7.3%       | 8.2%    | 14.5%   |  |  |  |  |  |
| Value Add                       | 6.2%             | 3.3%       | 2.3%    | 0.3%    |  |  |  |  |  |
| *Specified Benchmark is the Can | nbridge Global D | Distressed |         |         |  |  |  |  |  |

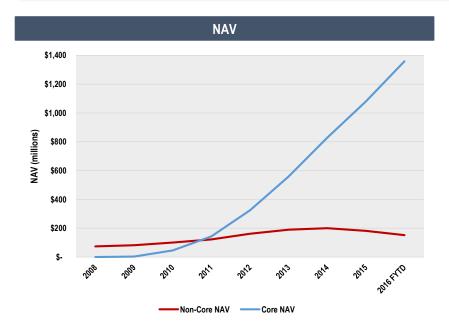
| Current Portfolio by Manager Strategy |            |       |          |            |      |          |            |       |          |
|---------------------------------------|------------|-------|----------|------------|------|----------|------------|-------|----------|
| Core Non-Core Total                   |            |       |          |            |      |          |            |       |          |
| Strategy                              | # Partners | NAV   | Unfunded | # Partners | NAV  | Unfunded | # Partners | NAV   | Unfunded |
| Distressed<br>Debt - Opp              | 3          | \$532 | \$79     | 2          | \$32 | \$6      | 5          | \$563 | \$85     |
| Distressed<br>Debt - Control          | 2          | 233   | 146      | 3          | 69   | 9        | 5          | 302   | 155      |
| Distressed<br>Debt - Trading          | 1          | 52    | 0        | 2          | 2    | 0        | 3          | 54    | 0        |

|                              | Current Portfolio by Manager Strategy |       |          |            |         |          |            |       |          |
|------------------------------|---------------------------------------|-------|----------|------------|---------|----------|------------|-------|----------|
|                              |                                       | Core  |          |            | Non-Cor | e        |            | Total |          |
| Strategy                     | # Partners                            | NAV   | Unfunded | # Partners | NAV     | Unfunded | # Partners | NAV   | Unfunded |
| Distressed<br>Debt - Opp     | 3                                     | \$532 | \$79     | 2          | \$32    | \$6      | 5          | \$563 | \$85     |
| Distressed<br>Debt - Control | 2                                     | 233   | 146      | 3          | 69      | 9        | 5          | 302   | 155      |
| Distressed<br>Debt - Trading | 1                                     | 52    | 0        | 2          | 2       | 0        | 3          | 54    | 0        |
| Other Debt Opp               | ) 1                                   | 15    | 113      | 3          | 11      | 3        | 4          | 27    | 116      |
| Total                        | 7                                     | \$832 | \$338    | 10         | \$114   | \$19     | 17         | \$946 | \$356    |

|   | Themes/Strategy                               |
|---|---|
| • | Take advantage of credit cycles               |
| • | Concentrated portfolio of partners            |
| • | Focus on opportunistic and control strategies |

### **Real Estate**





| Investment Returns |                                 |  |  |  |  |  |  |  |  |
|--------------------|---------------------------------|--|--|--|--|--|--|--|--|
| 1 Year             | 3 Years                         | 5 Years  | 7 Years  |  |  |  |  |  |  |
| 17.8%              | 17.4%                           | 11.4%  | 8.3%   |  |  |  |  |  |  |
| 11.3%              | 13.4%                           | 11.6%  | 8.2%   |  |  |  |  |  |  |
| 6.5%               | 4.0%                            | (0.2%)   | 0.1%   |  |  |  |  |  |  |
|                    | <b>1 Year</b><br>17.8%<br>11.3% | 1 Year         3 Years           17.8%         17.4%           11.3%         13.4% | 1 Year         3 Years         5 Years           17.8%         17.4%         11.4%           11.3%         13.4%         11.6% |  |  |  |  |  |  |

\*Specified Benchmark is the Cambridge Total Real Estate Index

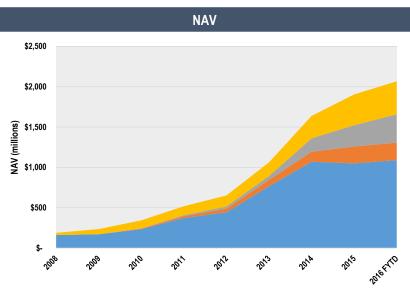
|        | Current Portfolio by Manager Strategy |         |          |            |         |          |            |         |          |
|--------|---------------------------------------|---------|----------|------------|---------|----------|------------|---------|----------|
|        | Core                                  |         |          |            | Non-Cor | e        |            | Total   |          |
| Region | # Partners                            | NAV     | Unfunded | # Partners | NAV     | Unfunded | # Partners | NAV     | Unfunded |
| Global | 3                                     | \$432   | \$328    | 0          | \$0     | \$0      | 3          | \$432   | \$328    |
| US     | 10                                    | 553     | 555      | 3          | 66      | 28       | 13         | 620     | 583      |
| Europe | 3                                     | 319     | 215      | 1          | 71      | 7        | 4          | 389     | 222      |
| Asia   | 2                                     | 39      | 67       | 1          | 14      | 3        | 3          | 54      | 70       |
| LatAm  | 1                                     | 16      | 84       | 0          | 0       | 0        | 1          | 16      | 84       |
| Total  | 19                                    | \$1,359 | \$1,248  | 5          | \$152   | \$38     | 24         | \$1,510 | \$1,286  |

#### Themes/Strategy

- As U.S. Real Estate cycle matures, focus on returns predicated on cash flow improvements to offset exit cap rate risk
- Selective non-U.S. exposure in Europe and Latam
- Target niche strategies such as wireless spectrum, manufactured housing, parking, and data centers which have less correlation to the overall real estate market
- Structuring partnerships with more control of capital deployment
- Grocery anchored / urban retail and class B multi-family continue to be attractive at this point in the cycle

### **Natural Resources**





Energy Metals and Mining Agriculture Infrastructure

|                      | Current Portfolio by Manager Strategy |         |          |            |         |          |            |         |          |
|----------------------|---------------------------------------|---------|----------|------------|---------|----------|------------|---------|----------|
|                      |                                       | Core    |          |            | Non-Cor | e        |            | Total   |          |
| Strategy             | # Partners                            | NAV     | Unfunded | # Partners | NAV     | Unfunded | # Partners | NAV     | Unfunded |
| Energy               | 9                                     | \$1,018 | \$939    | 4          | \$72    | \$32     | 13         | \$1,090 | \$971    |
| Metals and<br>Mining | 4                                     | 188     | 166      | 1          | 28      | 15       | 5          | 216     | 181      |
| Agriculture          | 3                                     | 345     | 236      | 0          | 6       | 2        | 3          | 352     | 238      |
| Infrastructure       | 4                                     | 405     | 451      | 1          | 4       | 16       | 5          | 409     | 467      |
| Total                | 20                                    | \$1,956 | \$1,792  | 6          | \$111   | \$64     | 26         | \$2,067 | \$1,857  |

| Investment Returns         |        |         |         |         |  |  |  |  |
|----------------------------|--------|---------|---------|---------|--|--|--|--|
| Asset Class                | 1 Year | 3 Years | 5 Years | 7 Years |  |  |  |  |
| UTIMCO - Natural Resources | (5.3%) | 5.5%    | 13.3%   | 14.1%   |  |  |  |  |
| Specific Benchmark         |        | (5.5%)  |         | 4.2%    |  |  |  |  |
| Value Add                  | 10.4%  | 10.9%   | 13.4%   | 9.8%    |  |  |  |  |

\*Specified Benchmark is the Cambridge Natural Resources Index. Preliminary data used for Q4 2015.

| Themes/Strategy  |   |
|--|---|
| Example of an investment of a stability of a stabil | _ |
| Focused on lower and middle market opportunistic strategies acros<br>subsectors  | S |
| Customized structures with a high degree of alignment and an emphasis on co-investments  |   |
| Leveraging sector expertise to be a liquidity provider at this point in the cycle  | I |

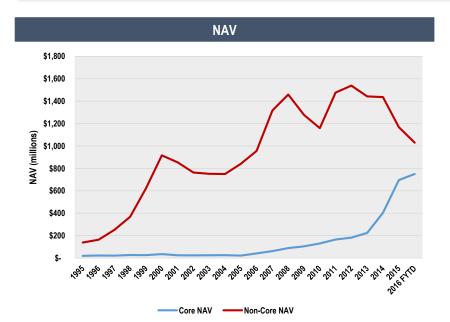
• Optimizing returns versus risk through security type (streaming) and niche expertise (Brazil agriculture)

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### **Buyout/Growth**





| Investment Returns     |        |         |         |         |  |  |  |  |  |  |
|------------------------|--------|---------|---------|---------|--|--|--|--|--|--|
| Asset Class            | 1 Year | 3 Years | 5 Years | 7 Years |  |  |  |  |  |  |
| UTIMCO - Buyout/Growth | 13.1%  | 12.5%   | 12.4%   | 10.9%   |  |  |  |  |  |  |
| Specific Benchmark     | 6.5%   | 10.5%   | 10.1%   | 13.9%   |  |  |  |  |  |  |
| Value Add              | 6.6%   | 2.0%    | 2.3%    | (3.0%)  |  |  |  |  |  |  |

\*Specified Benchmark is the Cambridge Global Buyout & Growth

|               | Current Portfolio by Manager Strategy |       |          |            |         |          |            |         |          |  |  |
|---------------|---------------------------------------|-------|----------|------------|---------|----------|------------|---------|----------|--|--|
|               |                                       | Core  |          |            | Non-Cor | e        |            | Total   |          |  |  |
| Strategy      | # Partners                            | NAV   | Unfunded | # Partners | NAV     | Unfunded | # Partners | NAV     | Unfunded |  |  |
| Small Buyout  | 11                                    | \$580 | \$652    | 8          | \$94    | \$24     | 19         | \$674   | \$676    |  |  |
| MM Buyout     | 1                                     | 2     | 48       | 7          | 252     | 45       | 8          | 255     | 93       |  |  |
| Mega Buyout   | 0                                     | 0     | 0        | 2          | 141     | 29       | 2          | 141     | 29       |  |  |
| Opportunistic | 1                                     | 35    | 37       | 5          | 294     | 16       | 6          | 330     | 53       |  |  |
| Growth        | 3                                     | 133   | 170      | 7          | 248     | 14       | 10         | 381     | 184      |  |  |
| Total         | 16                                    | \$750 | \$906    | 29         | \$1,030 | \$129    | 45         | \$1,780 | \$1,035  |  |  |

|   | Themes/Strategy  |
|---|--|
| _ | Portfolio shifting towards Lower Middle Market strategies  |
|   | 13/16 core partners are new since 2008                     |
|   | Majority of exposure in U.S.                               |
|   | Core partners focus on building companies                  |
|   | Sector focus prominent for new fund sourcing: healthcare & |

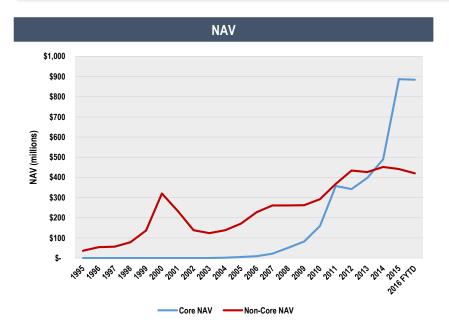
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technology

