

**UTIMCO BOARD OF DIRECTORS
MEETING AGENDA
October 13, 2016**

UTIMCO
401 Congress Avenue, Suite 2800
Austin, Texas 78701

| Time | Item # | Agenda Item |
|------------|------------|--|
| Begin | End | |
| | | OPEN MEETING: |
| 10:00 a.m. | 10:30 a.m. | 1 Call to Order Convene in Executive Session Pursuant to sections 552.071 and 552.074, Texas Government Code, the Board of Directors will convene in Executive Session to consult with Counsel and to deliberate individual personnel matters, including acceptance of the resignation of the Chief Executive Officer and Chief Investment Officer and appointment of Interim Chief Executive Officer and Chief Investment Officer. |
| | | Reconvene into Open Session Discussion and Appropriate Action Related to: - Accepting the Resignation of the Chief Executive Officer and Chief Investment Officer and Approving the Terms of Separation for Bruce Zimmerman* - Appointment of an Interim Chief Executive Officer and Chief Investment Officer* - Authorizing the Chairman of the Board of Directors to Appoint an Advisory Search Committee as a Nominating Committee for a New Chief Executive Officer and Chief Investment Officer and Retain an Executive Search Firm to Assist Advisory Search Committee* |
| 10:30 a.m. | 10:33 a.m. | 2 Discussion and Appropriate Action Related to Minutes of Meeting held August 23, 2016* |
| 10:33 a.m. | 11:40 a.m. | 3 Endowment and Operating Funds Update Report |
| 11:40 a.m. | 12:00 p.m. | Recess for Briefing Session pursuant to Texas Education Code Section 66.08(h)(2) related to Private Investments |
| 12:00 p.m. | | Reconvene into Open Session |
| 12:00 p.m. | | Adjourn |

* Action by resolution required

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: November 17, 2016 |
|--|

Materials to be distributed at meeting.

RESOLUTION RELATED TO MINUTES

RESOLVED, that the minutes of the Meeting of the Board of Directors held on **August 23, 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 **August 23, 2016**, by means of conference telephone enabling all persons participating in the meeting to hear each other, 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
Phil Adams
Kyle Bass
David J. Beck
R. Steven Hicks
H. Lee S. Hobson
Ray Nixon
Ray Rothrock

thus constituting a majority and quorum of the Board. William H. McRaven, Vice Chairman for Policy, did not attend the meeting. Chairman Hildebrand called the meeting to order at 3:32 p.m. Employees of the Corporation attending the meeting were Bruce Zimmerman, CEO and Chief Investment Officer; Joan Moeller, Secretary and Treasurer; 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; Susan Chen, Managing Director - MCC; Harland Doak, Senior Director – Fixed Income and other staff members. Other attendees were Roger Starkey and Terry Hull of UT System Administration; David Rejino of The Texas A&M University System; and Keith Brown of the McCombs School of Business at UT Austin. 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 July 21, 2106. 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 July 21, 2016, be, and are hereby, approved.

Dreyfus Institutional Preferred Government Money Market Fund

Chairman Hildebrand asked Mr. Russ Kampfe to present the request to add the Dreyfus Institutional Preferred Government Money Market Fund (the "Government Fund") as a cash and cash equivalent

holding of the Short Term Fund (“STF”), including the selection process and criteria considered in Staff’s recommendation. Mr. Kampfe explained that the Liquidity Policy requires staff to obtain UTIMCO Board approval to utilize any SEC Rule 2a-7 money market fund rated AAAM by Standard & Poor’s or the equivalent by a Nationally Recognized Statistical Rating Organization (NRSRO) for cash holdings. Mr. Zimmerman and Mr. Kampfe answered the Directors’ questions.

Chairman Hildebrand recommended approval of the proposal for the Dreyfus Institutional Preferred Government Money Market Fund to serve as a cash or cash holding equivalent for the STF. Upon motion duly made and seconded, the following resolution was approved:

RESOLVED that the Dreyfus Institutional Preferred Government Money Market Fund be, and is hereby approved, as a cash account for The University of Texas System Short Term Fund.

CEO’s Recommendation Regarding Staff Authorization

Chairman Hildebrand asked Mr. Bruce Zimmerman to discuss his recommendation for Mr. Mark Warner to act for Mr. Zimmerman when Mr. Zimmerman is absent due to an extended leave, incapacity, or an unforeseeable emergency. Mr. Zimmerman discussed his reasons for such a recommendation. Mr. Zimmerman answered the Directors’ questions. Chairman Hildebrand noted that he, in his sole discretion, will make the determination that it is necessary for Mr. Warner to perform the CEO and Chief Investment Officer duties.

Chairman Hildebrand recommended approval of Mr. Zimmerman’s recommendation. Upon motion duly made and seconded, the following resolution was approved:

RESOLVED, that, subject to the control of the Board of Directors of the Corporation, Mark Warner, Senior Managing Director – Natural Resources, Emerging Markets, and Lower/Middle Markets, shall have all the powers and duties of Chief Executive Officer and Chief Investment Officer of the Corporation, including the powers and duties of President of the Corporation set forth in Article V, Section 7 of the Corporation’s Bylaws and such additional powers and duties as have been or may hereafter be assigned to him in those capacities by the Board of Directors of the Corporation, and shall be authorized to act for Mr. Zimmerman when he is absent due to an extended leave of absence, incapacity or an unforeseeable emergency as determined by the Chairman of the Board of Directors of the Corporation, in his sole discretion.

At 3:41 p.m. the open meeting of the Board recessed into a Briefing Session pursuant to Texas Education Code Section 66.08 (h)(2) related to a Private Investment.

The open meeting of the Board reconvened in open session at 3:51 p.m.

Private Investment

Chairman Hildebrand noted that during the briefing session, Ms. Susan Chen gave a presentation on a proposed investment in Underscore.VC Fund I, L.P. Board approval is required for this proposed

investment because Director Rothrock owns an interest in this investment. Director Rothrock's interest was acquired prior to the time he joined the Corporation's Board and his interest is less than a pecuniary interest as defined in the Corporation's Code of Ethics (the "Code"). Chairman Hildebrand explained that the Code allows staff, with a 2/3 vote of the members of the Board and a finding that the director will not personally benefit from UTIMCO's investment, to invest in an entity in which a director is also invested so long as the director's interest is not a pecuniary interest and the interest was acquired before the director joined the board. Director Rothrock's investment in Underscore.VC meets these requirements. Director Rothrock did not participate in the discussion of this investment. Mr. Zimmerman and Ms. Chen answered the Directors' questions.

Chairman Hildebrand recommended approval of the \$20 million commitment to Underscore.VC Fund I, LP. Upon motion duly made and seconded, the following resolution was approved by a two-thirds majority of the Board with Director Rothrock abstaining:

WHEREAS, the Corporation's Private Investments Staff has recommended a \$20 million commitment to Underscore.VC Fund I, LP; and

WHEREAS, Director Rothrock has disclosed a conflict of interest in the proposed investment, which he acquired before the date he assumed position on the Board and does not constitute a pecuniary interest as defined by Section 2.06(a) of the Code must absent himself from any deliberations related to the proposed investment and refrain from voting on the matter; and

WHEREAS, Section 3.03 of the Code provides that the Corporation may not invest in the private investments of a business entity if a director or director entity then owns a private investment in the same business entity unless: (a) the director or director entity acquired the private investment before the date on which the director assumed a position with UTIMCO; (b) the director's private investment does not constitute a pecuniary interest in a business entity as defined by Section 3.01(b) of the Code; and (c) the Board approves the investment by UTIMCO or the UTIMCO entity by a vote of two-thirds of the membership of the Board after a full disclosure in an open meeting of the relevant facts and a finding by the Board that the investment will not benefit the director or director entity financially; and

WHEREAS, Director Rothrock has disclosed his interest Underscore.VC Fund I, LP and has absented himself from all deliberations related to the proposed investment as required by the Code.

NOW, THEREFORE, BE IT

RESOLVED, that the Board approves the \$20 million commitment to Underscore.VC Fund I, LP for the Permanent University Fund of the State of Texas and the Board of Regents of The University of Texas System General Endowment Fund (the "UT Funds") and directs staff to negotiate and enter into a contract with Underscore.VC Fund I, LP (the "Agreement"), conditioned on the receipt by the Chief Compliance Officer of UTIMCO of a certification of no pecuniary interest, as required by Section 4.04 of the UTIMCO Code of Ethics, from each director and key employee of UTIMCO.

RESOLVED FURTHER, that the Chief Executive Officer, any Managing Director, and the Secretary of this Corporation be, and each of them hereby is, authorized and empowered (any one of them acting alone) to do or cause to be done all such acts or things and to sign and deliver, or cause to be signed and delivered, all such documents, in the name and on behalf of the Corporation, in its capacity as the investment manager of the UT Funds or otherwise, as such officer of this Corporation may deem necessary, advisable or appropriate to effectuate or carry out the purposes and intent of the foregoing resolution and to perform the obligations of the UT Funds under the Agreement.

There being no further business to come before the Board, the meeting was adjourned at approximately 3:54 p.m.

Secretary: _____
Joan Moeller

Approved: _____ Date: _____
Jeffery D. Hildebrand
Chairman, Board of Directors of
The University of Texas Investment Management Company



UTIMCO Board
Endowment and Operating Funds Update
October 13, 2016

Performance Summary

Periods Ending August 31, 2016

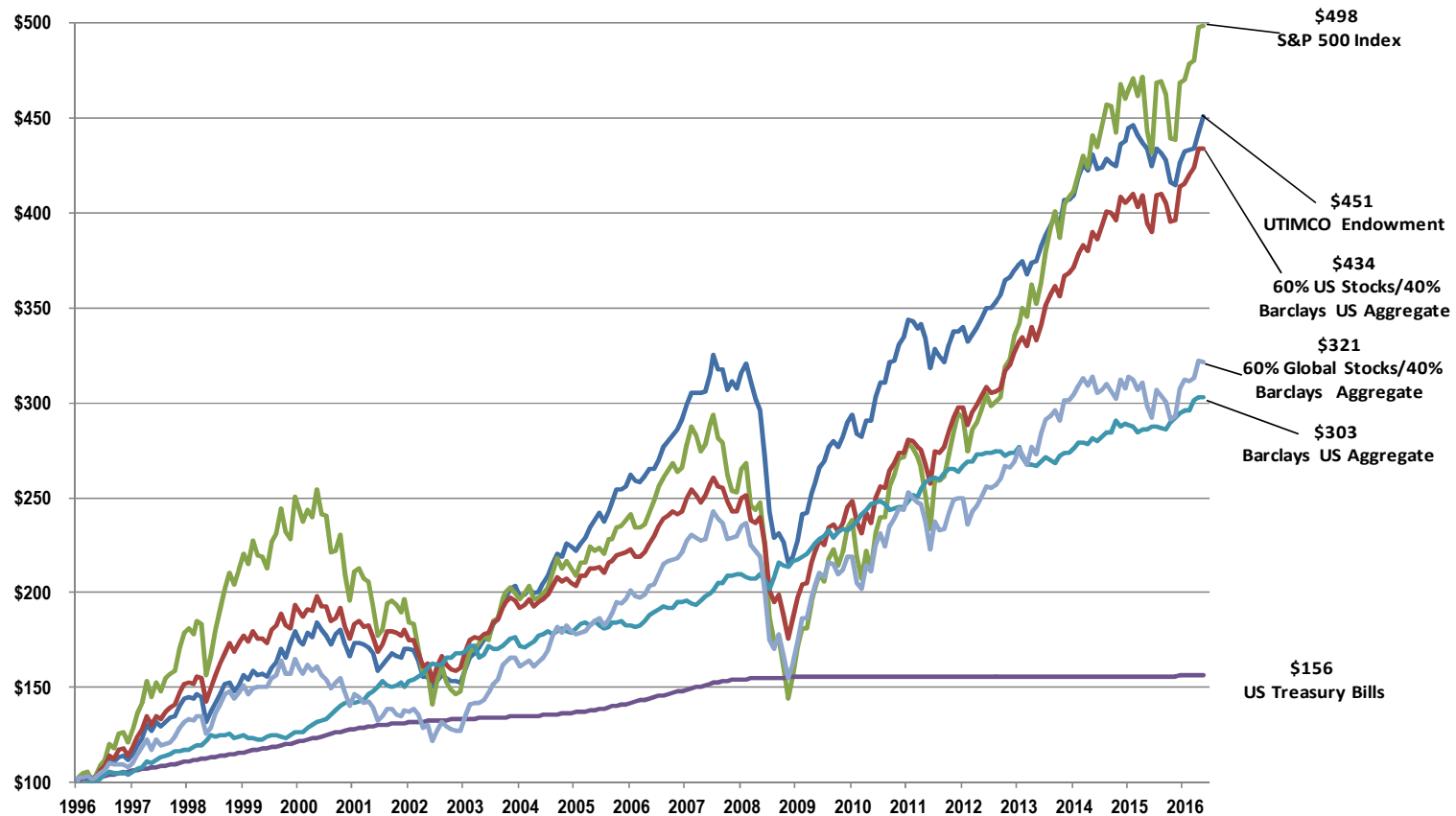


| | One Year | Three Years | Five Years | Seven Years | Ten Years |
|--|----------|-------------|------------|-------------|-----------|
| Actual Returns | 3.97% | 6.36% | 6.21% | 8.34% | 5.47% |
| Policy Portfolio Returns | N/A | N/A | N/A | N/A | N/A |
| Actual vs. Policy | N/A | N/A | N/A | N/A | N/A |
| CPI + 5% | 6.11% | 6.03% | 6.29% | 6.65% | 6.76% |
| Actual vs. CPI + 5% | -2.15% | 0.33% | -0.07% | 1.69% | -1.29% |
| 60% Global Stocks/ 40% Global Bonds | 7.76% | 5.62% | 6.27% | 6.74% | 4.70% |
| Actual vs. Global 60/40 | -3.79% | 0.73% | -0.05% | 1.60% | 0.77% |
| 60% US Stocks/ 40% Bonds | 10.09% | 9.23% | 10.17% | 10.12% | 6.76% |
| Actual vs. US 60/40 | -6.12% | -2.87% | -3.95% | -1.77% | -1.30% |
| Sharpe Ratio | 0.63 | 1.23 | 1.12 | 1.41 | 0.55 |
| Information Ratio | N/A | N/A | N/A | N/A | N/A |