### Venture





| Investment Returns             |                  |                 |         |         |  |  |  |  |  |
|--------------------------------|------------------|-----------------|---------|---------|--|--|--|--|--|
| Asset Class                    | 1 Year           | 3 Years         | 5 Years | 7 Years |  |  |  |  |  |
| UTIMCO - Venture               | 31.5%            | 31.1%           | 26.6%   | 25.4%   |  |  |  |  |  |
| Specific Benchmark             | 7.2%             | 19.9%           | 15.0%   | 14.4%   |  |  |  |  |  |
| Value Add                      | 24.3%            | 11.3%           | 11.6%   | 11.0%   |  |  |  |  |  |
| *Specified Perchmark is the Ca | mbridge Clobel V | lantura Canital |         |         |  |  |  |  |  |

\*Specified Benchmark is the Cambridge Global Venture Capital

|               | Current Portfolio by Manager Strategy |       |          |            |         |          |            |         |          |  |  |
|---------------|---------------------------------------|-------|----------|------------|---------|----------|------------|---------|----------|--|--|
|               |                                       | Core  |          |            | Non-Cor | e        |            | Total   |          |  |  |
| Strategy      | # Partners                            | NAV   | Unfunded | # Partners | NAV     | Unfunded | # Partners | NAV     | Unfunded |  |  |
| Technology    | 10                                    | \$743 | \$401    | 5          | \$109   | \$7      | 15         | \$851   | \$408    |  |  |
| Life Sciences | 1                                     | 3     | 32       | 6          | 128     | 30       | 7          | 131     | 61       |  |  |
| Diversified   | 1                                     | 139   | 46       | 9          | 183     | 12       | 10         | 322     | 58       |  |  |
| Total         | 12                                    | \$885 | \$478    | 20         | \$420   | \$49     | 32         | \$1,304 | \$527    |  |  |

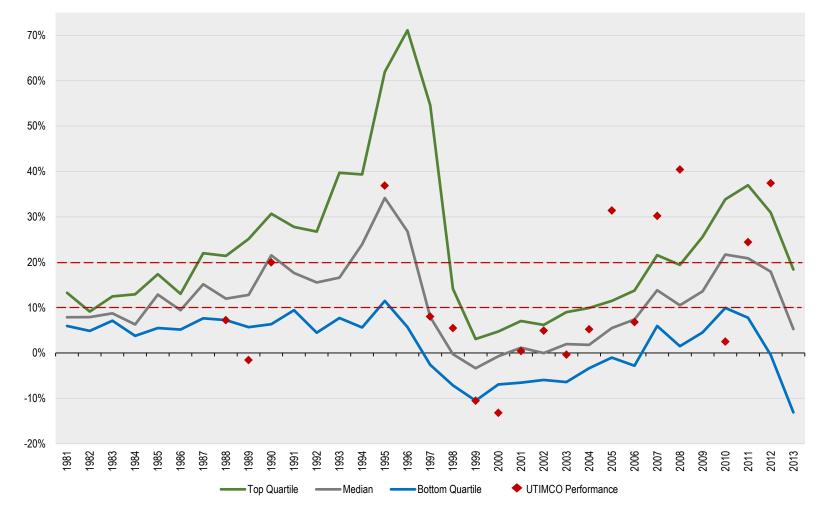
| Themes/ | Strat | teav |
|---------|-------|------|
|         | 0000  |      |

- Current exposure is primarily in early-stage (seed/Series A) funds
- · Majority of exposure is outside "blue chip" Silicon Valley firms
- Staff is exploring the following potential areas:
  - Ability/alternatives to scale the portfolio while maintaining attractive return profile
  - Ability to access "blue chip" Silicon Valley firms
  - Attractiveness of Austin or Texas-centric firms
  - Attractiveness of growth equity/expansion stage funds at this point in the cycle
- Healthcare exposure concentrated around disruptive technology, mainly in biotech

## **Venture Capital Performance by Vintage**

as of September 30, 2015

 While venture capital periodically delivers stunning returns, there are long period of mediocre to poor returns and partnering with top quartile firms is essential

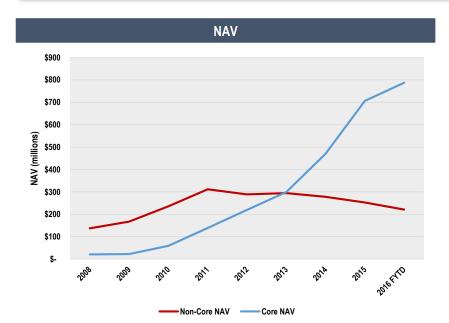


**UTIMCO Performance and Global Venture (CA) Performance** 

Private Investments | 30

## **Emerging Markets**





| Investment Returns        |        |         |         |                 |  |  |  |  |  |  |
|---------------------------|--------|---------|---------|-----------------|--|--|--|--|--|--|
| Asset Class               | 1 Year | 3 Years | 5 Years | 7 Years         |  |  |  |  |  |  |
| UTIMCO - Emerging Markets | 3.2%   | 2.9%    | 2.0%    | 5.7%            |  |  |  |  |  |  |
| Specific Benchmark        | (0.6%) | 9.4%    | 7.2%    | 13.6%           |  |  |  |  |  |  |
| Value Add                 | 3.8%   | (6.4%)  | (5.2%)  | ( <b>7.9%</b> ) |  |  |  |  |  |  |

\*Specified Benchmark is the Cambridge Emerging Markets Index. Cambridge data as of 9/30/2015.

|                    | Current Portfolio by Manager Strategy |       |          |            |       |          |            |         |          |  |  |
|--------------------|---------------------------------------|-------|----------|------------|-------|----------|------------|---------|----------|--|--|
|                    |                                       | Core  | e        | Total      |       |          |            |         |          |  |  |
| Region             | # Partners                            | NAV   | Unfunded | # Partners | NAV   | Unfunded | # Partners | NAV     | Unfunded |  |  |
| Asia               | 5                                     | \$593 | \$436    | 3          | \$118 | \$11     | 8          | \$711   | \$447    |  |  |
| Latin America      | 4                                     | 43    | 216      | 1          | 8     | 0        | 5          | 50      | 216      |  |  |
| Emerging<br>Europe | 1                                     | 22    | 14       | 3          | 51    | 31       | 4          | 73      | 45       |  |  |
| Africa             | 1                                     | 129   | 87       | 0          | 0     | 0        | 1          | 129     | 87       |  |  |
| Global             | 0                                     | 0     | 0        | 2          | 44    | 6        | 2          | 44      | 6        |  |  |
| Total              | 11                                    | \$787 | \$754    | 9          | \$221 | \$48     | 20         | \$1,008 | \$802    |  |  |

|   | Themes/Strategy  |
|---|--|
| • | Partner with a concentrated pool of lower middle market growth equity and buyout managers across the emerging markets (EM)                         |
| • | Invest with local managers that are well positioned to capitalize on<br>compelling EM themes such as domestic consumption and<br>industrialization |
| • | Target geographic markets with attractive growth dynamics and strong rule of law   |
| • | Asia, in particular China, and Latin America represent the largest geographic exposures in the EM portfolio  |



# Forward-Looking Commitment Model



### **Commitment Model Assumptions**

- Model updated quarterly to calibrate commitment "budgets"
- Projects NAV's based on several assumptions including:
  - Capital calls
  - Distributions
  - Portfolio appreciation
- Example: Venture Capital

|               | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 | Year 7 | Year 8 | Year 9 | Year 10 |
|---------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------|
| Capital Calls | 11%    | 23%    | 22%    | 16%    | 12%    | 7%     | 4%     | 2%     | 2%     | 1%      |
| Distributions | 0%     | 2%     | 3%     | 5%     | 10%    | 11%    | 13%    | 12%    | 11%    | 12%     |
| Appreciation  | -      | -6%    | 12%    | 1%     | 8%     | 13%    | 18%    | 13%    | 11%    | 15%     |

 The percentage of private investments to total endowment assets is most sensitive to total endowment return projections

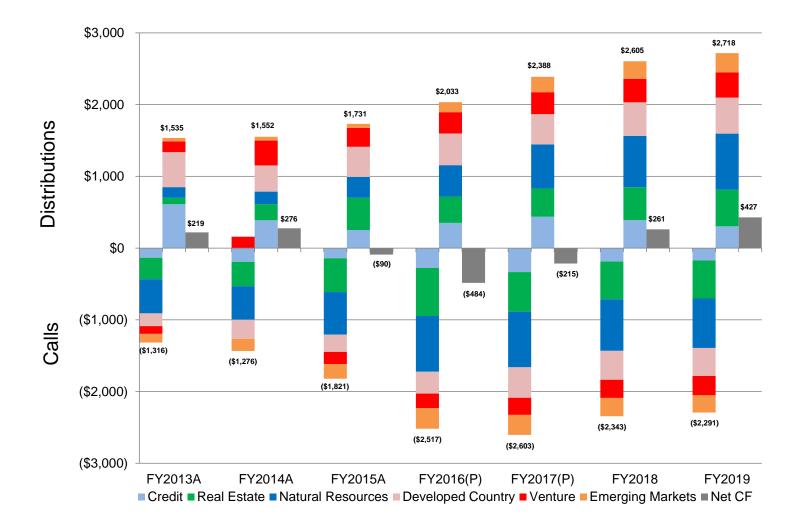


|                   | Unfunded<br>8/31/16 | Potential Commitment Targets |         |         |         |  |  |
|-------------------|---------------------|------------------------------|---------|---------|---------|--|--|
| Asset Class       | (\$MM)              | FY17                         | FY18    | FY19    | FY20    |  |  |
| Credit            | \$401               | \$125                        | \$150   | \$175   | \$200   |  |  |
| Real Estate       | 1,398               | 450                          | 475     | 500     | 525     |  |  |
| Natural Resources | 1,964               | 600                          | 575     | 550     | 550     |  |  |
| Buyout/Growth     | 1,134               | 350                          | 350     | 375     | 400     |  |  |
| Venture           | 655                 | 275                          | 300     | 325     | 375     |  |  |
| Emerging Markets  | 720                 | 200                          | 200     | 200     | 225     |  |  |
| Total             | \$6,272             | \$2,000                      | \$2,050 | \$2,125 | \$2,275 |  |  |

### **Projected Cash Flows**



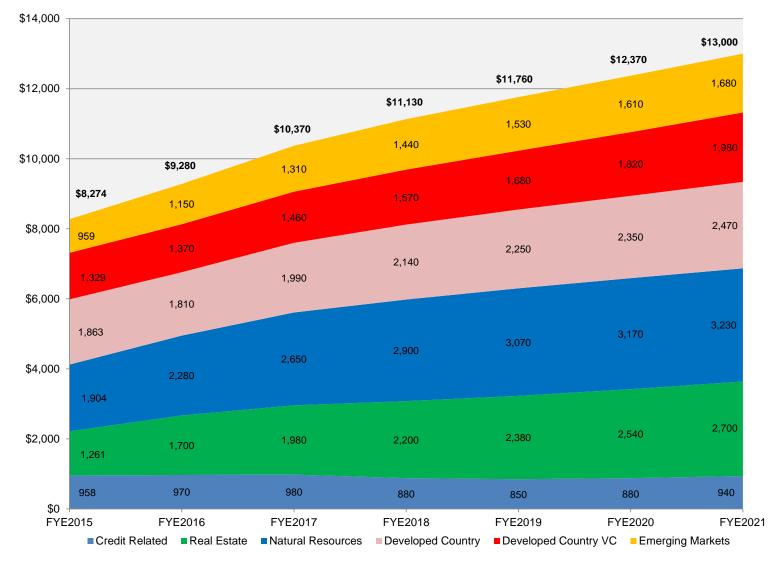
The Private Investments portfolio was cash flow positive in 2013 and 2014, negative in 2015, 2016 (P) and 2017 (P), and is projected to become cash flow positive again in 2018



### **Projected Private Investments NAV**



Private Investment NAV is projected to growth to \$13B in five years



### Agenda Item UTIMCO Board of Directors Meeting May 5, 2016

| Agenda Item:  | UTIMCO Organization Update   |
|---------------|--|
| Developed By: | Staff  |
| Presented By: | Zimmerman, Staff   |
| Type of Item: | Information Item   |
| Description:  | Bruce Zimmerman and Staff will provide an update on UTIMCO's staffing, 2 <sup>nd</sup> quarter budget vs. actual, and accounting system upgrade. |
| Reference:    | UTIMCO Organization Update presentation  |



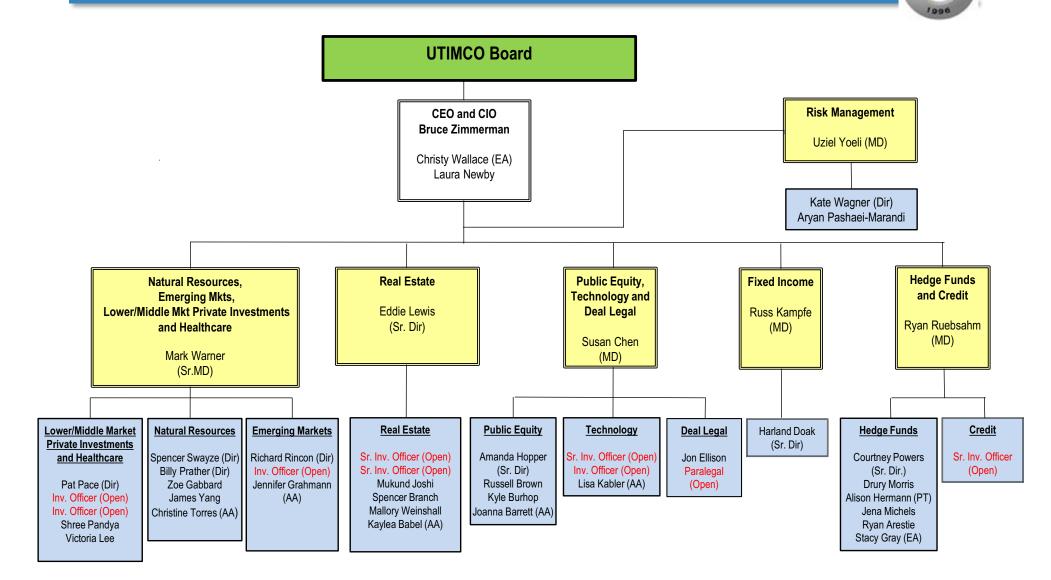
# The University of Texas Investment Management Company

### UTIMCO ORGANIZATION UPDATE May 5, 2016

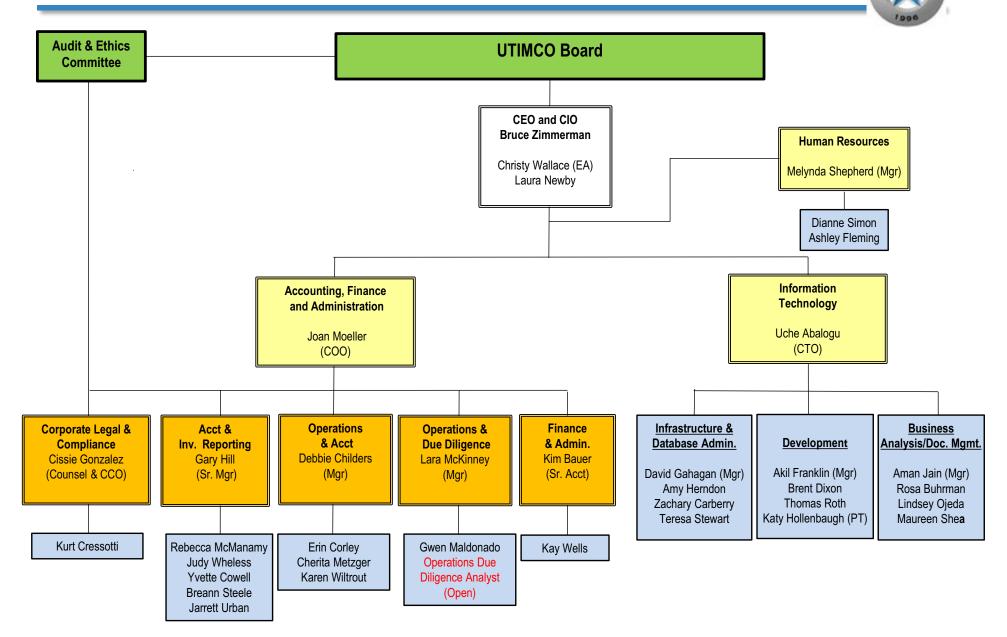


- Staffing
- Budget vs Actual
- Accounting System Upgrade

### UTIMCO ORGANIZATIONAL STRUCTURE Investments



### UTIMCO ORGANIZATIONAL STRUCTURE Support & Control





| UTIMCO Expenses                                | 2Q F     | Favorable /<br>(Unfavorable) |              |
|--|----------|------------------------------|--------------|
| (\$ in thousands)                              | Actual   | Budget                       |              |
| Salaries & Benefits                            | \$6,511  | \$6,960                      | \$449        |
| Legal  | 93       | 60                           | (33)         |
| Travel   | 393      | 402                          | 9            |
| Depreciation                                   | 767      | 875                          | 108          |
| Other Expenses                                 | 1,992    | 2,185                        | 193          |
| Subtotal                                       | 9,756    | 10,482                       | 726          |
| Incentive Compensation                         | 4,994    | 5,221                        | 227          |
| Total UTIMCO                                   | \$14,750 | \$15,703                     | \$953        |
| Non-UTIMCO, Non-Investment Management Expenses | \$4,409  | \$4,601                      | <u>\$192</u> |

# ACCOUNTING SYSTEM UPGRADE



### Prior to upgrade:

- Windows 2008/SQL 2005/Dynamics SL v7.0 (2011) Software at end of life Limited functionality
- Limited reporting
- Manual processes

## Two projects executing in parallel:

- Core System Upgraded
- BI 360 Reporting Platform

### After upgrade:

Windows 2012R2/SQL 2014/Dynamics SL 2015

Existing functionality preserved

Added functionality:

- New Modules: Cash Manager & Fixed Assets
- Test instance for change validation
- Data Warehouse with dynamic reporting
- Integration with Concur and Accounts Payable
- Automated reports
- Automated processes
- System training and upskilling for users

Fetimatos

|                     |            | _                   |         | _                 |        | _      |                             | LJU | iniates.                   |     |
|---------------------|------------|---------------------|---------|-------------------|--------|--------|-----------------------------|-----|----------------------------|-----|
|                     | % Complete | nplete Total Budget |         | t Actual Variance |        | riance | Spend at project Completion |     |                            |     |
|                     |            |                     |         |                   |        |        |                             | Cor | mpletion date of May 13, 2 | 016 |
| Core System Upgrade | 90         | \$                  | 48,917  | \$                | 25,907 | \$     | (23,010)                    | \$  | 28,500                     |     |
| BI360               | 60         | \$                  | 68,250  | \$                | 43,195 | \$     | (25,055)                    | \$  | 60,500                     |     |
|                     |            | \$                  | 117,167 | \$                | 69,102 | \$     | (48,065)                    | \$  | 89,000                     |     |

### Budget vs. Actual as of April 15, 2016

### Agenda Item UTIMCO Board of Directors Meeting May 5, 2016

| Agenda Item:    | Report from Audit and Ethics Committee  |
|-----------------|---|
| Developed By:   | Staff   |
| Presented By:   | White   |
| Type of Item:   | Information item  |
| Description:    | The Audit and Ethics Committee (the "Committee") will meet on April 26, 2016. The Committee's agenda includes (1) discussion and appropriate action related to the Committee minutes; (2) an update on compliance, reporting, and audit issues; and (3) a presentation of the unaudited financial statements for the six months ended February 29, 2016 for the Investment Funds and the Corporation. |
| Discussion:     | The Committee will review the unaudited financial statements for the second quarter for the Funds and UTIMCO Corporation and the quarterly compliance reports.  |
| Recommendation: | None  |
| Reference:      | Quarterly Compliance Reports  |

#### The University of Texas Investment Management Company Institutional Compliance Program Report for the Quarter Ended February 29, 2016

#### <u>Section I – Organizational Matters</u>

- One meeting of the Ethics and Compliance Committee were held during the quarter: January 5, 2016.
- Mark Shoberg, Managing Director Real Estate, Healthcare and Technology Investments terminated employment with UTIMCO on January 20, 2016. Eddie Lewis, Senior Director – Real Estate Investments is now reporting on Investment Due Diligence Activities related to real estate investments. Susan Chen, Managing Director – MCC, Technology and Deal Legal is now the party responsible for reporting on Investment Due Diligence Activities related to technology investments. Mark Warner, Senior Managing Director - Natural Resources, Emerging Markets & Lower/Middle Markets is now the party responsible for reporting on Investment Due Diligence Activities related to healthcare investments.

#### <u>Section II - Risk Assessment, Monitoring Activities and Specialized Training (Performed by Responsible</u> <u>Party)</u>

#### High-Risk Area #1: Investment Due Diligence

**Responsible Party:** Managing Director – LCC; Managing Director - MCC, Technology and Deal Legal;, Senior Managing Director - Natural Resources, Emerging Markets & Lower/Middle Markets; Managing Director - Fixed Income; Senior Director –Real Estate.

Key "A" risk(s) identified:

- Organization could fail to adequately conduct due diligence on prospective managers.
- Organization could fail to adequately conduct continual review and evaluation of external managers hired to manage UT System investment funds.

#### **Key Monitoring Activities:**

*MCC - Public Markets*: The MCC-Public Markets group participated in 58 meetings/calls with potential managers. Serious due diligence was initiated on one new mandate. One new mandate was completed. Ongoing review of active external managers included 63 meetings/calls. Additional efforts included monthly performance tracking, reviews and analyses by the team, and participation in one annual meeting.

*MCC - Fixed Income*: The MCC-Fixed Income group participated in 10 meetings/calls with potential managers. Ongoing review of active external managers included four meetings/calls. Additional efforts included 11 calls with brokers.

*Less Correlated and Constrained*: The Less Correlated and Constrained group participated in 43 meetings/calls with potential managers. Serious due diligence was initiated on one new mandate. Two new mandates were completed. Ongoing review of active external managers was conducted in the form of 69 meetings/calls/site visits. Additional efforts included monthly performance tracking, and reviews and analyses by the team.