Periods Ending June 30, 2016

| | One Year | Three Years | Five Years | Seven Years | Ten Years |
|---|----------|-------------|------------|-------------|-----------|
| Actual Returns | -0.70% | 6.72% | 5.64% | 9.16% | 5.61% |
| Average Return Peer Endowments | -1.55% | 7.14% | 7.00% | 9.48% | 6.56% |
| Actual vs. Average Return Peer Endowments | 0.85% | -0.42% | -1.36% | -0.32% | -0.95% |
| Percentile Rank | 26% | 57% | 87% | 57% | 76% |
| Average Return Endowments > Billion \$ | -2.21% | | | | |
| Actual vs. Average Return Endowments > Billion \$ | 1.51% | | | | |
| Percentile Rank | 13% | | | | |

Returns vs. Market



Trailing Annualized Returns Period Ending August 31, 2016

| | One Year | Three Years | Five Years | Seven Years | Ten Years | Since March 31, 1996 |
|--------------------------------------|----------|-------------|------------|-------------|-----------|----------------------|
| UT Endowments | 3.97% | 6.36% | 6.21% | 8.34% | 5.47% | 7.62% |
| 60% US Stocks / 40% Bonds | 10.09% | 9.23% | 10.17% | 10.12% | 6.76% | 7.43% |
| 60% Global Stocks / 40% Bonds | 7.76% | 5.62% | 6.27% | 6.74% | 4.70% | 5.86% |
| Stocks | 12.55% | 12.30% | 14.69% | 13.77% | 7.51% | 8.15% |
| Bonds | 5.97% | 4.37% | 3.24% | 4.27% | 4.89% | 5.55% |
| Treasury Bills | 0.18% | 0.08% | 0.08% | 0.08% | 0.81% | 2.20% |

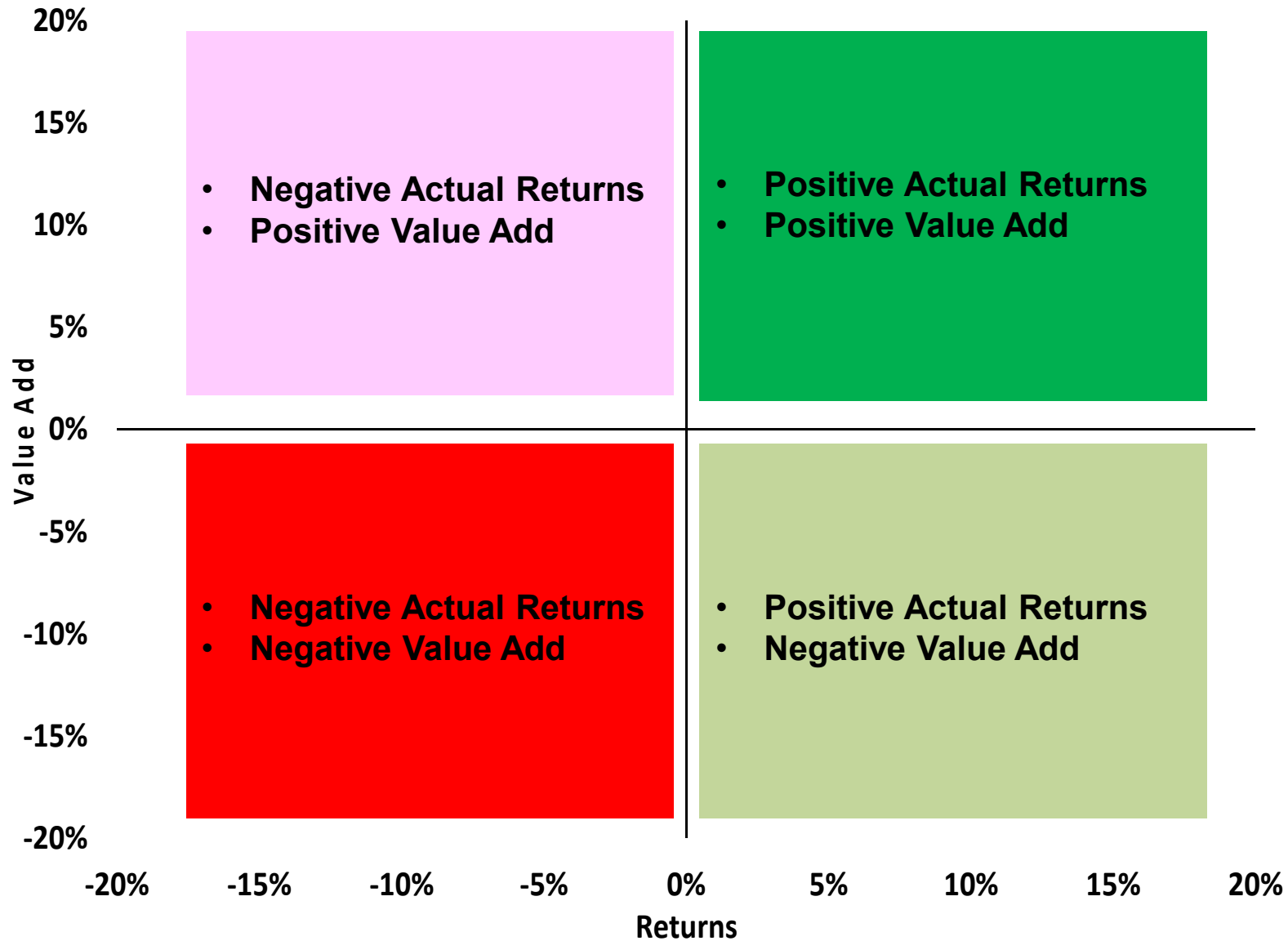
Endowment Returns and Ratios

Periods Ending August 31, 2016



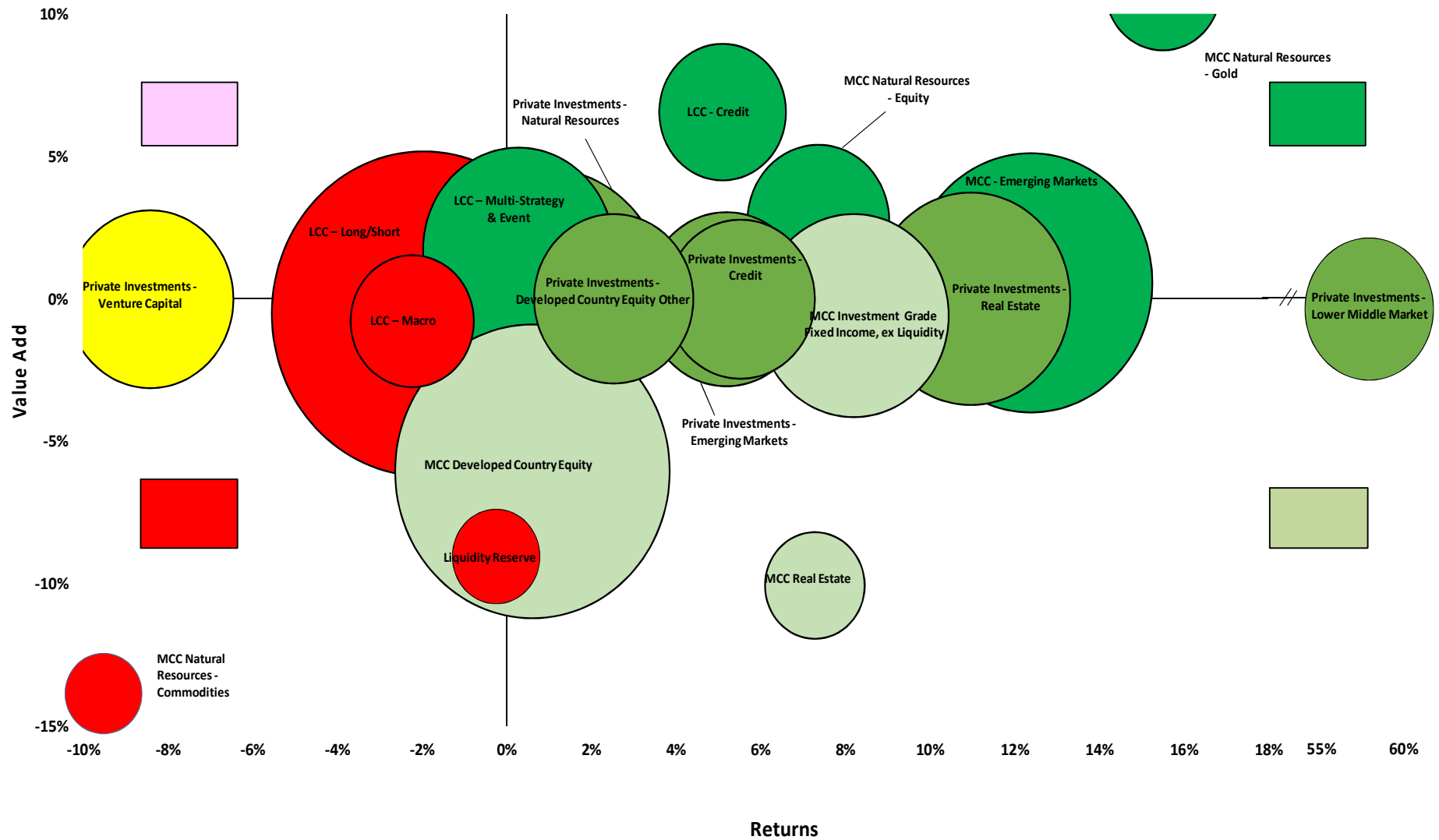
| Endowments | Net Asset Value (in millions) | Weighted Endowment Returns | | | | | | | | 1 year | | | 3 year | | | 5 year | | | 10 year | | | | | |
|---|----------------------------------|----------------------------|---------------|---------------|--------------|---------------|--------------|---------------|--------------|--------------------|---------------|---------------|--------------------|--------------|-------------|--------------------|--------------|-------------|--------------------|--------------|-------------|--------|--------|--------|
| | | vs. Bench | | vs. Bench | | vs. Bench | | vs. Bench | | Standard Deviation | Sharpe Ratio | Info Ratio | Standard Deviation | Sharpe Ratio | Info Ratio | Standard Deviation | Sharpe Ratio | Info Ratio | Standard Deviation | Sharpe Ratio | Info Ratio | | | |
| | | 1 year | 3 year | 5 year | 10 year | 1 year | 3 year | 5 year | 10 year | 1 year | 3 year | 5 year | 1 year | 3 year | 5 year | 1 year | 3 year | 5 year | 1 year | 3 year | 5 year | 1 year | 3 year | 5 year |
| More Correlated and Constrained | | | | | | | | | | | | | | | | | | | | | | | | |
| Fixed Income | | | | | | | | | | | | | | | | | | | | | | | | |
| Investment Grade | \$ 1,909 | 4.88% | -3.91% | 1.19% | -1.45% | 0.91% | -0.24% | 3.24% | -0.97% | 4.35% | 1.07 | (2.77) | 3.48% | 0.31 | (0.85) | 3.66% | 0.22 | (0.14) | 4.81% | 0.47 | (0.42) | | | |
| Credit Related | 31 | 17.69% | 7.57% | 9.37% | 4.06% | 9.19% | 1.91% | N/A | N/A | 8.82% | 1.98 | 1.64 | 7.99% | 1.16 | 0.92 | 9.24% | 0.98 | 0.43 | N/A | N/A | N/A | | | |
| Real Assets | | | | | | | | | | | | | | | | | | | | | | | | |
| Real Estate | 431 | 7.24% | -10.09% | 5.19% | -4.89% | 6.82% | -2.74% | 2.35% | -0.15% | 15.08% | 0.46 | (2.12) | 12.05% | 0.42 | (1.28) | 15.39% | 0.44 | (0.80) | 22.22% | 0.06 | (0.04) | | | |
| Natural Resources ex Gold | 1,074 | 0.94% | 1.89% | -11.89% | -2.19% | -9.37% | -1.30% | -3.93% | -0.14% | 26.23% | 0.03 | 0.18 | 20.80% | (0.58) | (0.30) | 19.96% | (0.47) | (0.22) | 22.34% | (0.22) | (0.03) | | | |
| Equity | | | | | | | | | | | | | | | | | | | | | | | | |
| Developed Markets | 3,276 | 0.47% | -6.21% | 8.59% | 1.19% | 12.30% | 2.78% | 5.68% | 1.35% | 14.33% | 0.02 | (1.52) | 11.39% | 0.75 | 0.32 | 11.73% | 1.04 | 0.74 | 15.48% | 0.31 | 0.36 | | | |
| Emerging Markets | 2,564 | 12.38% | 0.54% | 5.90% | 4.78% | 3.66% | 4.08% | 4.65% | 0.75% | 15.18% | 0.80 | 0.08 | 14.42% | 0.40 | 0.88 | 16.07% | 0.22 | 0.83 | 21.71% | 0.17 | 0.16 | | | |
| MCC subtotal | 9,285 | 4.80% | -4.02% | 3.56% | 0.48% | 4.31% | 1.11% | N/A | N/A | 12.02% | 0.38 | (1.16) | 9.76% | 0.35 | 0.17 | 10.66% | 0.40 | 0.39 | N/A | N/A | N/A | | | |
| Less Correlated and Constrained | | | | | | | | | | | | | | | | | | | | | | | | |
| Fixed Income | | | | | | | | | | | | | | | | | | | | | | | | |
| Investment Grade | 656 | -2.25% | -0.80% | -0.24% | -2.75% | 0.35% | -2.23% | N/A | N/A | 6.89% | (0.36) | (0.12) | 7.27% | (0.05) | (0.45) | 6.25% | 0.04 | (0.40) | N/A | N/A | N/A | | | |
| Credit Related | 1,060 | 5.11% | 6.56% | 4.03% | 1.52% | 7.08% | 4.50% | N/A | N/A | 5.26% | 0.93 | 2.10 | 4.42% | 0.89 | 0.47 | 4.41% | 1.59 | 1.51 | N/A | N/A | N/A | | | |
| Real Assets | | | | | | | | | | | | | | | | | | | | | | | | |
| Real Estate | - | 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 | | | |
| Natural Resources | - | 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 | | | |
| Equity | | | | | | | | | | | | | | | | | | | | | | | | |
| Developed Markets | 4,713 | -2.29% | -0.84% | 4.54% | 2.02% | 7.03% | 4.45% | N/A | N/A | 6.74% | (0.37) | (0.30) | 5.98% | 0.74 | 0.71 | 5.58% | 1.24 | 1.67 | N/A | N/A | N/A | | | |
| Emerging Markets | 495 | 6.22% | 7.67% | 8.63% | 6.12% | 4.81% | 2.23% | N/A | N/A | 7.51% | 0.80 | 1.52 | 6.72% | 1.27 | 1.10 | 5.87% | 0.80 | 0.44 | N/A | N/A | N/A | | | |
| LCC subtotal | 6,924 | -0.82% | 0.63% | 4.17% | 1.66% | 6.08% | 3.50% | 5.79% | 5.38% | 6.00% | (0.18) | 0.31 | 5.20% | 0.78 | 0.83 | 4.76% | 1.26 | 1.84 | 6.23% | 0.78 | 2.28 | | | |
| 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 | 961 | 5.54% | N/A | 8.73% | N/A | 10.22% | N/A | N/A | N/A | 1.84% | 2.89 | N/A | 2.26% | 3.82 | N/A | 3.55% | 2.86 | N/A | N/A | N/A | N/A | | | |
| Real Assets | | | | | | | | | | | | | | | | | | | | | | | | |
| Real Estate | 1,707 | 10.97% | N/A | 17.38% | N/A | 11.56% | N/A | N/A | N/A | 2.89% | 3.71 | N/A | 6.13% | 2.82 | N/A | 6.40% | 1.79 | N/A | N/A | N/A | N/A | | | |
| Natural Resources | 2,590 | 0.90% | N/A | 6.57% | N/A | 12.04% | N/A | N/A | N/A | 5.69% | 0.12 | N/A | 6.75% | 0.96 | N/A | 9.90% | 1.21 | N/A | N/A | N/A | N/A | | | |
| Equity | | | | | | | | | | | | | | | | | | | | | | | | |
| Developed Markets | 3,182 | 8.88% | N/A | 19.31% | N/A | 15.76% | N/A | N/A | N/A | 11.22% | 0.77 | N/A | 9.85% | 1.95 | N/A | 7.99% | 1.96 | N/A | N/A | N/A | N/A | | | |
| Emerging Markets | 1,153 | 5.19% | N/A | 5.99% | N/A | 2.74% | N/A | N/A | N/A | 6.42% | 0.77 | N/A | 5.45% | 1.08 | N/A | 5.27% | 0.50 | N/A | N/A | N/A | N/A | | | |
| Private Investment subtotal | 9,593 | 6.42% | N/A | 13.16% | N/A | 11.94% | N/A | 11.08% | N/A | 4.51% | 1.37 | N/A | 4.96% | 2.64 | N/A | 4.38% | 2.70 | N/A | 6.33% | 1.60 | N/A | | | |
| Total Before Insurance, Tactical, Hedging Derivatives and Gold | 25,802 | 3.74% | N/A | 6.65% | N/A | 7.08% | N/A | 5.82% | N/A | 6.11% | 0.57 | N/A | 5.23% | 1.25 | N/A | 5.60% | 1.25 | N/A | 8.22% | 0.59 | N/A | | | |
| Insurance, Tactical and Hedging Derivatives Impact on Total Return | - | 0.01% | 0.01% | 0.02% | 0.02% | -0.37% | -0.37% | -0.23% | -0.23% | | | | | | | | | | | | | | | |
| Gold Impact on Total Return | 578 | 0.22% | 0.22% | -0.31% | -0.31% | -0.50% | -0.50% | -0.13% | -0.13% | | | | | | | | | | | | | | | |
| Grand Total | \$ 26,380 | 3.97% | N/A | 6.36% | N/A | 6.21% | N/A | 5.47% | N/A | 5.96% | 0.63 | N/A | 5.11% | 1.23 | N/A | 5.47% | 1.12 | N/A | 8.17% | 0.55 | N/A | | | |