*Natural Resources:* The Natural Resources group participated in 151 meetings/calls with potential managers. Serious due diligence was initiated on one new mandate. Four new mandates were completed and there were additions to two existing mandates. Ongoing review of active external managers included 175 meetings/calls.

*Emerging Markets:* The Emerging Markets group participated in 78 meetings/calls with potential managers. Ongoing review of active external managers included 29 meetings/calls. Serious due diligence was initiated on one new mandate.

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*Private Markets, including Lower Middle Markets, Healthcare and Technology:* The Private Markets group participated in 30 meetings/calls with potential managers. Serious due diligence was initiated on ten new mandates. Eight new mandates were completed and there was an addition to one existing mandate. Ongoing review of active external managers included 41 meetings/calls. Additional efforts included participation in 1 annual meeting.

*Real Estate:* The Real Estate group participated in 57 meetings/calls with potential managers. Serious due diligence was initiated on two new mandates and one existing mandate. One new mandate was completed. Ongoing review of active external managers included 112 meetings/calls. Additional efforts included participation in one annual meeting.

Specialized Training: Staff attended 34 industry-related conferences/functions.

High-Risk Area #2: Investment Risk Management

Responsible Party: Managing Director - Risk Management

#### Key "A" risk(s) identified:

- Organization could fail to accurately perform its assessment of risk due to data and investment instrument modeling error.
- Organization could fail to respond to risk levels (manage risk budget).

#### **Key Monitoring Activities:**

- Hired and started training Aryan Marandi. Aryan is currently part-time, and will start full-time in May.
- During the quarter, Risk Team reconciled accounting records' market value with market values modeled by IFS; reconciled month end values from IFS to accounting records and identified reasons for all discrepancies. Compared each month's downside volatility with both prior month results and with market activity to determine consistency, and identified reasons for all changes; prepared monthly charts and reports, as well as analysis of managers' portfolio-level risks and performance.
- Risk Team participated in one due diligence call and reviewed five additional due diligence questionnaires.
- Risk Team continued to develop a system and processes by which the accuracy and integrity of the underlying data for Private Investments can be verified, thereby resulting in a system which the Staff trusts and uses. Currently the Risk Team is validating that the underlying data matches what the Investment Teams has. This project also allows additional analytics using exposures generated by the underlying data. Several analytical tools are being evaluated.
- Risk team continued to monitor sources and uses of cash, and to enhance our processes given that the Endowments are having more Private Investments and hence becoming more illiquid.
- Risk Team continued to monitor the current macro environment. Risk Team continued to review future scenarios with high risk, and is working with the Portfolio Positioning Task Force to better understand the impact of each such scenario and to address such scenarios. In particular, Risk Team evaluated the risks of a Chinese "hard landing".
- All internal derivatives were reviewed and analyzed in detail prior to initiation. The insurance budget is continuously tracked.
- Derivative positions are monitored on a daily basis. External managers that may use derivatives are monitored daily for spikes in returns or in volatility. Effects of derivatives on the overall portfolio are monitored monthly. Fixed income duration and tracking error is being monitored on an ongoing basis. Managers' use of margin and leverage is monitored on an ongoing basis. Risk Team confirmed downside volatility and VaR calculations each month.
- Risk Team monitors UTIMCO counterparties for any negative news and/or potential downgrades and continues to support investment staff in understanding risks inherent in managers operating under agency agreements.
- Risk Team prepared projections on portfolio downside volatility utilization, country exposure, liquidity, and asset allocations; updated projections on a weekly basis.

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Specialized Training: Risk Team participated in one conference during the quarter.

#### High-Risk Area #3: Information Technology & Security Responsible Party: Chief Technology Officer

#### Key "A" risk(s) identified:

- Organization could fail to adequately secure networks and data to prevent abuse, destruction, and/or theft.
- Organization could fail to manage computer software and hardware resulting in internal and external users unable to perform necessary job duties.

#### **Key Monitoring Activities:**

- New employee/intern security training was completed.
- Several alerts were sent to staff covering topics such as viruses, malware, phishing scams, securely sending credit card and social security numbers and updates for mobile devices.
- Monitoring and blocking of unencrypted electronic transmissions of social security numbers and credit card numbers is ongoing. Violations are reported to the CCO and staff is reminded to transmit via encrypted means. One violation occurred this quarter.
- Compliance checks for nightly shutdown/logout are regularly performed. Violations noted and violators notified as necessary.
- Random checks for confidential data storage continue and CISO continues to work with development staff to limit access to source code.
- Random checks for software compliance were completed. CISO continues to monitor and address policy violations for unauthorized software, sharing of credentials, and use of network resources.
- Continued refinement of Splunk for infrastructure monitoring and alerting.
- One malware incident, limited to 3 PC infected; no further impact to business.
- Began security review of Dynamo.
- Provided guidance to investment and back office staff on due diligence related to security, infrastructure and IT functions with new investment partners.
- Met with investment partner Serenity on IT security, and infrastructure strategies.
- Several compliance violations, including storing of UTIMCO data on unapproved personal devices or cloud services; using Outlook, Evernote, Google Apps, and CloudMagic email on personal laptops for UTIMCO business; saving passwords in the browser/not using lastpass. All issues were addressed with the respective user and resolved.

**Specialized Training:** CISO attended teleconference UT Security meetings and on-site CISO Council and InfoSec quarterly meetings. CISO met with Dell computer, Microsoft, M&S Technologies, Sequel Data Systems, Denim Group, Stratfor, and Dynamo to review new technologies, security standards, and security.

#### High-Risk Area #4: Investment Compliance

**Responsible Party:** Manager - Portfolio Accounting and Operations and Chief Compliance Officer **Key "A" risk(s) identified:** 

- Organization could fail to comply with investment policies, applicable laws and regulations, and other policies.
- Organization could fail to detect non-compliance with applicable policies, etc.

#### Key Monitoring Activities:

- Verified that investments are in compliance with rules and guidelines in policies, rules and regulations utilizing custodian's software and in-house developed databases and reports.
- Review of monthly and quarterly investment compliance reports prepared by staff continues.

- All mandates submitted to the Chief Compliance Officer were reviewed and categorized pursuant to asset class and investment type in accordance with the Mandate Categorization Procedure and approved by the UTIMCO Risk Committee.
- Continued participation by the Portfolio Accounting and Operations staff in prospective and active external manager investment due diligence.
- Derivative Investment Controls and Processes are being followed and work continues on improving them.

#### Specialized Training: None

#### **High-Risk Area #5:** Conflicts of Interest **Responsible Party:** Chief Compliance Officer

#### Key "A" risk(s) identified:

• Organization could fail to comply with conflicts of interest provisions in Code of Ethics and Texas Education Code section 66.08.

#### **Key Monitoring Activities:**

- All Certificates of Compliance were received timely from all Directors and Key Employees for all investment managers hired and funded. Certificates were reviewed for completeness; no conflicts of interest were noted, i.e., no pecuniary interests were identified.
- Three new employees and one intern were hired during the quarter. All employee financial disclosure statements and ethics compliance statements due were received on or before the required due dates.
- Three employee ethics and compliance training session was held for the new hires. All received training within a reasonable time after hire.
- Effective April 1, 2013, a new procedure regarding the periodic review of public resources for comparison with financial disclosure statement information provided by Directors and Key Employees was adopted, which requires review of these statements within 90 days after the deadline for filing the statements. The review of public resources was performed for one individual appointed as a Key Employee/Officer on November 18, 2015.
- List of publicly traded securities of all publicly traded companies in which a Director or employee has a pecuniary interest (the "restricted list") was maintained. Internal managers and external managers under agency agreements are provided the restricted list in order to prevent the violation of UTIMCO Code of Ethics and *Texas Education Code* Section 66.08. No new external managers under an agency agreement were hired during the quarter.
- On a daily basis, the Chief Compliance Officer reviewed security holdings of internal and external managers under agency agreements for compliance with the restricted list. No exceptions noted.
- Of the 38 securities transactions during the quarter, one required preclearance. All but one transactional disclosure form were submitted within the required ten days.
- CEO approval was given to one employee for outside employment.
- Beginning with the fourth quarter 2015, the Finance and Administration travel review process was modified to require testing of a sample of expense reports only and no longer provide a review of all reimbursement requests. As a result, compliance reporting is now limited to information obtained from the sample tested during the quarter. Of the seven expense reports tested during the quarter, one included a sponsored entertainment event and had appropriate documentation and approval. Five sponsored entertainment events requiring CEO, CCO, or UTIMCO Chairman approval that did not include travel received the requisite approvals.

#### Specialized Training: None

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#### Section III – Monitoring and Assurance Activities (Performed by Compliance Office)

#### High-Risk Area #1: Investment Due Diligence

Assessment of Control Structure: Well controlled

Assurance Activities Conducted: CCO reviewed results of quarterly due diligence monitoring plans for each Investment group. Ongoing due diligence efforts on multiple managers continue. The Managing Director, Risk Management and CCO participated in the bi-weekly Investment Committee meetings. Significant Findings: None.

#### High-Risk Area #2: Investment Risk Management

Assessment of Control Structure: Well controlled

**Assurance Activities Conducted:** CCO continues to review documentation maintained by the Risk Team evidencing risk monitoring performed by the Risk Team. **Significant Findings:** None

High-Risk Area #3: Information Technology & Security Assessment of Control Structure: *Well controlled* Assurance Activities Conducted: CCO continues to meet with CISO regarding information technology and security practices. Significant Findings: None

#### High-Risk Area #4: Investment Compliance

Assessment of Control Structure: Well controlled

**Assurance Activities Conducted:** CCO is performing monthly review and sign-off of Compliance Reports to determine that policy requirements have been maintained based on the activity performed by staff. CCO reviewed the documentation and workpapers supporting the various compliance reports prepared by the Responsible Parties. **Significant Findings:** None

#### High-Risk Area #5: Conflicts of Interest

Assessment of Control Structure: Well controlled

Assurance Activities Conducted: CCO reviewed the completed sign-offs for completeness for all certificates of compliance received. Monitoring for potential conflicts of interest in the areas of personal securities transactions, outside employment and business activities, and manager/third party-paid travel, entertainment and gifts is ongoing. Significant Findings: None

#### Section IV – General Compliance Training Activities

Three training sessions for new hires were held during the quarter.

#### Section V – Action Plan Activities

See updated Institutional Compliance Action Plan Fiscal Year 2016.

#### Section VI – Confidential Reporting

UTIMCO maintains a Compliance Hotline to receive and process complaints. UTIMCO has contracted with an outside vendor to provide the service. The chart below summarizes the calls received during the **FISCAL YEAR**:

|                           | FYTD   |            |
|---------------------------|--------|------------|
| Туре                      | Number | % of Total |
| Employee Relations        | 0      | 0.00%      |
| Policy Issues             | 0      | 0.00%      |
| Hang ups or wrong numbers | 0      | 0.00%      |

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| Total | 0 | 0.00% |
|-------|---|-------|
|       |   |       |

All calls are accepted by the hotline and reported to the UTIMCO Compliance Office. All reports are handled by a 5-person team comprised of the General Counsel and Chief Compliance Officer, the Compliance Specialist (TBD), the Manager - Finance & Administration, the Executive Assistant to the CEO and Chief Investment Officer, and David Givens from The University of Texas Systemwide Compliance Office.