Returns and Value Add



Returns and Value Add by Investment Strategy

Year Ended August 31, 2016

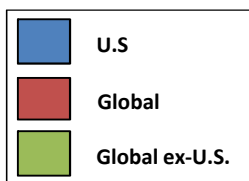
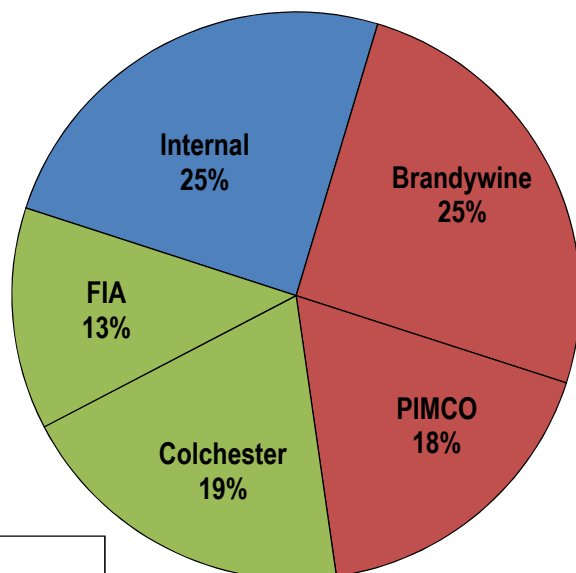


MCC Investment Grade Fixed Income ex-LR



NAV, Investment Returns, and Capital Movement as of August 31, 2016

\$3.9 Billion NAV (4 External Partners)



| Liquidity |
|-----------|
| 90 days |
| 100% |

| Capital Movement (FY16) | |
|-------------------------|------------|
| Subscriptions | |
| Total | \$148 |
| Redemptions | |
| Total | (148) |
| Net Activity | \$0 |

Investment Returns

| | 1 Year | 3 Years | 5 Years | 7 Years |
|------------------------------|-------------|-------------|-------------|-------------|
| Actual Return | 8.2% | 3.2% | 2.6% | 4.5% |
| Benchmark Return | <u>8.8%</u> | <u>2.6%</u> | <u>1.1%</u> | <u>2.9%</u> |
| Value Add | -0.6% | 0.5% | 1.4% | 1.6% |
| Actual Standard Deviation | 5.8% | 4.6% | 4.4% | 4.6% |
| Benchmark Standard Deviation | 5.0% | 4.3% | 4.3% | 5.0% |
| Sharpe Ratio | 1.4 | 0.7 | 0.6 | 0.9 |
| Information Ratio | -0.4 | 0.3 | 0.9 | 0.9 |

Statistics for periods longer than a year are annualized

Returns:

- Strong absolute performance this year, with relative underperformance driven by overweights to Mexican bonds and the Mexican Peso and underweights to Japanese and Developed European currencies and bonds
- Relative performance over longer time horizons is strong

Outlook:

- Outperformance by the G3 bond markets and the Yen and Euro currencies would cause underperformance for the FI portfolio
- Conversely, stable/good performance by the Emerging Market currencies and bond markets will cause outperformance

MCC Investment Grade Fixed Income



Portfolio Characteristics

| Overview | | |
|-----------------------|--------|------------|
| | UTIMCO | BC Gbl Agg |
| Total Portfolio Size | \$3.9B | \$47.8T |
| Modified Duration | 6.7 | 7.1 |
| Yield to Maturity | 2.4% | 1.1% |
| Average Agency Rating | A1 | AA3 |

| Geographical Exposure | | | |
|-----------------------|--------|------------|------|
| | UTIMCO | BC Gbl Agg | O/U |
| United States | 39% | 30% | 9% |
| Canada | 1% | 3% | -3% |
| Europe | 23% | 35% | -13% |
| Asian-Pac Aggregate | 19% | 27% | -8% |
| Emerging Markets | 18% | 4% | 15% |

| Currency Exposure | | | |
|----------------------|--------|------------|-----|
| | UTIMCO | BC Gbl Agg | O/U |
| United States Dollar | 39% | 44% | -5% |
| Euro | 15% | 24% | -9% |
| Japanese Yen | 14% | 18% | -4% |
| UK Pound Sterling | 5% | 6% | -1% |
| Emerging Markets | 17% | 3% | 14% |
| Other | 10% | 6% | 4% |

| Sector Exposure | | | |
|-------------------------|--------|------------|-----|
| | UTIMCO | BC Gbl Agg | O/U |
| Treasuries & Sovereign | 68% | 66% | 2% |
| Government Related | 4% | 10% | -5% |
| Corporates | 24% | 18% | 6% |
| Securitized | 4% | 6% | -3% |
| Cash & Cash Equivalents | 0% | 0% | 0% |

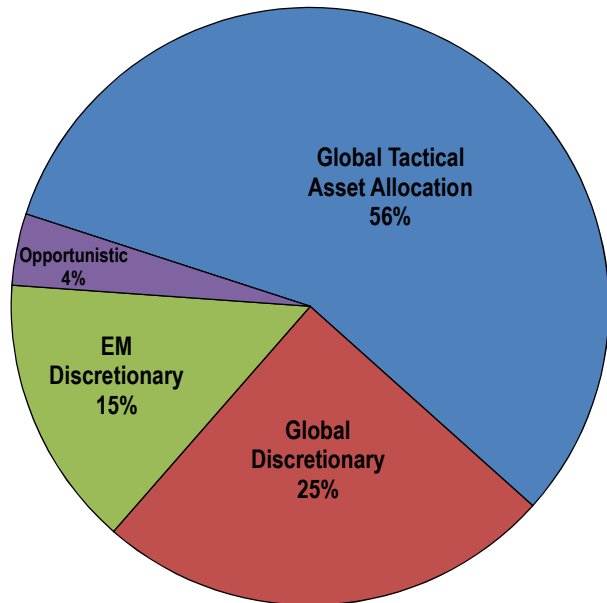
As of 8/31/2016

LCC – Macro



NAV, Investment Returns, and Capital Movement as of August 31, 2016

\$1.0 Billion NAV (4 Partners)



| Capital Movement (FY16) | |
|-------------------------|--------------|
| Subscriptions | |
| Total | \$572 |
| Redemptions | |
| Total | (156) |
| Net Activity | \$416 |

| Investment Returns | | | | |
|-----------------------------------|--------|---------|---------|---------|
| | 1 Year | 3 Years | 5 Years | 7 Years |
| Actual Return | -2.2% | -0.2% | 0.4% | 8.9% |
| General Benchmark Return | -1.4% | 2.5% | 2.6% | 2.7% |
| Value Add | -0.8% | -2.7% | -2.1% | 6.2% |
| Specific Benchmark ⁽¹⁾ | 1.9% | 2.7% | 0.5% | 1.6% |
| Value Add | -4.1% | -2.8% | -0.1% | 7.2% |
| Volatility | 6.6% | 7.2% | 6.2% | 9.2% |
| Specific Benchmark Volatility | 4.1% | 3.9% | 3.9% | 4.5% |
| Sharpe Ratio | -0.4 | -0.4 | 0.0 | 0.1 |
| Information Ratio ⁽²⁾ | -0.5 | -0.5 | -0.5 | 0.0 |

(1) HFRI Macro Index

(2) Calculated based on the Specific Benchmark

Statistics for periods longer than a year are annualized

Returns:

- Weak absolute and relative performance over the past one, three and five years as managers have struggled with easy monetary policies and low volatilities
- Strong absolute and relative long-term performance

Outlook:

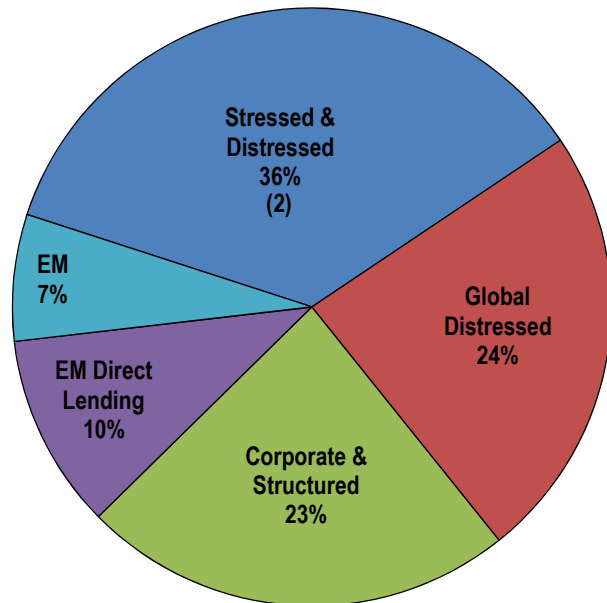
- Opportunity set expected to improve as shifts in monetary policies are more likely to occur over time