# The University of Texas Investment Management Company Institutional Compliance Action Plan Fiscal Year 2016

| #   | ACTION ITEM  | TARGET COMPLETION<br>DATE | STATUS   |
|---|--|---------------------------|--|
| A. RI                                       | SK ASSESSMENT  |                           |  |
| 1.  | Maintain Enterprise Risk Management<br>Framework; update risk assessments as<br>needed, including mapping of controls  | 08/31/16                  | No activity  |
| <b>B.</b> MONITORING ACTIVITIES / ASSURANCE |  |                           |  |
| 2.  | Continual enhancement of compliance monitoring and reporting   | On-going                  | Ongoing  |
| 3.  | Periodic review of Responsible Party<br>Monitoring Plan documentation for high<br>risk areas A   | On-going                  | 1 <sup>st</sup> Qtr. and 2 <sup>nd</sup> Qtr. FY<br>2016 reviewed  |
| С. СС                                       | OMPLIANCE TRAINING / AWARENESS   |                           |  |
| 4.  | Provide Code of Ethics training and<br>information to improve staff awareness of<br>compliance program   | 04/30/16                  | Three new hire trainings<br>were held on12/14/2016,<br>01/22/2016, and<br>02/18/2016 (all were<br>completed within 30 days<br>of hire)                           |
| 5.  | Identify and network with similarly situated compliance professionals  | On-going                  | The Regulatory<br>Fundamentals Group and<br>Rice University<br>conference 02/03/2016   |
| <b>D. R</b>                                 | EPORTING   |                           |  |
| 6.  | Conduct quarterly meetings with the internal ethics and compliance committee   | On-going                  | 1st qtr. FY 2016 meeting<br>held 01/05/2016  |
| 7.  | Provide quarterly/annual reports to the<br>Audit and Ethics Committee and System-<br>wide compliance office  | On-going                  | First quarter FY 2016<br>report presented to Audit<br>and Ethics Committee on<br>02/17/16; report<br>submitted to Systemwide<br>Compliance Office on<br>01/27/16 |
| <b>E. O</b> 2                               | THER / GENERAL COMPLIANCE  |                           |  |
| 8.  | Complete wholesale review and compilation<br>of all laws, regulations, policies and<br>procedures applicable to UTIMCO and the<br>funds; and to the extent necessary, modify<br>compliance processes and reporting | 03/31/16                  | Data is currently being<br>accumulated; revised<br>target completion date of<br>08/31/2016   |
| 9.  | Supervise and manage work of Legal and<br>Compliance Specialist  | 08/31/16                  | Kurt Cressotti began<br>employment as<br>Compliance Specialist on<br>March 15, 2016  |

| #   | ACTION ITEM  | TARGET COMPLETION<br>DATE | STATUS  |
|-----|--|---------------------------|---|
| 10. | Research and implement new/additional compliance program best practices, if needed                                     | 08/31/16                  | Data is currently being accumulated                                       |
| 11. | Complete third live testing of Business<br>Continuity Plan; update as business<br>processes change                     | 02/28/16                  | No activity   |
| 12. | UT Systemwide Compliance Office<br>activities participation: annual compliance<br>officers' forum and other activities | On-going                  | No activity; Compliance<br>Officers' Forum to be<br>held on April 4, 2016 |
| 13. | Hotline reporting  | On-going                  | No activity   |

## Agenda Item UTIMCO Board of Directors Meeting May 5, 2016

- Agenda Item: Report from Risk Committee
- Developed By: Staff
- Presented By: Bass
- Type of Item: Information item
- **Description:** The Risk Committee ("Committee") will meet on April 26, 2016. The Committee's agenda includes (1) discussion and appropriate action related to minutes; (2) discussion and appropriate action related to categorization of investment mandates; (3) review and discussion of compliance reporting; and (4) review and discussion of performance and risk reporting. Also included on the Committee's agenda is a Briefing Session pursuant to Texas Education Code Section 66.08(h)(2) related to Investments.
- **Discussion** The Committee will review and take appropriate action related to the 14 mandate categorizations prepared by Staff for the period beginning February 1, 2016, and ending April 1, 2016. Staff continues to monitor five mandates. The Committee will report to the UTIMCO Board the results of its review of the Investment Mandate Categorizations.

The Committee will also review the quarterly compliance reporting and the performance and risk reporting.

Recommendation: None

Reference: None

#### Agenda Item

#### UTIMCO Board of Directors Meeting May 5, 2016

- Agenda Item: Report from Compensation Committee: (1) Discussion and Appropriate Action Related to Designation of Employee in Eligible Position as Participant in the UTIMCO Compensation Program for the Performance Period ending August 31, 2016; and (2) Discussion and Appropriate Action Related to Amendments to Appendix B of UTIMCO Compensation Program (UTIMCO Peer Group)
- **Developed By:** Zimmerman, Moeller, Gonzalez
- Presented By: Hobson
- Type of Item:
   Action item; Action required by UTIMCO Board
- **Description:** The Compensation Committee (the "Committee") will meet on April 26, 2016. The Committee's agenda includes the following (1) discussion and appropriate action related to minutes of its January 15, 2016 meeting; (2) discussion and appropriate action related to designation of Employee in Eligible Position as Participant in the UTIMCO Compensation Program and a Participant's Qualitative Performance Goals for the Performance Period ending August 31, 2016; and (3) discussion and appropriate action related to amendments to Appendix B of UTIMCO Compensation Program (UTIMCO Peer Group). The Committee may also meet in Executive Session for the purpose of deliberating individual personnel compensation matters.
- Discussion: Designation of Employee in Eligible Position. The Committee, at its January 15, 2016 meeting, approved the Designation of Employees in Eligible Positions in the UTIMCO Compensation Program ("Plan") for the 2015/2016 Performance Period and the Participants' Qualitative Goals. The Board also approved the Designation of Employees in Eligible Positions at its January 15th meeting. At the April 26th Committee meeting, Mr. Zimmerman will request that a newly hired employee, Akil Franklin, be designated in an Eligible Position. Mr. Franklin's hire date was January 25, 2016. Section 5.3 of the Plan provides that the Board may designate a newly hired or promoted employee as eligible to participate in the Plan for a Performance Period (or remainder of a Performance Period) within 30 days of such hire or promotion or, if later, as soon as administratively feasible. Section 5.4 of the Plan requires that the CEO recommend Performance Goals for employees who are hired or promoted during the Performance Period and become Participants at the time those employees are designated as Participants (with such Performance Goals subject to confirmation by the Committee as soon as administratively feasible after such Performance Goals are recommended). Mr. Franklin's Qualitative Performance Goals were provided for review by the Committee in Executive Session.

The Committee will take appropriate action related to Mr. Franklin's designation in the Eligible Position of Mgr., Development in the Plan effective January 25, 2016, and Mr. Franklin's Qualitative Performance Goals for the 2015/2016 Performance Period.

### Agenda Item UTIMCO Board of Directors Meeting May 5, 2016

<u>Appendix B, UTIMCO Peer Group</u>. The Peer Group set forth in Appendix B of the UTIMCO Compensation Program (the "Plan") is a peer group of endowment funds that is composed of all endowment funds with more than 10 full-time employee positions, allocations to alternative assets in excess of 40%, and with assets greater than \$2.5 billion, determined as of the last day of each fiscal year ended in June of the preceding fiscal years, excluding the Total Endowment Assets (PUF and GEF). The Plan's Peer Group for the fiscal year ending August 31, 2016 incorporates June 2013, 2014, and 2015. The Peer Group is updated annually, and Appendix B is updated accordingly. The Peer Group may be included as a Qualitative Performance Goal for certain Plan Participants.

The Compensation Plan Universe for 2015/16 as determined by UTIMCO staff will be used as the Peer Group for Appendix B of the UTIMCO Compensation Program. Staff is recommending no changes to the Peer Group. Staff has determined that no other endowment funds have met the required criteria for the three immediately preceding June fiscal years. The Committee will take appropriate action at its meeting on April 26, 2016.

- **Recommendation:** The Committee will request appropriate action from the Board related to (1) the designation of Akil Franklin as an Employee in an Eligible Position as a Participant in the Plan for the 2015/2016 Performance Period; and (2) the approval of the Peer Group for the UTIMCO Compensation Program for the Performance Period beginning September 1, 2015, and ending August 31, 2016
- **Reference:** Appendix B, UTIMCO Peer Group

# RESOLUTION RELATED TO 2015/2016 PARTICIPANT IN UTIMCO COMPENSATION PROGRAM

WHEREAS, Section 5.3.(a) of the UTIMCO Compensation Program (the "Plan") provides that, in order to become a "Participant" in the Plan for a Performance Period, a UTIMCO employee must be (1) employed in a position designated by the Board of Directors of UTIMCO (the "Board") as an "Eligible Position" for that Performance Period and (2) selected by the Board as a Participant for that Performance Period; and

WHEREAS, the Compensation Committee of the Board has recommended Akil Franklin (Mgr., Development) to become a Participant for the 2015/2016 Performance Period; and

WHEREAS, the UTIMCO Board wishes to select Akil Franklin (Mgr., Development) as a Participant for the 2015/2016 Performance Period.

NOW, THEREFORE, be it:

RESOLVED, that, Akil Franklin (Mgr., Development) be designated as a "Participant" in the Plan for the 2015/2016 Performance Period, effective as of January 25, 2016.

# RESOLUTION RELATED TO PEER GROUP

WHEREAS, Section 8.14. of the UTIMCO Compensation Program (the "Plan") provides that the "Peer Group" will be updated annually at the beginning of each Performance Period, and Appendix B (UTIMCO Peer Group) will be amended accordingly; and

WHEREAS, Section 7.2. of the Plan provides that the Board has the right to amend the Plan or any portion thereof from time to time; and

WHEREAS, the Board wishes to amend Appendix B to conform to the updated Peer Group as defined in the Plan.

NOW, THEREFORE, be it:

RESOLVED, that the updated and amended Appendix B (UTIMCO Peer Group), a copy of which is attached hereto, is hereby adopted and approved as part of the Plan to replace the current Appendix B, effective as of September 1, 2015.

# **Appendix B**

## **UTIMCO Peer Group**

- Brown University
- Columbia University
- Cornell University
- Dartmouth College
- Duke University
- Emory University
- Harvard University
- John Hopkins University
- Massachusetts Institute of Technology
- New York University
- Northwestern University
- Princeton University
- Rice University
- Stanford University
- UNC Management Company
- University of California
- University of Chicago
- University of Michigan
- University of Notre Dame
- University of Pennsylvania
- University of Southern California
- University of Virginia Investment Management Company
- Vanderbilt University
- Washington University in St. Louis
- Yale University

Source: UTIMCO Staff. Represents endowment funds (excluding the Total Endowment Assets) with more than 10 full-time employee positions, allocations to alternative assets in excess of 40%, and with assets greater than \$2.5 billion, all to be determined as of the last day of each year ended June 2013, 2014, 2015.