LCC – Credit



NAV, Investment Returns, and Capital Movement as of August 31, 2016

\$1.1 Billion NAV (6 Partners)



| Capital Movement (FY16) | |
|-------------------------|---------------|
| Subscriptions | |
| Total | \$176 |
| Redemptions | |
| Total | (231) |
| Net Activity | (\$55) |

| Investment Returns | | | | |
|-----------------------------------|--------|---------|---------|---------|
| | 1 Year | 3 Years | 5 Years | 7 Years |
| Actual Return | 5.2% | 3.4% | 6.7% | 10.0% |
| General Benchmark Return | -1.4% | 2.5% | 2.6% | 2.7% |
| Value Add | 6.6% | 0.9% | 4.1% | 7.3% |
| Specific Benchmark ⁽¹⁾ | 3.0% | 1.4% | 3.9% | 6.0% |
| Value Add | 2.2% | 2.0% | 2.8% | 4.0% |
| Volatility | 5.0% | 4.3% | 4.4% | 5.2% |
| Specific Benchmark Volatility | 7.0% | 5.7% | 5.6% | 5.7% |
| Sharpe Ratio | 1.0 | 1.0 | 0.8 | 1.5 |
| Information Ratio ⁽²⁾ | 0.7 | 0.7 | 0.8 | 1.2 |

(1) HFRI ED: Distressed/Restructuring Index

(2) Calculated based on the Specific Benchmark

Statistics for periods longer than a year are annualized

Returns:

- Strong absolute and relative performance over most time periods due to both favorable markets and manager selection

Outlook:

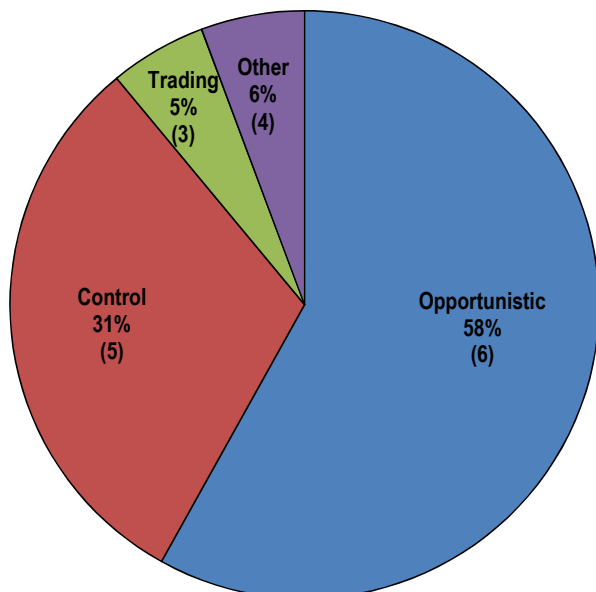
- Expect favorable catalysts in existing positions and higher cash balances in advance of the next default cycle

Private Investments - Credit



NAV, Capital Movement, and One Year Investment Returns as of August 31, 2016, all other Investment Returns as of May 31, 2016

\$961 Million NAV; \$329 Million Unfunded (16 Partners)



| Capital Movement (FY16) | |
|-------------------------|----------------------|
| <u>Calls</u> | |
| Total | <u>\$164</u> |
| <u>Distributions</u> | |
| Total | <u>(213)</u> |
| Net Activity | <u><u>(\$49)</u></u> |

| Investment Returns | | | | | |
|---|-----------------|--------------------|----------|---------|---------|
| | As of | As of May 31, 2016 | | | |
| | August 31, 2016 | 1 Year | 9 Months | 3 Years | 5 Years |
| <u>Actual Return</u> | 5.5% | 4.2% | 8.7% | 10.2% | 12.8% |
| <u>General Benchmark</u> | N/A | 2.5% | 12.7% | 12.1% | 9.5% |
| Value Add | | 1.7% | -4.0% | -1.9% | 3.3% |
| <u>Specific Benchmark⁽¹⁾</u> | N/A | 1.3% | 8.5% | 9.1% | 12.5% |
| Value Add | | 2.8% | 0.2% | 1.1% | 0.3% |

(1) Vintage Weighted Cambridge Associates Distressed Securities and Mezzanine Index as of May 31, 2016

Returns:

- During FY 2016, the portfolio returned 5.5%
- For the FY 9 months ending May 2016, the portfolio returned 4.2%, outperforming the Specific Benchmark by 2.8% and the General Benchmark by 1.7%
- Over longer time periods, 9-13% annual returns
- Fair outperformance versus the Specific Benchmark across all horizons with varying performance versus the General Benchmark

Outlook:

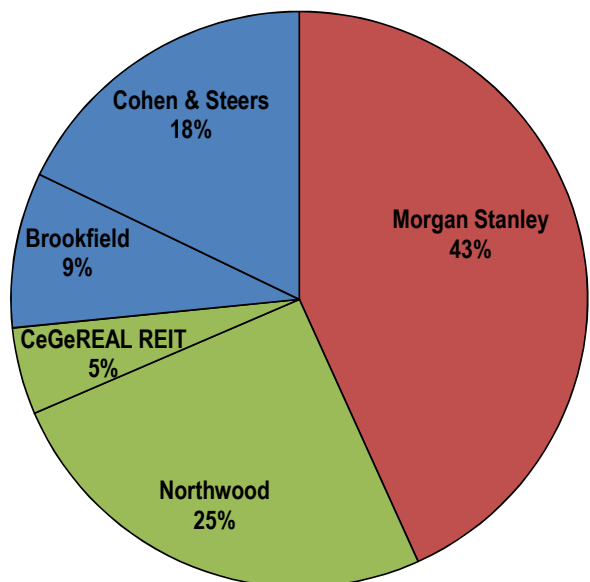
- Continue to make fewer new commitments until the next default cycle
- Reduce the number of partners

MCC – Real Estate



NAV, Investment Returns, and Capital Movement as of August 31, 2016

\$633 Million (4 Partners)



| Investment Returns | | | | |
|------------------------------|--------------|--------------|-------------|--------------|
| | 1 Year | 3 Years | 5 Years | 7 Years |
| Actual Return (Ex Hedges) | 7.3% | 5.2% | 6.8% | 9.0% |
| Benchmark Return | <u>17.3%</u> | <u>10.1%</u> | <u>9.6%</u> | <u>11.2%</u> |
| Value Add | -10.1% | -4.9% | -2.7% | -2.2% |
| Actual Standard Deviation | 15.1% | 12.0% | 15.4% | 15.9% |
| Benchmark Standard Deviation | 13.6% | 12.2% | 15.0% | 15.3% |
| Sharpe Ratio | 0.5 | 0.4 | 0.4 | 0.5 |
| Information Ratio | -2.2 | -1.3 | -0.8 | -0.7 |

| Capital Movement (FY16) | |
|-------------------------|-----------------|
| Subscriptions | |
| Total | \$ 27 |
| Redemptions | |
| Total | (236) |
| Net Activity | \$ (209) |

U.S

Global

International

| Liquidity |
|----------------|
| <u>90 days</u> |
| 100% |

Returns:

- Portfolio generated positive actual returns of 5% to 9% over all time periods. All regional exposures contributed to the positive actual returns
- On a relative basis, the portfolio underperformed the benchmark during each time period

Outlook:

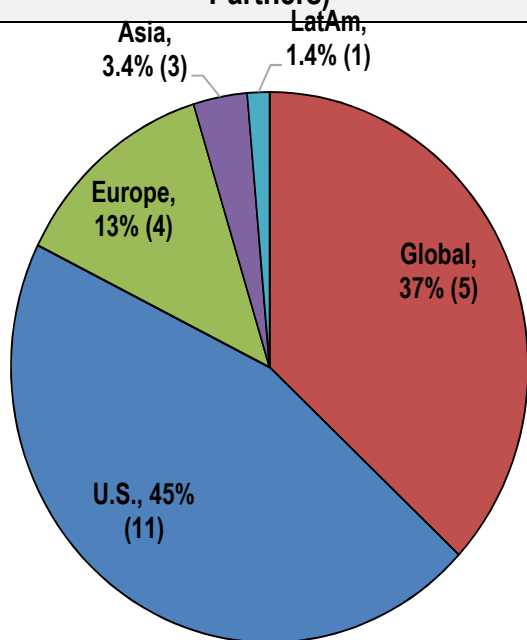
- MCC RE is no longer in the portfolio policy and will likely be fully liquidated no later than the end of FY 2017
- Active management to be phased out even more rapidly

Private Investments – Real Estate



NAV, Investment Returns, and Capital Movement as of August 31, 2016

\$1.7 Billion NAV; \$1.4 Billion Unfunded (24 Partners)



Capital Movement (FY16)

| <u>Calls</u> | |
|----------------------|---------------|
| Total | \$ 625 |
| <u>Distributions</u> | |
| Total | (341) |
| Net Activity | \$ 284 |

| | Investment Returns | | | | |
|---|-----------------------|--------------------|----------------------|---------|---------|
| | As of August 31, 2016 | As of May 31, 2016 | | | |
| | 1 Year | 9 Months | 3 Years | 5 Years | 7 Years |
| <u>Actual Return</u> | 11.0% | 8.7% | 18.6% | 11.5% | 8.9% |
| <u>General Benchmark</u> | N/A | 2.5% | 12.7% | 12.1% | 9.5% |
| <i>Value Add</i> | | 6.2% | 5.8% | -0.6% | -0.6% |
| <u>Specific Benchmark⁽¹⁾</u> | N/A | 11.3% | 11.3% ⁽²⁾ | 8.8% | -0.3% |
| <i>Value Add</i> | | -2.6% | 7.3% | 2.7% | 9.1% |

(1) Cambridge Associates – Real Estate Opportunistic Index (UTIMCO vintage-weighted by NAV)

(2) 9 Month Return is 5.6% for Real Estate Opportunistic Index (Cambridge vintage-weighted by NAV)

Returns:

- The portfolio generated absolute returns of 9% to 19% over the past 7 years and 11% this fiscal year
- The Portfolio has generally outperformed its Specific Benchmark and has outperformed the General Benchmark in recent years
- Global & North American exposure continued to drive performance over last fiscal year
- The European portfolio underperformed due to the relatively immature portfolio which magnified the J-curve impact, and the weakening of the Euro and British Pound

Outlook:

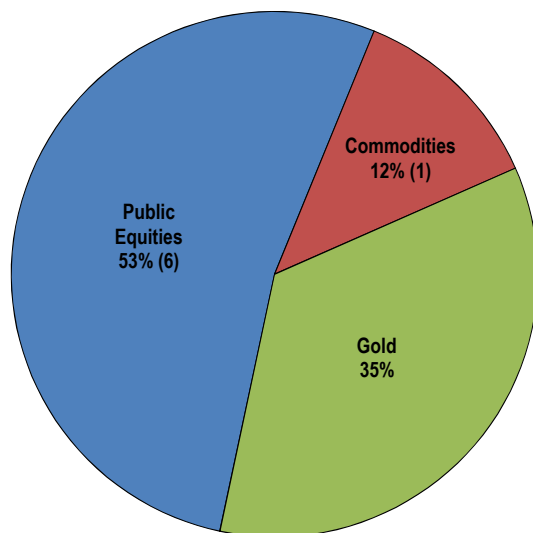
- Going forward, the Real Estate team will maintain a thematic approach in the United States while selectively seeking value in Europe
- Targeted themes include: demographic shifts, affordability, necessity retail, big data, and e-commerce growth

MCC - Natural Resources



NAV, Investment Returns, and Capital Movement as of August 31, 2016

\$2.1 Billion NAV (7 Partners)



| Subscriptions | |
|---------------------------|----------------|
| TPH Asset Management | \$ 200 |
| Blackrock Metals & Mining | 130 |
| Total | \$ 330 |
| Redemptions | |
| Commodities | (331) |
| Gold Futures | (63) |
| Total | (394) |
| Net Activity | \$ (64) |

Returns:

- The Public Equity portfolio rebounded strongly this year with a 7.4% gain to show flat returns over seven years after negative returns over the three and five-year periods
- Commodities posted negative returns over all time periods during the past seven years
- Gold performed strongly this year but detracted from performance over the three and five year periods
- Staff's decision in December 2015 to underweight commodities by moving \$330 million of exposure to NR equities added 340 bps of improved performance to the combined MCC-NR portfolio and 22 bps of value add at the endowment level

| Investment Returns | | | | |
|--|--------|---------|---------|---------|
| | 1 Year | 3 Years | 5 Years | 7 Years |
| Public Equities (\$1,108 million) | | | | |
| Actual Return | 7.4% | -9.8% | -6.5% | 0.3% |
| Benchmark | 6.7% | -5.7% | -3.5% | 0.6% |
| Value Add | 0.6% | -4.0% | -2.9% | -0.3% |
| Actual Standard Deviation | 30.8% | 25.5% | 25.1% | 24.1% |
| Benchmark Standard Deviation | 22.9% | 19.4% | 20.1% | 20.2% |
| Sharpe Ratio | 0.1 | -0.5 | -0.4 | -0.1 |
| Information Ratio | 0.1 | -0.4 | -0.4 | -0.0 |
| Commodities (\$256 million) | | | | |
| Actual Return | -15.2% | -17.3% | -14.2% | -6.3% |
| Benchmark | -8.8% | -14.0% | -12.8% | -5.7% |
| Value Add | -6.5% | -3.3% | -1.5% | -0.6% |
| Actual Standard Deviation | 17.0% | 15.1% | 15.0% | 15.4% |
| Benchmark Standard Deviation | 14.4% | 13.8% | 15.0% | 15.3% |
| Sharpe Ratio | -1.1 | -1.3 | -1.1 | -0.6 |
| Information Ratio | -1.2 | -0.8 | -0.4 | -0.2 |
| Gold (\$733 million) | | | | |
| Actual Return | 15.3% | -2.1% | -6.4% | |

Statistics for periods longer than a year are annualized

Outlook:

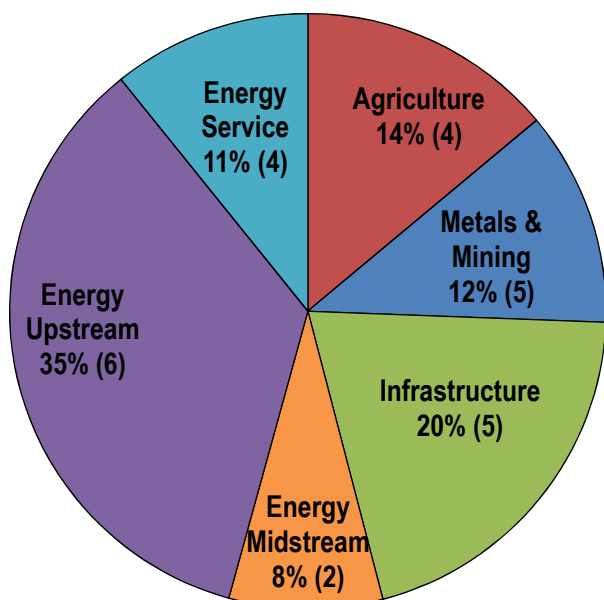
- The MCC-NR equity policy portfolio target will be combined into the broader MCC-DCE policy portfolio target during FY17
- The MCC-NR commodity policy portfolio target will be removed during FY17

Private Investments - Natural Resources



NAV, Capital Movement, and One Year Investment Returns as of August 31, 2016, all other Investment Returns as of May 31, 2016

\$2.6 Billion NAV, \$1.9 Billion Unfunded (26 Partners)



| | Investment Returns | | | | |
|-----------------------------------|-----------------------|--------------------|---------|---------|---------|
| | As of August 31, 2016 | As of May 31, 2016 | | | |
| | 1 Year | 9 Mo. | 3 Years | 5 Years | 7 Years |
| Actual Return | 0.9% | -0.9% | 6.0% | 12.5% | 15.2% |
| General Benchmark | N/A | 2.5% | 12.7% | 12.1% | 9.5% |
| Value Add | | -3.4% | -6.7% | 0.4% | 5.7% |
| Specific Benchmark ⁽¹⁾ | N/A | -13.7% | -8.4% | -4.5% | 0.1% |
| Value Add | | 12.8% | 14.4% | 17.0% | 15.2% |

(1) Vintage weighted 80% Cambridge Associates Natural Resources Private Equity Index and 20% Cambridge Associates Infrastructure Private Equity Index as of May 31, 2016

Returns:

- The portfolio return was slightly positive this fiscal year, while longer term performance has been strong
- The portfolio has consistently outperformed its Specific Benchmark and the General Benchmark over the seven year horizon in spite of the historical correction in the global resources sector
- Infrastructure and energy managers drove significant outperformance, representing approximately 75% of the portfolio
- Weaker performance by agriculture and mining investments was driven by the impact of the J-curve on newer funds as well as sector fundamentals

Outlook:

- NR PE has \$1.9B of unfunded commitments available to be invested in an attractive portion of the cycle

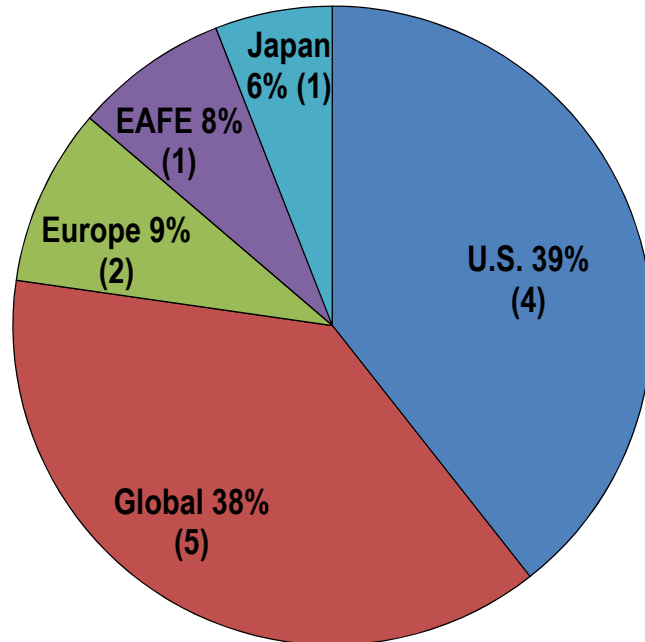
| \$ in millions | Net Asset Value | Unfunded | Capital Movement (FY16) | |
|---------------------|-----------------|----------------|-------------------------|--------|
| Energy | | | | |
| NAM Upstream | \$440 | \$261 | | |
| Other Upstream | 465 | 183 | | |
| Midstream | 216 | 169 | | |
| Energy Service | 279 | 271 | | |
| Total Energy | 1,400 | 884 | | |
| Mining | 303 | 256 | | |
| Agriculture | 360 | 324 | | |
| Infrastructure | 527 | 421 | | |
| Total | \$2,590 | \$1,884 | | |
| | | | Calls | |
| | | | Total | \$ 783 |
| | | | Distributions | |
| | | | Total | (144) |
| | | | Net Activity | \$ 639 |

MCC Public Equity – Developed Markets



NAV, Investment Returns, and Capital Movement as of August 31, 2016

\$4.0 Billion NAV (13 Partners)



| Investment Returns | | | | |
|------------------------------|-------------|-------------|-------------|-------------|
| | 1 Year | 3 Years | 5 Years | 7 Years |
| Actual Return | 0.6% | 8.6% | 12.3% | 12.0% |
| Benchmark Return | <u>6.7%</u> | <u>7.4%</u> | <u>9.5%</u> | <u>9.0%</u> |
| Value Add | -6.1% | 1.2% | 2.8% | 3.0% |
| Actual Standard Deviation | 14.3% | 11.4% | 11.7% | 12.6% |
| Benchmark Standard Deviation | 14.0% | 11.5% | 12.7% | 13.8% |
| Sharpe Ratio | 0.0 | 0.7 | 1.0 | 0.9 |
| Information Ratio | -1.5 | 0.3 | 0.7 | 0.8 |

Statistics for periods longer than a year are annualized

| Capital Movement (FY16) | |
|-------------------------|---------|
| Subscriptions | |
| Total | \$350 |
| Redemptions | |
| Total | (518) |
| Net Activity | (\$168) |

| Liquidity | |
|-----------|--------|
| 90 days | 1 Year |
| 77% | 93% |

Returns:

- Underperformance over the past year driven by a large position held by two concentrated U.S. managers
- Performance over longer time horizons is strong, with Sharpe Ratios of 0.9 to 1.0 and Information Ratios of 0.7 to 0.8 over trailing five and seven year periods

Outlook:

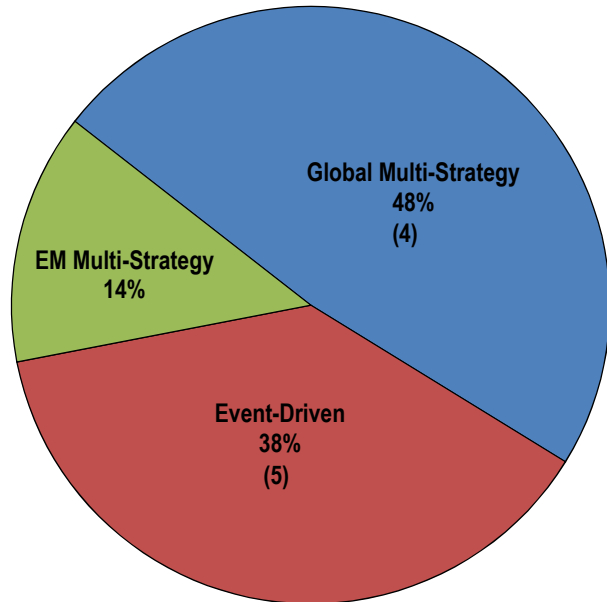
- The portfolio is overweight tech, industrials, and the USD, and would benefit from strong performance from these sectors and currency
- The portfolio is underweight financials, consumer staples, and most foreign currencies (EUR, JPY, GBP, CAD, AUD), and could underperform if these sectors and/or currencies rallied

LCC – Multi-Strategy & Event



NAV, Investment Returns, and Capital Movement as of August 31, 2016

\$2.4 Billion NAV (10 Partners)



Capital Movement (FY16)

| | |
|----------------------|----------------|
| Subscriptions | |
| Total | \$50 |
| Redemptions | |
| Total | (772) |
| Net Activity | (\$722) |

Investment Returns

| | 1 Year | 3 Years | 5 Years | 7 Years |
|-----------------------------------|--------------|-------------|-------------|-------------|
| Actual Return | 0.3% | 2.5% | 5.5% | 6.5% |
| General Benchmark Return | <u>-1.4%</u> | <u>2.5%</u> | <u>2.6%</u> | <u>2.7%</u> |
| Value Add | 1.7% | 0.0% | 2.9% | 3.8% |
| Specific Benchmark ⁽¹⁾ | <u>3.2%</u> | <u>2.9%</u> | <u>4.3%</u> | <u>5.8%</u> |
| Value Add | -2.9% | -0.4% | 1.2% | 0.8% |
| Volatility | 5.4% | 4.9% | 5.1% | 5.1% |
| Specific Benchmark Volatility | 6.3% | 5.0% | 5.2% | 5.4% |
| Sharpe Ratio | 0.0 | 0.0 | 0.5 | 1.0 |
| Information Ratio ⁽²⁾ | -1.3 | -1.3 | -0.2 | 0.5 |

(1) HFRI Event-Driven (Total) Index

(2) Calculated based on the Specific Benchmark

Statistics for periods longer than a year are annualized

Returns:

- Absolute and relative performance over the past one and three years was disappointing due to an unfavorable environment for event-driven strategies
- Stronger long-term absolute and relative returns driven by both equity strategies and distressed credit

Outlook:

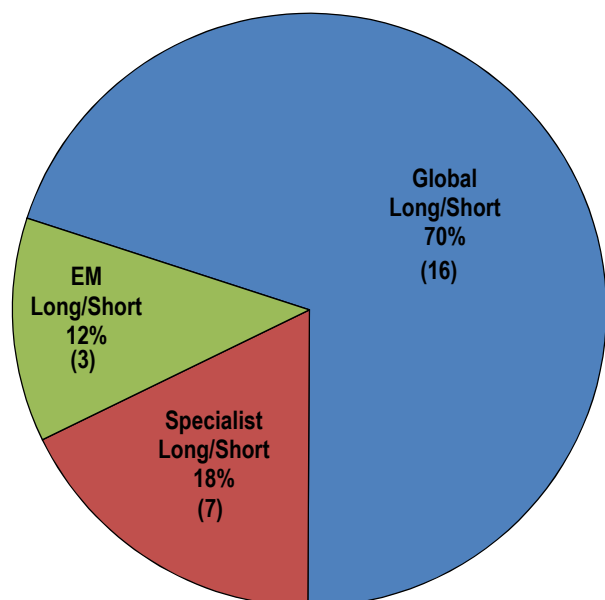
- Opportunity set expected to remain muted and risk-taking to be balanced

LCC – Long/Short Equity



NAV, Investment Returns, and Capital Movement as of August 31, 2016

\$6.0 Billion NAV (26 Partners)



Capital Movement (FY16)

| <u>Subscriptions</u> | |
|----------------------|---------------|
| Total | \$759 |
| <u>Redemptions</u> | |
| Total | (771) |
| Net Activity | (\$12) |

Investment Returns

| | 1 Year | 3 Years | 5 Years | 7 Years |
|-----------------------------------|--------|---------|---------|---------|
| Actual Return | -2.0% | 6.0% | 7.3% | 6.8% |
| General Benchmark Return | -1.4% | 2.5% | 2.6% | 2.7% |
| Value Add | -0.5% | 3.5% | 4.8% | 4.1% |
| Specific Benchmark ⁽¹⁾ | 2.8% | 3.8% | 4.1% | 4.6% |
| Value Add | -4.8% | 2.2% | 3.3% | 2.1% |
| Volatility | 6.8% | 6.4% | 5.7% | 5.7% |
| Specific Benchmark Volatility | 7.4% | 6.1% | 7.1% | 7.3% |
| Sharpe Ratio | -0.3 | -0.3 | 0.9 | 1.3 |
| Information Ratio ⁽²⁾ | -1.0 | -1.0 | 0.4 | 0.6 |

(1) HFRI Equity Hedge (Total) Index

(2) Calculated based on the Specific Benchmark

Statistics for periods longer than a year are annualized

Returns:

- Weak one year absolute and relative returns due to negative alpha of short portfolios for several managers with low net exposure
- Acceptable long-term absolute and relative returns driven by positive long and short alpha as well as moderate net long exposure

Outlook:

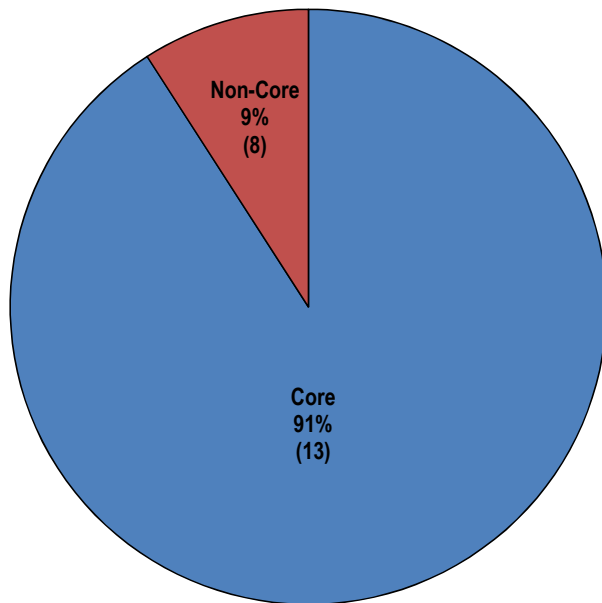
- Expect good stock picking environment and improved short alpha

Private Investments – LMM Private Equity



NAV, Capital Movement, and One Year Investment Returns as of August 31, 2016, all other Investment Returns as of May 31, 2016