#### Agenda Item

#### UTIMCO Board of Directors Meeting May 5, 2016

- Agenda Item: Report from Policy Committee: (1) Discussion and Appropriate Action Related to Amendments to the Delegation of Authority Policy; and (2) Discussion and Appropriate Action Related to Amendments to the Short Term Fund Investment Policy Statement
- Developed By: Staff
- Presented By: Hicks, Zimmerman

 Type of Item:
 Action item; Action required by UTIMCO Board; Further action required by the UT

 System Board of Regents on the STF Investment Policy Statement

- **Description:** The Policy Committee (the "Committee") will meet on April 26, 2016. The Committee's agenda includes (1) discussion and appropriate action related to minutes of its October 15, 2015 meeting and its October 15, 2015 joint meeting with the Risk Committee; (2) discussion and appropriate action related to amendments to the Delegation of Authority Policy; and (3) discussion and appropriate action related to appropriate action related to amendments to the Short Term Fund Investment Policy Statement.
- **Discussion:** <u>Delegation of Authority Policy.</u> Mr. Zimmerman will present to the Committee amendments to the Delegation of Authority Policy. As a result of the UT System Audit Office audit of the internal controls surrounding the processes of the separately managed accounts, staff is proposing changes to the Delegation of Authority Policy to clarify staff's delegated authority with respect to investment of the UT System funds.

Following is a brief summary of the proposed changes to the Delegation of Authority Policy, effective May 5, 2016:

Pages 3-4, Allocation of Investment Funds to New Managers and Mandates; language has been changed to clarify staff's delegated authority to commit UT System funds to new relationships and new mandates.

Page 4, Changing Allocations of Investment Funds to Existing Managers and Mandates; language has been changed to clarify staff's delegated authority to commit UT System funds to existing managers and mandates.

Pages 4-5, Terms Applicable to All Internal and External Managers; language has been changed to clarify staff's delegated authority with respect to investment and revise the established process to request a complete review of the investment prior to execution of the investment.

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#### Agenda Item UTIMCO Board of Directors Meeting May 5, 2016

Page 6, Investment in Derivative Investments; language has been changed to clarify staff's delegated authority to enter into Derivative Investments.

#### Page 7, Appendix A has been deleted

Minor editorial changes.

<u>Short Term Fund Investment Policy Statement.</u> Mr. Zimmerman will present to the Committee amendments to the Short Term Fund (STF) Investment Policy Statement. The STF is the pooled fund for the collective investment of operating funds and other short and intermediate term funds. STF assets consist of Cash and Cash Equivalents. All investments are stated at amortized cost, which in most cases approximates the market value of securities. The objective of the fund is to maintain a stable \$1.00 net asset value. Currently, the STF is invested in the Dreyfus Institutional Preferred Money Market Fund.

In July 2014, the Securities and Exchange Commission adopted amendments to the rules that govern money market funds. The new rules require a floating net asset value (NAV) for institutional prime money market funds, which allows the daily share prices of these funds to fluctuate along with changes in the market-based value of fund assets; the new rules also provide the boards of these money market funds tools – liquidity fees and redemption gates - to address runs on the fund. The final rules provided a two-year transition period. The new rules become effective October 14, 2016.

With a floating NAV, institutional prime money market funds are required to value their portfolio securities using market-based factors and buy and redeem shares based on a floating NAV. Daily share prices of these money market funds will fluctuate with changes in the market-based value of their portfolio securities. Institutional prime money market funds will be required to price their shares using a more precise method so investors are more likely to see fluctuations in value. Currently, money market funds "penny round" their share prices to the nearest one percent (to the nearest penny in the case of a fund with a \$1.00 share price.) Under the floating NAV amendments, institutional prime money market funds instead would be required to "basis point round" their share price to the nearest 1/100<sup>th</sup> of one percent.

Government and retail money market funds would be allowed to continue using the amortized cost method and/or penny rounding method of pricing to seek a stable share price. A government money market fund is defined as any money market fund that invests 99.5% or more of its total assets in cash, government securities and/or repurchase agreements that are collateralized solely by government securities and cash.

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#### Agenda Item UTIMCO Board of Directors Meeting May 5, 2016

The STF Investment Policy Statement is being amended to accommodate changes in the SEC rules governing money market funds. In order to mitigate the impact of the SEC rule changes on UT institutions, the UT System is proposing that the STF maintain a portion of its investments in a government money market fund that has a constant NAV, is not subject to redemption fees and gates, provides additional diversification and a later trading window. Based on historical cash flows, the UT System is proposing an initial balance in a governmental money market fund of \$500 million, which UTIMCO staff would rebalance daily. The target balance in the government fund may be reviewed and adjusted periodically. The balance of the STF would remain invested in institutional prime money market funds, currently the Dreyfus Institutional Preferred Money Market Fund. All accounts (member institutions) would execute STF-related transactions in the government fund and would be credited with the government fund rate on the institution's entire STF balance (government fund balance plus the account's share invested in institutional prime funds) on a daily basis, payable monthly. The member institutions would not incur any gains or losses in the STF. The STF Investment Policy Statement has proposed amendments to remove language stating that each account invested in the STF has an undivided interest in the STF. The UT System plans to absorb the floating NAV risk versus having UT institutions generate realized and unrealized gains and losses on STF transactions. The UT System would manage the System's overall liquidity and would receive the incremental returns on the portion of the STF invested in the institutional preferred money market funds in exchange for absorbing the floating NAV risk.

- **Recommendation:** The Committee will request the UTIMCO Board to take appropriate action related to amendments to the Delegation of Authority Policy, effective May 5, 2016 and to the Short Term Fund Investment Policy Statement, effective September 1, 2016.
- **Reference:** Delegation of Authority Policy, effective May 5, 2016 Short Term Fund Investment Policy Statement, effective September 1, 2016

# RESOLUTION RELATED TO DELEGATION OF AUTHORITY POLICY AND SHORT TERM FUND INVESTMENT POLICY STATEMENT

RESOLVED, that amendments to the Delegation of Authority Policy as presented be, and are hereby approved, and that amendments to the Short Term Fund Investment Policy Statement, as presented be, and are hereby approved, subject to approval by the Board of Regents of The University of Texas System. Effective Date of Policy: November 18, 2014<u>May 5, 2016</u> Date Approved by UTIMCO Board: <u>November 18, 2014May 5, 2016</u> Supersedes: Delegation of Authority Policy approved by the UTIMCO Board on <del>July 22, 2013</del><u>November 18, 2014</u>

#### Purpose:

The purpose of the Delegation of Authority Policy is to provide a clear delineation of responsibilities of the UTIMCO Board of Directors and the UTIMCO staff. Section 66.08(d) of the *Texas Education Code* provides that UTIMCO's duties to the U. T. System Board of Regents with respect to the management of investment funds shall be governed by a contract between the two parties. UTIMCO provides various investment management services to the U. T. System Board as more fully described in the Investment Management Services Agreement by and between the U. T. System Board and UTIMCO. The UTIMCO Board is responsible for management and investment oversight of UTIMCO. The UTIMCO Board recommends amendments to the Investment Policies for approval by the U. T. System Board. The UTIMCO Board is responsible for overseeing the investment process to execute the established Investment Policies. However, to enhance the competitiveness of the investment process, improve management and operational efficiency, and define and concentrate accountability for performance, certain duties and responsibilities are delegated by the UTIMCO Board to UTIMCO Management. This Policy Statement defines the delegation of authority in the two primary areas of UTIMCO operations:

- (1) Management, Operations, and Finance; and
- (2) Investments.

#### **Objective:**

By clearly defining the scope of delegated authority to UTIMCO Management, this Policy Statement enhances operational efficiency and timeliness in decision making, thereby enhancing competitiveness.

### Scope:

This Policy applies to all matters under UTIMCO control. The only delegations of authority granted by the UTIMCO Board are enumerated in this Policy, and any authority not specifically granted in this Policy is retained by the UTIMCO Board acting as agent for the U. T. System Board, provided that nothing contained in this Policy Statement is intended to, or shall, limit any delegation of authority otherwise set forth in the UTIMCO Bylaws, the Investment Management Services Agreement, any Committee Charter, any Investment Policy, or any formal policy adopted by the UTIMCO Board.

### Authority Delegated to UTIMCO Management:

The primary functions of the UTIMCO Board are to formulate, revise, implement, and conduct ongoing oversight of the policies it has established for UTIMCO. The duties and responsibilities of the UTIMCO Board are enumerated in the UTIMCO Bylaws, Articles of Incorporation, Committee Charters, Investment Management Services Agreement, and UTIMCO policies. To execute its responsibilities more efficiently, the UTIMCO Board has delegated the authority to implement UTIMCO policies to UTIMCO Management in two primary areas: (i) Management, Operational, and Financial Authority; and (ii) Investment Authority.

*Management, Operational, and Financial Authority:* Final authority for the functions listed below rests with the UTIMCO Board:

- Administration, Accounting and Financial Management;
- Systems Technology Management;
- Personnel Management;
- Compliance;
- Client Relations and Reporting; and
- Public Relations.

However, the UTIMCO Board hereby delegates authority to UTIMCO Management in each functional area as specified below:

Administration, Accounting, and Financial Management: The UTIMCO Board hereby delegates all day-to-day operational decisions to UTIMCO Management. This delegation includes, but is not limited to, all administrative decisions regarding the management of endowment and operating funds as well as all administrative and financial decisions associated with the operation of the UTIMCO organization. This delegation includes the authority to execute all contracts and agreements, subject to the limitations defined below.

Systems Technology Management: The UTIMCO Board hereby delegates all decisions regarding the operation and management of all systems technology assets to UTIMCO Management. This delegation includes the authority to execute all contracts and agreements, subject to the limitations defined below.

*Personnel Management:* The UTIMCO Board hereby delegates to the UTIMCO Chief Executive Officer all personnel management decisions regarding positions included in approved UTIMCO operating budgets, and grants authority to the Chief Executive Officer to add non-budgeted personnel as necessary, subject to review in the following budget cycle, provided that the addition of any non-budgeted personnel shall be promptly reported to the UTIMCO Board. All compensation decisions for officers of UTIMCO are excluded from this delegation.

*Compliance:* The UTIMCO Board hereby delegates all compliance operations to UTIMCO Management, while retaining all oversight functions as specified in UTIMCO policies.

*Client Relations and Reporting:* The UTIMCO Board hereby delegates all client relations and reporting decisions to UTIMCO Management.

*Public Relations:* The UTIMCO Board hereby delegates to the UTIMCO Chief Executive Officer, in conjunction with The University of Texas System Offices of Public Affairs and Governmental Relations, all decisions regarding public relations matters, except for those matters that are reserved to the UTIMCO Vice Chairman for Policy.

In addition, to facilitate the execution of the authority granted above, the UTIMCO Board hereby delegates the following specific duties and responsibilities to UTIMCO Management:

- Contracts: The UTIMCO Board hereby delegates to the UTIMCO Chief Executive Officer the authority to execute on the behalf of UTIMCO all contracts, leases, or other commercial arrangements (except investment management agency contracts, partnership agreements, investment consultant agreements and agreements with independent auditors) for a total obligation of \$1 million or less during the contract term; provided that, for purposes of this delegation any contract that does not have a fixed term shall be deemed to have a term of one year; provided further, that notice of any such new contracts, leases, or other commercial arrangements of \$50,000 or more shall be reported to the UTIMCO Board at its next regularly scheduled meeting, and annually, all existing contracts, leases, or other commercial arrangements of \$50,000 or more shall be reported to the UTIMCO Board.
- Fiduciary Counsel: Management of UTIMCO's Fiduciary Counsel: The UTIMCO Board hereby delegates to the UTIMCO Chief Executive Officer the authority to direct the day-to-day work product of the UTIMCO fiduciary counsel, provided that the UTIMCO fiduciary counsel shall continue to have primary reporting responsibility to the UTIMCO Board.

*Investment Authority:* The UTIMCO Board hereby delegates the following specific duties and responsibilities to UTIMCO Management:

- Tactical Asset Allocation: Without limitations of timing, procedures, or vehicles utilized, decisions regarding tactical asset allocation within the ranges established in Investment Policies, including rebalancing portfolio weights to Policy Target Weights or actively deviating from Policy Weights as market conditions dictate, are hereby delegated to the UTIMCO Chief Executive Officer, as long as any decisions do not violate established Investment Policies. Short sales of securities (including exchange traded funds, and individual common stocks and bonds) and equity indices or short positions established through Delegated Derivative Investments as defined in the Derivative Investment Policy to offset existing long positions for risk control purposes may also be utilized as a vehicle in tactical asset allocation. Prior to implementation of any short security sale strategy and throughout the duration of the strategy, risk analyses shall be performed to verify the expected risk reducing impact of the proposed strategy and that the strategy does not result in the risk position of the total Funds being outside the policy risk range.
- *Risk Management:* The UTIMCO Board hereby delegates all decisions regarding the design and operation of any risk management system to UTIMCO Management.
- Allocation of Investment Funds to New Managers and Mandates: The UTIMCO Board hereby delegates to the UTIMCO Chief Executive Officer the authority to commit UT System funds to a new relationship with an internal or external investment manager during the first six months of the relationship or to new mandates with external investment managers already under existing relationships with UTIMCO, and the accompanying authority to negotiate and execute agency, partnership or subscription agreements as necessary, subject only to the following limitationsprovided that any Director may require a complete review by the Board of the investment prior to the execution of the investment if the investment exceeds any of the following thresholds:

- More Correlated & Constrained (MCC) Investments: <u>New commitments may not</u> exceed 1.5% of Applicable Assets (as defined below).
- Less Correlated & Constrained (LCC) Investments: <u>New commitments may not</u> exceed 1.0% of Applicable Assets.
- Private Investments: <u>New commitments may not exceed</u> 0.75% of Applicable Assets.
  - Co-investments: <u>New commitments</u> to a direct Private Investment with an existing external manager: <u>may not exceed</u> 0.30% of Applicable Assets.
- Changing Allocations of Investment Funds to Existing Managers and Mandates: Subsequent to
  the first six months of the UTIMCO relationship with a new manager, the UTIMCO Board hereby
  delegates to the UTIMCO Chief Executive Officer the authority to increase investments or
  commitments to existing internal or external investment managers and mandates, and the
  accompanying authority to renegotiate existing agency, partnership or subscription agreements
  as necessary, subject only to the following limitations provided that any Director may require a
  complete review by the Board of the investment prior to the execution of the investment if the
  investment exceeds any of the following thresholds:
  - More Correlated & Constrained (MCC) Investments: Total increases may not exceed 1.0% of Applicable Assets in each subsequent 12-month period.
  - Less Correlated & Constrained (LCC) Investments: Total increases may not exceed .75% of Applicable Assets in each subsequent 12-month period.
  - Private Investments: Total increases may not exceed 0.50% of Applicable Assets in each subsequent 12-month period.
    - Co-investments: <u>Total increases</u> to a direct Private Investment with an existing external manager: <u>may not exceed</u> 0.30% of Applicable Assets in each subsequent 12-month period.
- Terms Applicable to All Internal and External Managers:
  - Any Director may require a complete review by the Board of an investment prior to the execution of the investment if, as a result of the investment:
    - <u>No commitment or increase shall be permitted which increases the Total</u> <u>Assets managed by anthe internal or external manager exceedto more</u> <u>than 50% of the Total Assets managed by the manager in that</u> <u>investment strategy; or<sub>z</sub></u>
    - <u>No commitment or increase shall be permitted which causes the Total</u> <u>Assets managed by anthe internal or external manager to exceed 3.0%</u> of Applicable Assets in the aggregate for all Investment Types (4.0% <u>except for managers limited to MCC Investment Grade Fixed Income</u> <u>mandates</u>), which may not exceed 4.0%. For purposes of this provision, if Total Assets managed by the internal or external manager includes an <u>allocation to Private Investments and MCC and/or LCC Investments</u>, <u>Applicable Assets will include the total combined NAV of the Endowments plus the ITF.</u>
  - If any UTIMCO Director requires a complete review of the investment prior to the execution of the investment, the UTIMCO Director will submit a written request to Staff and the Staff shall make a presentation to highlight the attributes and risks of the proposed investment at the next UTIMCO Board meeting. Subsequent to

|   |  | hearing the presentation, the Board shall vote on whether or not to approve such           |  |
|---|--|--|--|
|   |  | investment.  |  |
|   | 0  | <u>"Applicable Assets"</u> is defined as follows:  |  |
|   |  | • For MCC and LCC Investments: Total combined NAV of the                                   |  |
|   |  | Endowments and ITF determined as of the most recent quarter-end                            |  |
|   |  | close of books; and  |  |
|   |  | -For Private Investments: Total combined NAV of the Endowments                             |  |
|   |  | determined as of the most recent quarter-end close of books.                               |  |
|   |  | ↔ No commitment or increase shall be permitted which increases the Total                   |  |
|   |  | Assets managed by an internal or external manager to more than 50%                         |  |
|   |  | of the Total Assets managed by the manager in that investment strategy.                    |  |
|   |  | ↔ No commitment or increase shall be permitted which causes the Total                      |  |
|   |  | Assets managed by an internal or external manager to exceed 3.0% of                        |  |
|   |  | Applicable Assets in the aggregate for all Investment Types except for                     |  |
|   |  | managers limited to MCC Investment Grade Fixed Income mandates.                            |  |
|   |  | which may not exceed 4.0%. For purposes of this provision, if Total                        |  |
|   |  | Assets managed by the internal or external manager includes an                             |  |
|   |  | allocation to Private Investments and MCC and/or LCC Investments.                          |  |
|   |  | Applicable Assets will include the total combined NAV of the                               |  |
|   |  | Endowments plus the ITF.   |  |
|   | 0  | For purposes of the above thresholds, "Total Assets" shall be defined as NAV plus          |  |
|   |  | unfunded commitments.  |  |
|   | Ð  | Any increases that exceed the above thresholds must follow the process outlined            |  |
|   |  | in Áppendix A.   |  |
|   | 0  | Prior to a new relationship with an internal or external investment manager or to a        |  |
|   |  | new mandate with an existing external investment manager, the Staff will send              |  |
|   |  | each Board member a description of the proposed investment and a Certificate of            |  |
|   |  | Compliance for the investment.   |  |
|   | 0  | Passive exposure, either by an individual internal or external manager, is limited         |  |
|   |  | only as required to maintain the Policy Portfolio within the Asset Class and               |  |
|   |  | Investment Type ranges.  |  |
|   | 0  |  |  |
|   |  | regularly scheduled Board meetings regarding all decisions made under this                 |  |
|   |  | delegated authority.   |  |
| ٠ |  | onitoring and Termination: The UTIMCO Board hereby delegates to the UTIMCO Chief           |  |
|   |  | fficer all decisions regarding monitoring and termination of existing internal or external |  |
|   | investment   | •  |  |
| • |  | ding, on a quarterly basis, manager mandates (excluding passive exposure) shall be         |  |
|   |  | across all Funds, asset classes and investment types and any mandate resulting in          |  |
|   | three percent (3%) or more exposure relative to the total Funds (excluding the ITF for Private |  |  |
|   |  | ) will be reported to the Risk Committee at its next meeting. UTIMCO staff will be         |  |
|   | •  | nake a presentation and prepare a recommendation to the Risk Committee regarding           |  |
|   |  | ate course of action for any manager mandate resulting in five percent (5%) or more        |  |
|   |  | elative to the total Funds (excluding the ITF for the Private Investments). Such           |  |
|   | presentatior   | and recommendation will include information regarding the manager mandate,                 |  |

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including original amount of investment, historical performance, market and economic outlook, and appropriate sizing, with timelines for completion of any recommended action. After discussion and review by the Risk Committee, the Risk Committee may approve the recommendation of UTIMCO staff, determine a different appropriate level of exposure or request additional information to be presented at a subsequent meeting before action may be taken by UTIMCO staff. UTIMCO staff will be responsible for implementing any Risk Committee approved action.

- Investment in Derivative Investments: The UTIMCO Board hereby delegates to the UTIMCO Chief Executive Officer the authority to enter into the Derivative Investments of the types set forth in Exhibit B of the Derivative Investment Policy and as authorized by the Funds' Investment Policy Statements. Any <u>Director may require a complete review of any</u> new <u>derivative</u> <u>Derivative</u> investment\_Investment recommended by UTIMCO staff or for the engagement of an external manager operating under an Agency Agreement that has been approved by UTIMCO's Chief Investment Officer butif the new Derivative Investment is not within the delegated authority set forthof the types authorized in Exhibit B of the Derivative Investment Policy-must follow the process outlined in Appendix A.
- Internal Investment Management: The UTIMCO Board hereby delegates to the UTIMCO Chief Executive Officer all decisions associated with the direct management of assets by UTIMCO Staff.
- Management of the UTIMCO Board's External Investment Consultant(s): The UTIMCO Board hereby delegates to the UTIMCO Chief Executive Officer the authority to direct the day-to-day work product of the UTIMCO Board's external investment consultant(s), provided that the UTIMCO Board's external investment consultant(s) shall continue to have primary reporting responsibility to the UTIMCO Board.

#### **Documentation, Controls, and Reporting:**

All UTIMCO Management decisions made under this Delegation of Authority Policy will be monitored by UTIMCO's Chief Compliance Officer. Any exceptions to this Policy will be reported to UTIMCO's Chief Executive Officer immediately. The UTIMCO Chief Executive Officer will develop a remedy to the exception, if possible, and report the exception and the remedy to the UTIMCO Chairman immediately. Additionally, the UTIMCO Chief Executive Officer will report any exceptions to this Policy to the UTIMCO Board at its next regularly scheduled meeting, unless the UTIMCO Chairman instructs otherwise.

### Appendix A UTIMCO Board Option to Review Proposed Investments

In instances where a proposed investment exceeds the stated Investment Authority of the UTIMCO Chief Executive Officer, the Staff must follow the procedures listed below to provide the UTIMCO Board the opportunity to review an investment proposal at a UTIMCO Board meeting:

1. Option to Review Investment Proposal

a. For new commitments, Staff will send each UTIMCO Director an investment recommendation, a Certificate of Compliance if one has not previously been provided to each UTIMCO Director, and an Option to Review Investment Proposal. Staff will provide a UTIMCO Director a complete due diligence report upon request.

b. For additional commitments to existing managers and partnerships, Staff will send each UTIMCO Director an executive summary of the proposed investment and an Option to Review Investment Proposal. Staff will provide a UTIMCO Director a complete due diligence report upon request.

c. For new Derivative Investments, Staff will send to each UTIMCO Director detailed documentation describing the proposed trade and an Option to Review Investment Proposal.