\$886 Million NAV; \$605 Million Unfunded (21 Partners)



| Capital Movement (FY16) | |
|-------------------------|--------------|
| <u>Calls</u> | |
| Total | \$97 |
| <u>Distributions</u> | |
| Total | (217) |
| Net Activity | (120) |

| | Investment Returns | | | | |
|---|-----------------------|--------------------|---------|---------|---------|
| | As of August 31, 2016 | As of May 31, 2016 | | | |
| | 1 Year | 9 Months | 3 Years | 5 Years | 7 Years |
| <u>Actual Return</u> | 57.8% | 13.6% | 17.2% | 15.4% | 11.4% |
| <u>General Benchmark</u> | N/A | 2.5% | 12.7% | 12.1% | 9.5% |
| Value Add | | 11.1% | 4.5% | 3.3% | 1.9% |
| <u>Specific Benchmark⁽¹⁾</u> | N/A | 4.9% | 13.4% | 12.4% | 14.3% |
| Value Add | | 8.7% | 3.8% | 3.0% | -2.9% |

(1) Vintage Cambridge Associates Global Buyout & Growth Index adjusted to exclude emerging markets as of May 31, 2016

Returns:

- During FY 2016, the portfolio returned 57.8%, driven primarily by large valuation uplifts in a few funds and co-investments
- For the FY 9 months ending May 2016, the portfolio returned 13.6%, outperforming the Specific Benchmark by 8.7% and the General Benchmark by 11.1 %
- Strong outperformance versus the Specific Benchmark and General Benchmark across the 1, 3, and 5 year time horizons
- Weaker 7 year performance due to newness of current strategic initiative

Outlook:

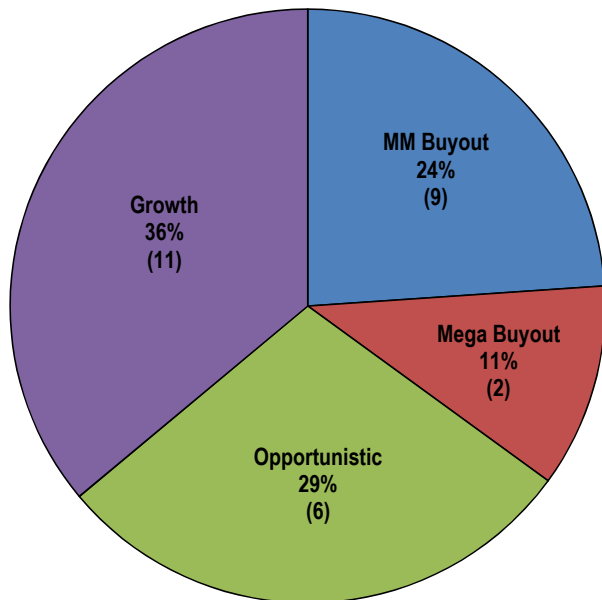
- Staff will continue to focus on underwriting new Lower Middle Market partners and driving co-investment with our existing core partners
- Few partners as non-core relationships wind-down

Private Investments – General Private Equity



NAV, Investment Returns, and Capital Movement as of August 31, 2016

\$1.1 Billion NAV; \$399 Million Unfunded (26 Partners)



*Two Managers have funds in two sub-strategies

| Capital Movement (FY16) | |
|-------------------------|----------------|
| <u>Calls</u> | |
| Total | \$73 |
| <u>Distributions</u> | |
| Total | (213) |
| Net Activity | <u>(\$140)</u> |

| Investment Returns | | | | | |
|-----------------------------------|-----------------------|--------------------|---------|---------|---------|
| | As of August 31, 2016 | As of May 31, 2016 | | | |
| | 1 Year | 9 Months | 3 Years | 5 Years | 7 Years |
| Actual Return | 2.5% | 3.4% | 9.1% | 9.4% | 10.3% |
| General Benchmark | N/A | 2.5% | 12.7% | 12.1% | 9.5% |
| Value Add | | 0.9% | -3.6% | -2.7% | 0.8% |
| Specific Benchmark ⁽¹⁾ | N/A | 4.9% | 13.4% | 12.4% | 14.3% |
| Value Add | | -1.5% | -4.3% | -3.0% | -4.0% |

(1) Vintage Cambridge Associates Global Buyout & Growth Index adjusted to exclude emerging markets as of May 31, 2016

Returns:

- During FY 2016, the portfolio returned 2.5%
- For the FY 9 months ending May 2016, the portfolio returned 3.4%, underperforming the Specific Benchmark by 1.5% and outperforming the General Benchmark by 0.9%
- Absolute performance over the 5 year time horizons has been 9-10%, lagging benchmarks
- The portfolio is in the process of “rolling off”

Outlook:

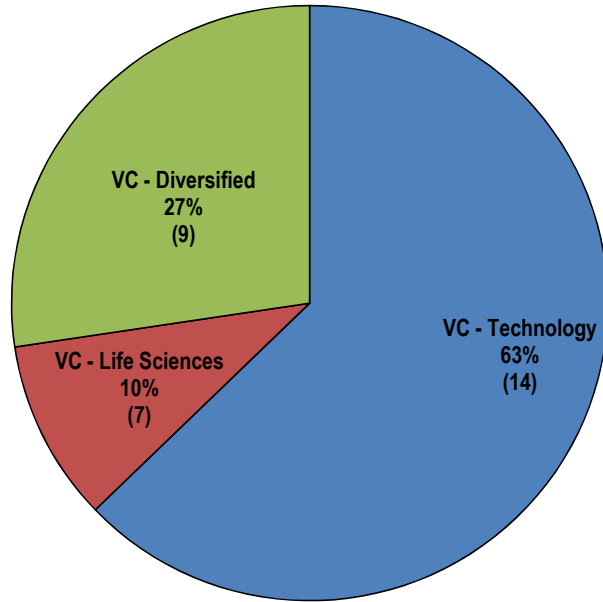
- Staff expects 9-10% returns from the General Private Equity portfolio as it continues to roll off over the next few years

Private Investments – Venture Capital



NAV, Capital Movement, and One Year Investment Returns as of August 31, 2016, all other Investment Returns as of May 31, 2016

\$2.0 Billion NAV; \$656 Million Unfunded (30 Partners)



| Capital Movement (FY16) | |
|-------------------------|--------|
| <u>Calls</u> | |
| Total | \$296 |
| <u>Distributions</u> | |
| Total | (312) |
| Net Activity | (\$16) |

| Investment Returns | | | | | |
|-----------------------------------|-----------------------|--------------------|---------|---------|---------|
| | As of August 31, 2016 | As of May 31, 2016 | | | |
| | 1 Year | 9 Months | 3 Years | 5 Years | 7 Years |
| Actual Return | -8.4% | -10.8% | 25.1% | 19.1% | 23.6% |
| General Benchmark | N/A | 2.5% | 12.7% | 12.1% | 9.5% |
| Value Add | | -13.3% | 12.4% | 7.0% | 14.1% |
| Specific Benchmark ⁽¹⁾ | N/A | 11.9% | 13.8% | 9.0% | 9.2% |
| Value Add | | -22.7% | 11.3% | 10.1% | 14.3% |

(1) Vintage Weighted Cambridge Associates Global Venture Capital Index as of May 31, 2016

Returns:

- During FY 2016, the portfolio returned -8.4%, due to general valuation decreases across the portfolio, after an incredibly strong FY 2015 performance
- As of May 2016, the portfolio returned -10.8% FYTD, underperforming the Specific Benchmark by 22.7% and the General Benchmark by 13.3%
- Strong absolute and relative performance versus the Specific Benchmark and General Benchmark across longer term horizons

Outlook:

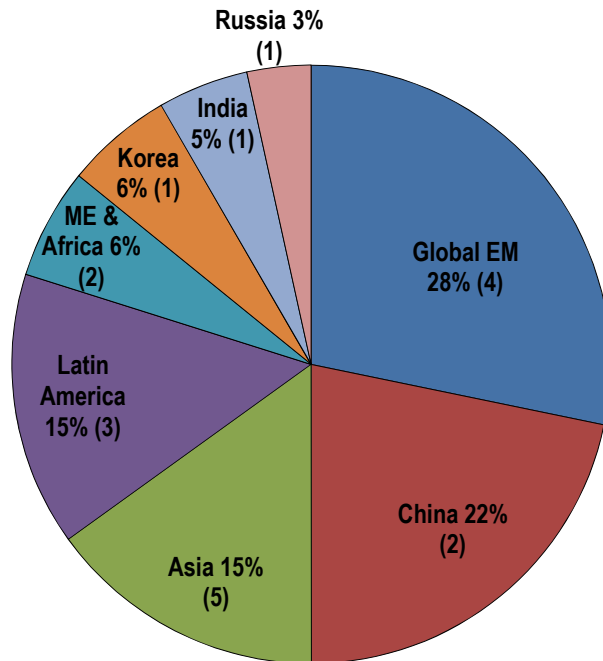
- Funds continue to deploy capital at a measured pace due to valuation environment
- Focused on maintaining and growing core partner relationships and underwriting potential new partners
- Reduction in number of partners as non-core relationships roll-off

MCC Public Equity – Emerging Markets



NAV, Investment Returns, and Capital Movement as of August 31, 2016

\$3.1 Billion NAV (19 Partners)



| Investment Returns | | | | |
|------------------------------|--------------|-------------|--------------|-------------|
| | 1 Year | 3 Years | 5 Years | 7 Years |
| Actual Return | 12.4% | 5.9% | 3.7% | 6.6% |
| Benchmark Return | <u>11.8%</u> | <u>1.1%</u> | <u>-0.4%</u> | <u>3.4%</u> |
| Value Add | 0.6% | 4.8% | 4.1% | 3.2% |
| Actual Standard Deviation | 15.6% | 14.3% | 16.0% | 16.3% |
| Benchmark Standard Deviation | 19.4% | 16.8% | 18.6% | 18.6% |
| Sharpe Ratio | 0.8 | 0.4 | 0.2 | 0.4 |
| Information Ratio | 0.1 | 0.8 | 0.8 | 0.7 |

Statistics for periods longer than a year are annualized

Returns:

- Strong absolute performance over the past year driven by an overweight to Brazil, which offset negative impact of China A-share exposure
- Fair absolute performance over long time periods
- Relative performance over longer time horizons is strong, with Information Ratios of 0.7 to 0.8 over trailing three, five, and seven year periods

Outlook:

- The portfolio is overweight consumer, Brazil, the Middle East, frontier Africa, the USD, and the BRL and would benefit from strong performance in these areas
- The portfolio is underweight financials, Taiwan, South Africa, and China, so strong performance from these markets could cause the portfolio to underperform

| Capital Movement (FY16) | |
|-------------------------|--------|
| Subscriptions | |
| Total | \$475 |
| Redemptions | |
| Total | (509) |
| Net Activity | (\$34) |

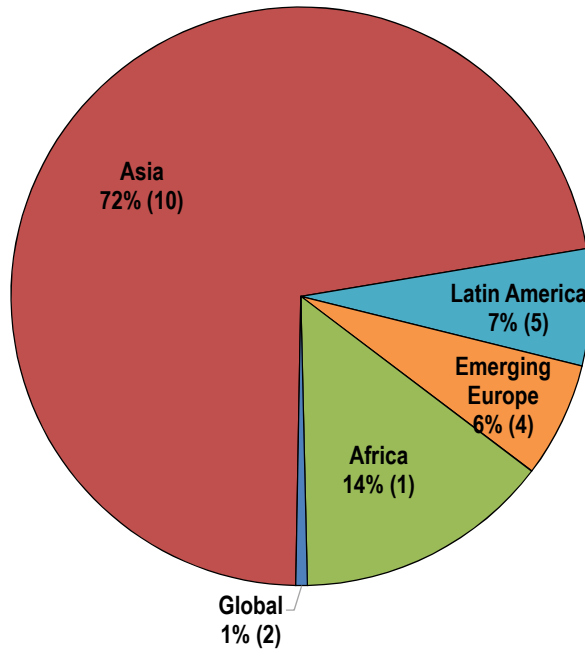
| Liquidity | |
|----------------|---------------|
| 90 days | 1 Year |
| 54% | 98% |

Private Investments - Emerging Markets



NAV, Capital Movement, and One Year Investment Returns as of August 31, 2016, all other Investment Returns as of May 31, 2016

\$1.2 Billion NAV, \$0.7 Billion Unfunded (22 Partners)



| Capital Movement (FY16) | |
|-------------------------|---------------|
| <u>Calls</u> | |
| Total | \$ 197 |
| <u>Distributions</u> | |
| Total | (60) |
| Net Activity | <u>\$ 137</u> |

| Investment Returns | | | | | |
|-----------------------------------|-----------------------|--------------------|---------|---------|---------|
| | As of August 31, 2016 | As of May 31, 2016 | | | |
| | 1 Year | 9 Months | 3 Years | 5 Years | 7 Years |
| Actual Return | 5.2% | 1.2% | 4.0% | 2.1% | 7.3% |
| General Benchmark | N/A | 2.5% | 12.7% | 12.1% | 9.5% |
| Value Add | | -1.3% | -8.7% | -10.0% | -2.2% |
| Specific Benchmark ⁽¹⁾ | N/A | -4.8% | 5.4% | 2.0% | 4.5% |
| Value Add | | 6.0% | -1.3% | 0.1% | 2.8% |

(1) Vintage Weighted Cambridge Associates Emerging Markets Private Equity Index adjusted to exclude venture, energy, and mezzanine funds as of May 31, 2016

Returns:

- The portfolio returned 5.2% this year and has returned between 2% and 7% over the past seven years
- The portfolio has lagged the General Benchmark but bested its Specific Benchmark over the first nine months of this fiscal year and over the five and seven-year time periods

Outlook:

- Staff maintains a positive outlook as the portfolio matures and Staff continues to actively co-invest with our core partners
- Attractive valuations and attractive growth rates exist for investing new capital in many emerging markets
- New staff and increased focus should produce strong long term returns

MCC Performance Recap



Investment Returns as of August 31, 2016

| Portfolio | One Year | | Three Year | | Five Year | | Seven Year | |
|------------------------------|-------------|--------------|--------------|--------------|--------------|--------------|-------------|--------------|
| | Actual | vs Benchmark | Actual | vs Benchmark | Actual | vs Benchmark | Actual | vs Benchmark |
| Liquidity Reserve | -0.2% | -0.5% | -0.7% | -0.8% | -0.8% | -0.9% | -1.2% | -1.3% |
| IGFI ex-Liquidity Reserve | 8.2% | -0.6% | 3.2% | 0.5% | 2.6% | 1.4% | 4.4% | 1.6% |
| Real Estate | 7.3% | -10.1% | 5.2% | -4.9% | 6.8% | -2.7% | 9.0% | -2.2% |
| Gold | 15.3% | 0.0% | -2.1% | 0.0% | -6.4% | 0.0% | - | - |
| Commodities | -15.2% | -6.5% | -17.3% | -3.3% | -14.2% | -1.5% | -6.4% | -0.7% |
| NR Public Equity | <u>7.4%</u> | <u>0.6%</u> | <u>-9.8%</u> | <u>-4.0%</u> | <u>-6.5%</u> | <u>-2.9%</u> | <u>0.4%</u> | <u>-0.2%</u> |
| MCC-Natural Resources | 5.8% | 1.2% | -8.8% | -3.5% | -8.4% | -3.0% | -0.2% | 0.1% |
| Developed Country Equity | 0.6% | -6.1% | 8.6% | 1.2% | 12.3% | 2.8% | 12.0% | 3.0% |
| Emerging Markets Equity | 12.4% | 0.6% | 5.9% | 4.8% | 3.7% | 4.2% | 6.6% | 3.2% |
| Total MCC, ex-Liq Res | 5.6% | -3.3% | 3.4% | 0.3% | 2.8% | -0.4% | 5.8% | 0.5% |

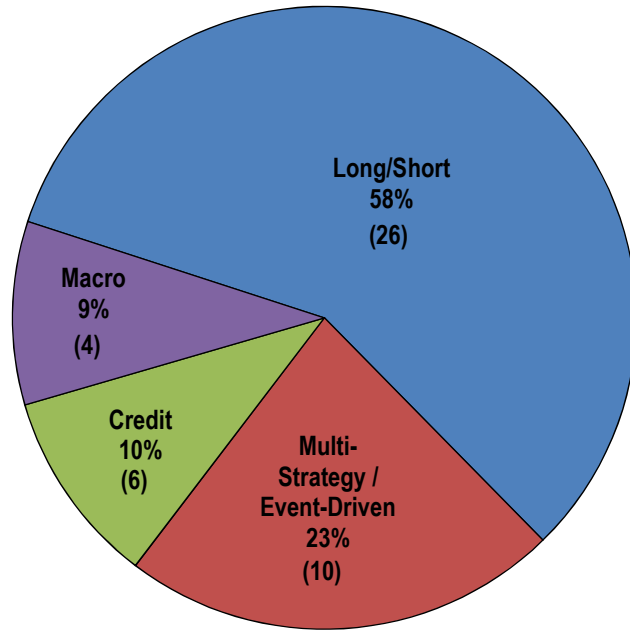
Note: negative performance of Liquidity Reserve due to fees unrelated to Liquidity Reserve assets, including FactSet, BNY Mellon custody fees, etc.

LCC - Recap



NAV, Investment Returns, and Capital Movement as of August 31, 2016

\$10.5 Billion NAV (46 Partners)



| Investment Returns | | | | |
|--------------------------|--------|---------|---------|---------|
| | 1 Year | 3 Years | 5 Years | 7 Years |
| Actual Return | -0.8% | 4.2% | 6.1% | 7.1% |
| General Benchmark Return | -1.4% | 2.5% | 2.6% | 2.7% |
| Value Add | 0.6% | 1.6% | 3.5% | 4.4% |
| LCC Volatility | 5.7% | 5.1% | 4.8% | 4.8% |
| Benchmark Volatility | 4.3% | 3.9% | 4.0% | 4.2% |
| Sharpe Ratio | -0.2 | 0.8 | 1.3 | 1.5 |
| Information Ratio | 0.3 | 0.8 | 1.8 | 2.4 |

Statistics for periods longer than a year are annualized.

| Concentration | |
|---------------|-----|
| Top 10 | 44% |
| Top 20 | 68% |
| Top 30 | 88% |

| Liquidity | |
|-----------|--------|
| 90 days | 1 year |
| 20% | 72% |

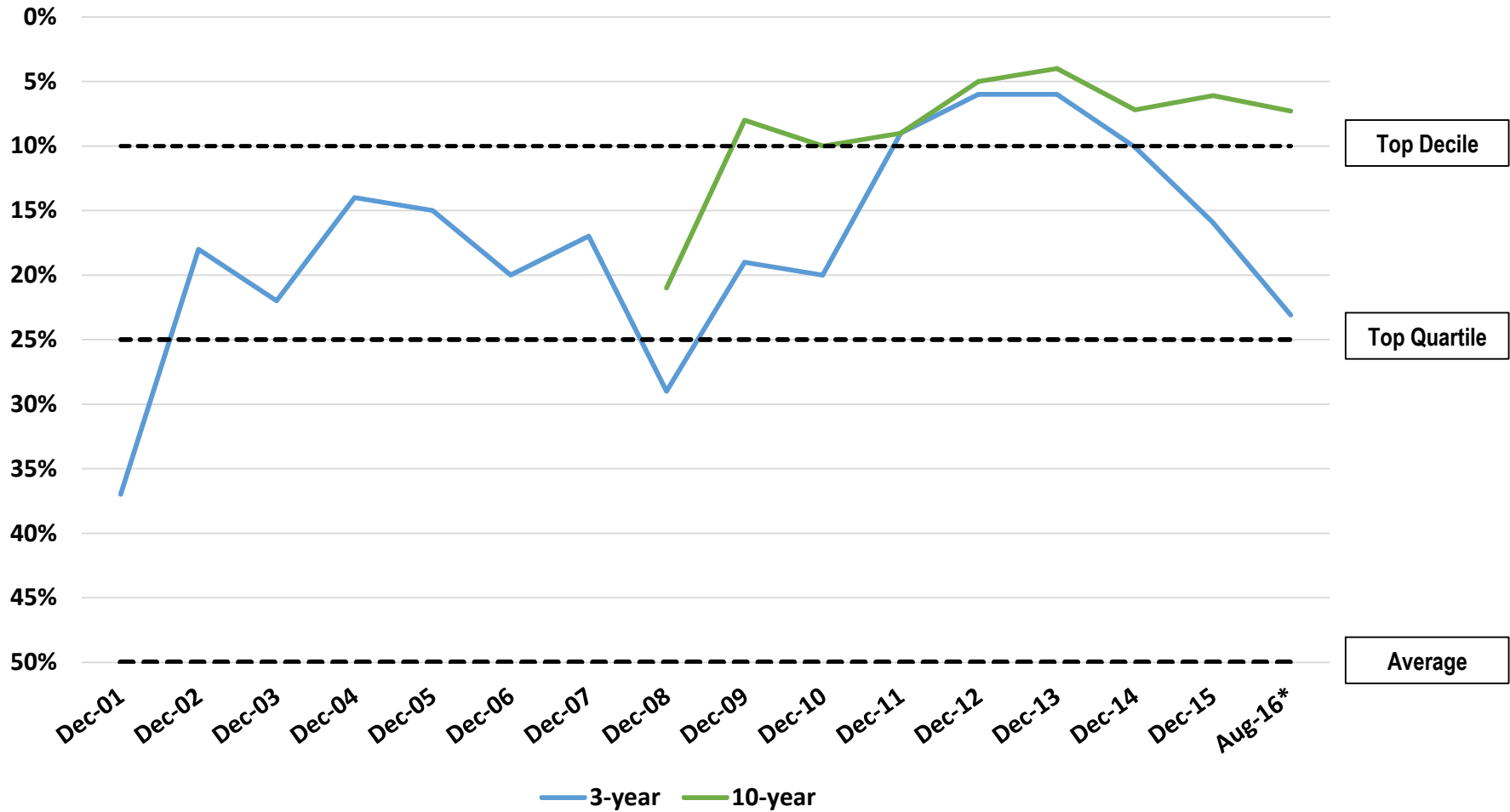
| Capital Movement (FY16) | |
|-------------------------|----------------|
| Subscriptions | |
| Total | \$1,557 |
| Redemptions | |
| Total | (1,936) |
| Net Activity | (\$379) |

| Look-Thru Leverage | | | |
|--------------------|--------------|-------------|------------|
| | % of Capital | Gross | Net |
| Core Strategies | 94% | 161% | 52% |
| FI & FX | 6% | 735% | -425% |
| Total LCC | 100% | 197% | 23% |

Value Add Versus Fund of Funds



Consistent top quartile performance within the Fund of Funds universe



*Approximately 85% of Fund of Funds reported through October 6, 2016 – Final data subject to change

Private Investments Portfolio Recap

Year Ended August 31, 2016



| \$ in millions | Beg FY 9/1/15 | | | Calls | Distributions | Change in Valuation | % | FY'16 New Commitments | | End 8/31/16 | |
|---------------------------------------|----------------|----------------|------------|----------------|----------------|------------------------|--------------|-----------------------|----------------|----------------|----------------|
| | NAV | Unfunded | # Funds | | | | | # Funds | \$ Committed | NAV | Unfunded |
| Credit-Related Fixed Income | \$958 | \$371 | 39 | \$164 | \$213 | \$52 | 5.5% | 0 | \$25 | \$961 | \$330 |
| Real Estate | 1,261 | 1,487 | 55 | 629 | 345 | 162 | 11.0% | 7 | 552 | 1,707 | 1,476 |
| Natural Resources | 1,911 | 1,971 | 70 | 783 | 145 | 41 | 0.9% | 16 | 713 | 2,590 | 1,877 |
| Venture | 1,329 | 588 | 60 | 296 | 312 | (117) | -8.4% | 8 | 264 | 1,196 | 656 |
| Other Developed Country Equity | <u>1,863</u> | <u>1,012</u> | <u>94</u> | <u>170</u> | <u>430</u> | <u>382</u> | <u>22.1%</u> | <u>6</u> | <u>152</u> | <u>1,985</u> | <u>1,005</u> |
| Total Developed Country Equity | 3,192 | 1,600 | 154 | 466 | 742 | 265 | 8.9% | 14 | 416 | 3,181 | 1,661 |
| Emerging Markets Equity | <u>959</u> | <u>703</u> | <u>31</u> | <u>197</u> | <u>60</u> | <u>56</u> | 5.2% | <u>6</u> | <u>265</u> | <u>1,152</u> | <u>728</u> |
| TOTAL | <u>\$8,281</u> | <u>\$6,132</u> | <u>349</u> | <u>\$2,239</u> | <u>\$1,505</u> | <u>\$576</u> | 6.4% | <u>43</u> | <u>\$1,971</u> | <u>\$9,591</u> | <u>\$6,072</u> |
| % of Endowment (PUF+ GEF) | 32% | 24% | | | | | | | | 36% | 23% |

Co-Investments - Summary



| | Private Investments | | | | | | | | | | | |
|---|---------------------|----------------------|-----|-------|-------------|---------|-------------------|---------|-----------------|---------|-------|----------------------|
| | MCC | | LCC | | Real Estate | | Natural Resources | | Private Markets | | Total | |
| <u>FY 2016</u> | # | \$ | # | \$ | # | \$ | # | \$ | # | \$ | # | \$ |
| Pipeline: | | | | | | | | | | | | |
| Reviewed | 4 | \$190 | 7 | \$375 | 15 | \$411 | 39 | \$978 | 31 | \$271 | 96 | \$2,225 |
| Interest | 2 | 90 | 6 | 350 | 9 | 216 | 36 | 903 | 27 | 221 | 80 | 1780 |
| Committed ⁽¹⁾ | 2 | 90 | 0 | 0 | 2 | 31 | 12 | 283 | 19 | 65 | 35 | 469 |
| In Process | 0 | 0 | 0 | 0 | 0 | 0 | 15 | 430 | 2 | 15 | 17 | 445 |
| Since Inception | # | \$ | # | \$ | # | \$ | # | \$ | # | \$ | # | \$ |
| Pipeline: | | | | | | | | | | | | |
| Reviewed | 9 | \$440 | 15 | \$875 | 53 | \$1,147 | 91 | \$2,484 | 74 | \$1,127 | 242 | \$6,073 |
| Interest | 3 | 140 | 11 | 700 | 31 | 644 | 78 | 2084 | 61 | 839 | 184 | 4,407 |
| Committed ⁽¹⁾ | 3 | 140 | 1 | 75 | 15 | 214 | 35 | 897 | 37 | 213 | 91 | 1,539 |
| In Process | 0 | 0 | 0 | 0 | 1 | 25 | 15 | 430 | 2 | 15 | 18 | 470 |
| Portfolio Returns (Since Inception): | | | | | | | | | | | | |
| Invested | 3 | \$136 | 1 | \$75 | 15 | \$193 | 35 | \$642 | 36 | \$204 | 90 | \$1,250 |
| Realized Proceeds | 0 | 0 | 1 | 83 | 6 | 55 | 2 | 167 | 5 | 45 | 14 | 350 |
| NAV | | 177 | | 5 | | 189 | | 745 | | 344 | | 1,461 |
| Multiple | | 1.3x | | 1.2x | | 1.3x | | 1.4x | | 1.9x | | 1.4x |
| IRR | | 31.0% ⁽²⁾ | | 10.2% | | 10.5% | | 25.4% | | 45.4% | | 25.2% ⁽³⁾ |

(1) Private Markets had 15 underwritten co-investments since inception and 5 in FY 2016. The fund manager had discretion in the remaining 22 co-investments since inception and 14 in FY 2016.

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

(3) Total IRR calculation includes only Private Investment co-investments.