2. Option to Review Investment Proposal Form

The Option to Review Investment Proposal Form will require a UTIMCO Director to choose one of the following alternatives:

(i) I do not require a complete review of the investment at a subsequent Board meeting prior to the execution of the investment; or

(ii) I do not require a complete review of the investment at a subsequent Board meeting prior to the execution of the investment but request that UTIMCO Staff make a presentation regarding the proposed investment at a future UTIMCO Board meeting; or

(iii) I require a complete review of the investment at a subsequent Board meeting prior to the execution of the investment.

3. If any UTIMCO Director requires a complete review of the investment prior to the execution of the investment, the Staff shall make a presentation to highlight the attributes and risks of the proposed investment at the next UTIMCO Board meeting. Subsequent to hearing the presentation, the Board shall vote on whether or not to approve such investment.

## THE UNIVERSITY OF TEXAS SYSTEM SHORT TERM FUND INVESTMENT POLICY STATEMENT

#### Purpose

The Short Term Fund (the "STF") was established by the Board of Regents of The University of Texas System (the "Board of Regents") as a pooled fund for the collective investment of operating funds and other short and intermediate term funds held by U. T. System institutions and System Administration with an investment horizon of less than one year.

## STF Organization

The STF functions like a mutual fund in which each eligible account purchases and redeems STF units as provided herein. The ownership of STF assets shall at all times be vested in the Board of Regents. Such assets shall be deemed to be held by the Board of Regents, as a fiduciary, regardless of the name in which the assets may be registered.

### STF Management

Article VII Section 11b of the Texas Constitution authorizes the Board of Regents, subject to procedures and restrictions it establishes, to invest the Permanent University Fund (the "PUF") in any kind of investment and in amounts it considers appropriate, provided that it adheres to the prudent investor standard. This standard provides that the Board of Regents, in making investments, may acquire, exchange, sell, supervise, manage, or retain, through procedures and subject to restrictions it establishes and in amounts it considers appropriate, any kind of investment that prudent investors, exercising reasonable care, skill, and caution, would acquire or retain in light of the purposes, terms, distribution requirements, and other circumstances of the fund then prevailing, taking into consideration the investment of all the assets of the fund rather than a single investment. Pursuant to Section 51.0031(c) of the *Texas Education Code*, the Board of Regents has elected the PUF prudent investor standard to govern its management of the STF.

Ultimate fiduciary responsibility for the STF rests with the Board of Regents. Section 66.08, *Texas Education Code*, as amended, authorizes the Board of Regents, subject to certain conditions, to enter into a contract with a nonprofit corporation to invest funds under the control and management of the Board of Regents.

Pursuant to an Investment Management Services Agreement between the Board of Regents and The University of Texas Investment Management Company ("UTIMCO"), the STF shall be managed by UTIMCO, which shall: a) recommend investment policy for the STF, b) determine specific Asset Class targets, ranges and

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performance benchmarks consistent with STF objectives, and c) monitor STF performance against STF objectives. UTIMCO shall invest the STF assets in conformity with this Policy Statement.

UTIMCO may select and terminate unaffiliated investment managers subject to the Delegation of Authority Policy approved by the UTIMCO Board, as amended. Managers shall be monitored for performance and adherence to investment disciplines.

## STF Administration

UTIMCO shall employ an administrative staff to ensure that all transaction and accounting records are complete and prepared on a timely basis. Internal controls shall be emphasized so as to provide for responsible separation of duties and adequacy of an audit trail. Custody of STF assets shall comply with applicable law and be structured so as to provide essential safekeeping and trading efficiency.

### Funds Eligible to Purchase STF Units

No account shall be eligible to purchase units of the STF unless it is under the sole control, with full discretion as to investments, by the Board of Regents and/or UTIMCO.

Any account whose governing instrument contains provisions which conflict with this Policy Statement, whether initially or as a result of amendments to either document, shall not be eligible to purchase or hold units of the STF.

The funds of a foundation structured as a supporting organization described in Section 509(a) of the *Internal Revenue Code of 1986*, which supports the activities of the U. T. System and its institutions, may purchase units in the STF provided that a contract between the Board of Regents and the foundation has been executed authorizing investment of foundation funds in the STF.

### **STF Investment Objectives**

The primary investment objective shall be to maximize current income consistent with the absolute preservation of capital and maintenance of adequate STF liquidity. The STF shall seek to maintain a net asset value of \$1.00.

Achievement of this objective shall be defined as a fund return in excess of the average gross return of the median manager of an approved universe of institutional only money market funds.

## Asset Class Allocation and Policy

Asset Class allocation is the primary determinant of investment performance and subject to the Asset Class allocation ranges specified herein is the responsibility of UTIMCO. Specific Asset Class allocation targets may be changed from time to time based on the economic and investment outlook.

STF assets shall be allocated to the following broad Asset Class:

<u>Cash and Cash Equivalents</u> – Short-term, highly liquid investments that are readily convertible to known amounts of cash, and which are subject to a relatively small risk of changes in value.

#### Performance Measurement

The investment performance of the STF will be measured by an unaffiliated organization, with recognized expertise in this field and reporting responsibility to the UTIMCO Board, and compared against the performance benchmarks of the STF. Such measurement will occur at least quarterly.

#### Investment Guidelines

The STF must be invested at all times in strict compliance with applicable law.

Investment guidelines include the following:

### <u>General</u>

- All investments will be U.S. dollar denominated assets.
- Investment guidelines for index, commingled funds, limited partnerships, and corporate vehicles managed externally shall be governed by the terms and conditions of the respective investment management contracts, partnership agreements or corporate documents.
- Investment guidelines of all other externally managed accounts as well as internally invested funds must be reviewed and approved by UTIMCO's Chief Investment Officer prior to investment of STF assets in such investments.
- No securities may be purchased or held which jeopardize the STF's taxexempt status.
- No internal investment strategy or program may purchase securities on margin or use leverage unless specifically authorized by the UTIMCO Board.

• No internal investment strategy or program employing short sales may be made unless specifically authorized by the UTIMCO Board.

## Cash and Cash Equivalents

Holdings of cash and cash equivalents may include the following:

- unaffiliated liquid (Money Market Funds) investment funds, <u>subject to Rule</u> <u>2a-7 of the Investment Company Act of 1940 as amended from time to time</u>, rated AAA<sub>M</sub> by Standard & Poor's Corporation or the equivalent by a Nationally Recognized Statistical Rating Organization (NRSRO),
- securities of the U.S. Treasury and U.S. Agencies and their instrumentalities with maturities of 397 days or less,
- separately managed accounts with investment guidelines equivalent to, or more stringent than, unaffiliated liquid investment funds, <u>subject to Rule 2a-7</u> of the Investment Company Act of 1940 as amended from time to time, rated AAA<sub>M</sub> by Standard & Poor's Corporation or the equivalent by a NRSRO,
- the Custodian's late deposit interest bearing liquid investment fund,
- municipal short term securities,
- commercial paper rated in the two highest quality classes by Moody's Investor Service, Inc. (P1 or P2) or Standard & Poor's Corporation (A1 or A2 or the equivalent),
- negotiable certificates of deposit with a bank that is associated with a holding company whose short-term rating meets the commercial paper rating criteria specified above or that has a certificate of deposit rating of 1 or better by Duff & Phelps,
- floating rate securities, if they meet the single security duration criteria and are based on a spread over or under a well known index such as LIBOR or a Constant Maturity Treasury index. No internally leveraged floating rate securities are permitted (i.e., a coupon equivalent to a formula that creates a multiplier of an index value). The following types of floating rate securities are not eligible for investment: inverse floaters, non-money market based floaters, interest only or principal only floaters, non-dollar based floaters, and range note floaters, and
- repurchase agreements and reverse repurchase agreements transacted with a dealer that is approved by UTIMCO and selected by the Federal Reserve Bank as a Primary Dealer in U.S. Treasury securities and rated A-1 or P-1 or the equivalent:
  - Each approved counterparty shall execute the Standard Public Securities Association (PSA) Master repurchase agreement with UTIMCO.
  - Eligible Collateral Securities for repurchase agreements are limited to U.S. Treasury securities and U.S. Government Agency securities with a maturity of not more than 10 years.

- The maturity for a repurchase agreement may be from one day to two weeks.
- The value of all collateral shall be maintained at 102% of the notional value of the repurchase agreement, valued daily.
- All collateral shall be delivered to the STF custodian bank. Tri-party collateral arrangements are not permitted.
- The aggregate amount of repurchase agreements with maturities greater than seven calendar days may not exceed 10% of the STF's total assets.
- Overnight repurchase agreements may not exceed 50% of the STF's total assets.

## Compliance

Compliance with this Policy will be monitored by UTIMCO's Chief Compliance Officer. UTIMCO's Chief Executive Officer, the UTIMCO Board, and the UTIMCO Audit & Ethics Committee will receive regular reports on UTIMCO's compliance with this Policy. All material instances of noncompliance, as determined by UTIMCO's Chief Compliance Officer and the Chair of the UTIMCO Audit & Ethics Committee, will require an action plan proposed by UTIMCO's Chief Executive Officer and approved by the Chairman of the UTIMCO Board with timelines for bringing the noncompliant activity within this Policy.

### **STF** Distributions

Distributions of income from the STF to the unitholders shall be made as soon as practicable on or after the last day of each month.

## STF Accounting

The fiscal year of the STF shall begin on September 1st and end on August 31st. Market value of the STF shall be maintained on an accrual basis in compliance with Generally Accepted Accounting Principles ("GAAP"), Governmental Accounting Standards Board Statements, industry guidelines, or state statutes, whichever is applicable. Significant asset write-offs or write-downs shall be approved by UTIMCO's Chief Investment Officer and reported to the UTIMCO Board. Assets deemed to be "other than temporarily impaired" as defined by GAAP shall be written off and reported to UTIMCO's Chief Investment Officer and the UTIMCO Board when material.

### Valuation of Assets

Institutional prime money market funds are valued using a floating net asset value. All investments other than institutional prime money market funds are stated at amortized cost, which in most cases approximates the market value of securities. The objective of the fund is to maintain a stable \$1.00 net asset value; however, the \$1.00 net asset value is neither guaranteed nor insured by UTIMCO.

The STF's net assets shall include all related receivables and payables of the STF on the valuation date., and the value of each unit thereof shall be its proportionate part of such net value. Such valuation shall be final and conclusive.

### Purchase of STF Units

Purchase of STF units may be made on each business day upon payment of cash to the STF or contribution of assets approved by UTIMCO's Chief Investment Officer, at the net asset value per unit of the STF as of the most recent valuation date.

Each account whose monies are invested in the STF shall own an undivided interest in the STF in the proportion that the number of units invested therein bears to the total number of all units comprising the STF.

#### **Redemption of STF Units**

Redemption of units may be made on each business-day-at the net asset value per unit.

### Securities Lending

The STF may not participate in a securities lending contract with a bank or nonbank security lending agent.

#### Investor Responsibility

The UTIMCO Board shall discharge its fiduciary duties with respect to the STF solely in the interest of STF unitholders and shall not invest the STF so as to achieve temporal benefits for any purpose, including use of its economic power to advance social or political purposes.

#### **Amendment of Policy Statement**

The Board of Regents reserves the right to amend the Investment Policy Statement as it deems necessary or advisable.

### **Effective Date**

The effective date of this policy shall be September 1, 20162.