Endowment Risk Dashboard

August 31, 2016



Underperformance

| <u>FY2016</u> | <u>3-years</u> | <u>5-years</u> | <u>10-years</u> |
|---------------|----------------|----------------|-----------------|
| 4.0% | 6.4% | 6.2% | 5.5% |



Market

| <u>Beta</u> | | |
|--------------------|--------------|-----------------|
| <u>U.S. Equity</u> | <u>Rates</u> | <u>Currency</u> |
| 0.653 | (0.349) | (0.140) |



Scenarios

| | <u>China Hard</u> | <u>US Liquidity</u> | <u>Japan</u> | <u>50% Oil</u> |
|----------|-------------------|---------------------|------------------|----------------|
| Expected | <u>Landing</u> | <u>Squeeze</u> | <u>Implosion</u> | <u>Drop</u> |
| Returns: | -22.6% | -20.7% | -16.3% | 0.8% |



Downside Volatility

| | <u>1 stdev</u> | <u>2 stdev</u> |
|------------------|----------------|----------------|
| Expected returns | -5.3% | -20.4% |
| VIX: | 13.4% | |



Active Management

| | <u>1-year</u> | <u>3-years</u> | <u>10-years</u> |
|--------------------------|---------------|----------------|-----------------|
| <u>Value-Add</u> | | | |
| bps | N/A | N/A | N/A |
| \$ | N/A | N/A | N/A |
| <u>Return/Volatility</u> | | | |
| Sharpe | 0.63 | 1.23 | 0.55 |
| IR | N/A | N/A | N/A |



Transparency

| <u>Full but</u> | | | |
|-----------------|---------------|----------------|-------------|
| <u>Full</u> | <u>Lagged</u> | <u>Partial</u> | <u>None</u> |
| 26% | 41% | 30% | 3% |



Concentration

| <u>Manager</u> | | | <u>Securities (Top 10)</u> | |
|----------------|---------------|---------------|----------------------------|---------------|
| <u>US</u> | <u>Top 10</u> | <u>Top 20</u> | <u>Bonds</u> | <u>Stocks</u> |
| 53% | 23% | 39% | 5.1% | 5.5% |



Illiquidity

| | <u>90 day</u> | <u>1 year</u> | <u>Unfunded</u> |
|------------|------------------|------------------|-----------------|
| Endowments | <u>liquidity</u> | <u>liquidity</u> | <u>Commit-</u> |
| ITF | 35% | 54% | <u>ments</u> |
| | 59% | 85% | 24% |



Leverage

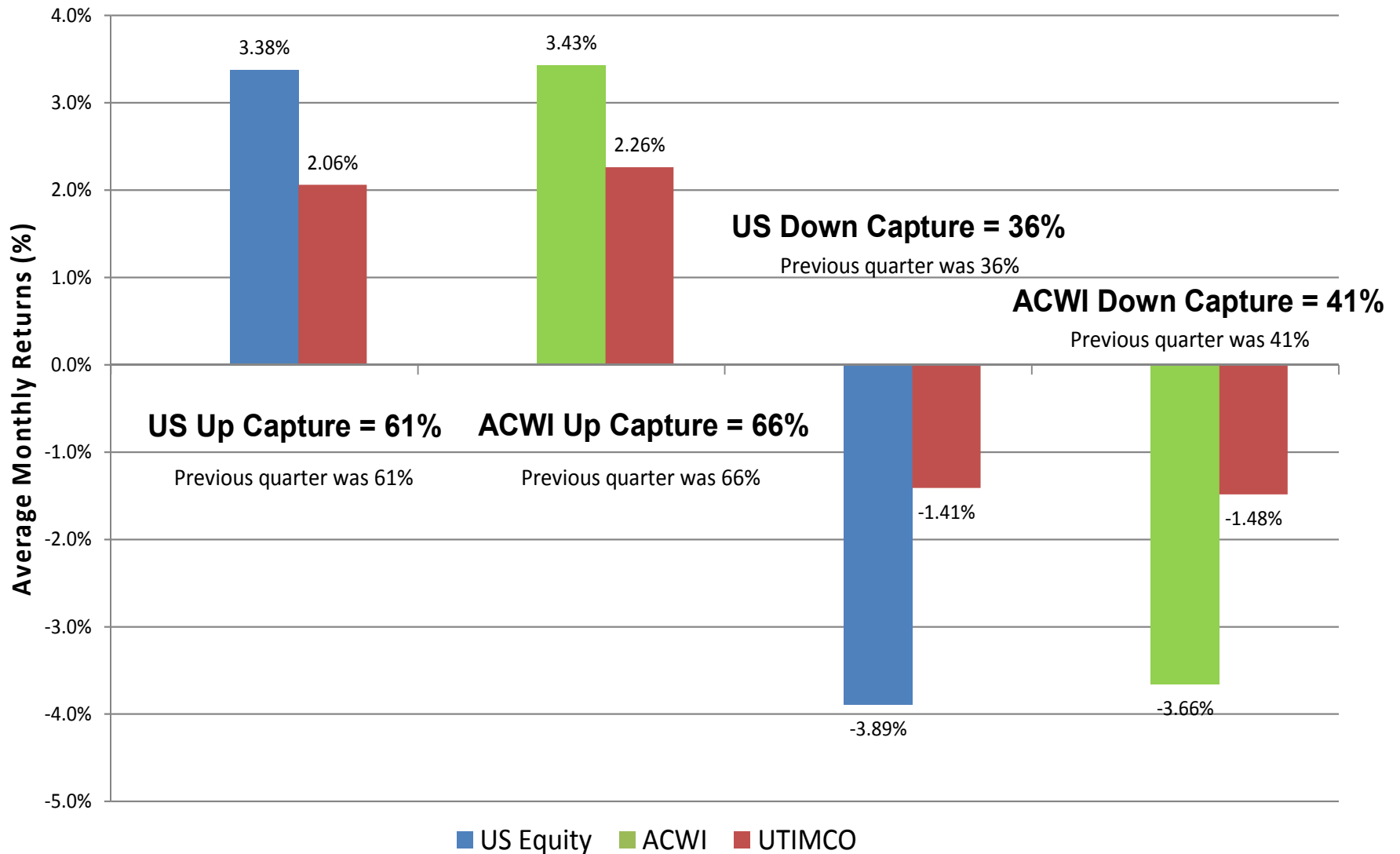
| | <u>LCC</u> | <u>LCC ex-FI</u> | <u>Endowments</u> |
|-------|------------|------------------|-------------------|
| Gross | 1.97 | 1.61 | 1.00 |
| Net | 0.23 | 0.52 | 1.00 |



Permanent Loss of Capital

| | <u>Invested</u> | <u>Realized</u> | <u>Anticipated/</u> | <u>Total Loss</u> | <u>Annualized</u> |
|-------|----------------------|-------------------|---------------------|-------------------|-------------------|
| | <u>Capital (\$B)</u> | <u>Loss (\$M)</u> | <u>Unrealized</u> | <u>(\$M)</u> | <u>Loss (%)</u> |
| MCC | \$33.7 | \$622 | - | \$622 | 0.30% |
| LCC | 13.2 | 240 | 198 | 438 | 0.51% |
| PI | <u>14.5</u> | <u>327</u> | <u>202</u> | <u>529</u> | <u>0.81%</u> |
| Total | <u>\$61.4</u> | <u>\$1,189</u> | <u>\$400</u> | <u>\$1,589</u> | <u>0.44%</u> |

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



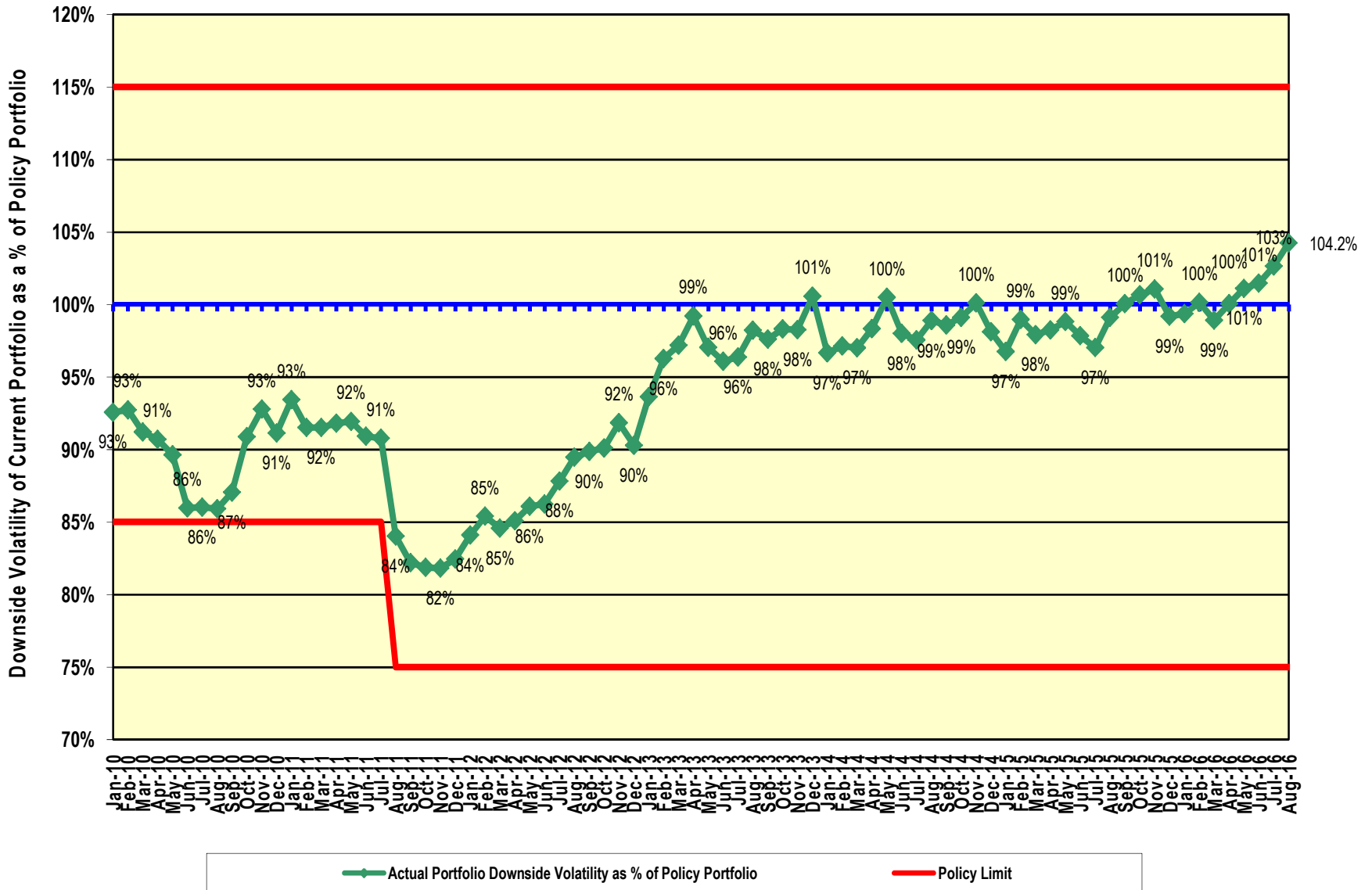
Data from 8/1996 till 8/2016. US equity had 95 down months and 146 up months; ACWI had 101 down months and 140 up months

Scenario Analysis



| | Scenario | | | | | | | |
|--|--------------------------|----------------------------|-----------------------|-----------------------|------------------------|----------------------------|-------------------------------|------------------------------|
| | China Hard Landing | US Liquidity Squeeze | Eurozone Breakup | Japan Implosion | Currency Debasement | Eurozone Lost Decade | Mideast War / Oil shock | Oil supply shock (50%) |
| Expected Policy Returns (nominal) | (23.9%) | (22.4%) | (17.8%) | (18.4%) | (15.1%) | (4.1%) | (2.9%) | 0.5% |
| Gain from tactical positions | (0.8%) | (0.1%) | (0.2%) | (0.4%) | 0.3% | 0.0% | 0.2% | (0.7%) |
| Gain from current hedges | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% |
| Gain from manager's alpha | <u>2.1%</u> | <u>1.8%</u> | <u>2.8%</u> | <u>2.5%</u> | <u>1.9%</u> | <u>2.3%</u> | <u>1.4%</u> | <u>1.0%</u> |
| Estimated Endowment Returns | <u>(22.6%)</u> | <u>(20.7%)</u> | <u>(15.2%)</u> | <u>(16.3%)</u> | <u>(12.9%)</u> | <u>(1.8%)</u> | <u>(1.3%)</u> | <u>0.8%</u> |

Downside Volatility Utilization of GEF



Transparency Summary



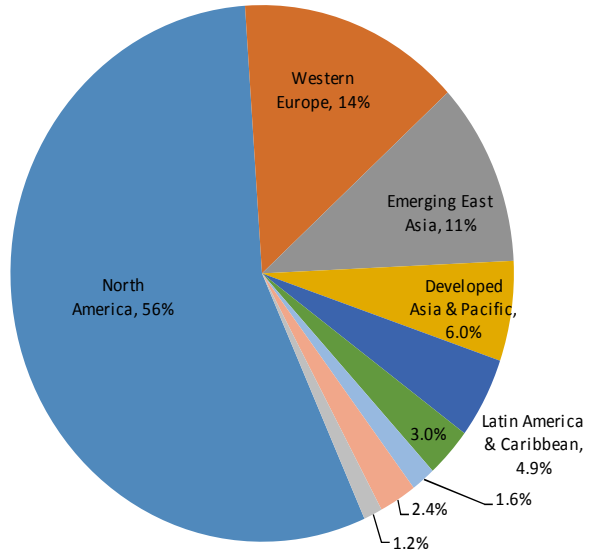
| | MCC | | | TOTAL | LCC | Privates | TOTAL |
|-----------------|--------------|-------------|----------|-------|-----|----------|-------|
| | Fixed Income | Real Assets | Equities | | | | |
| Full & Timely | 100% | 100% | 73% | 80% | | | 26% |
| Full but lagged | | | 9% | 6% | | 99% | 41% |
| Partial | | | 12% | 9% | 95% | | 30% |
| No Transparency | | | 6% | 5% | 5% | 1% | 3% |

Geographic Exposure

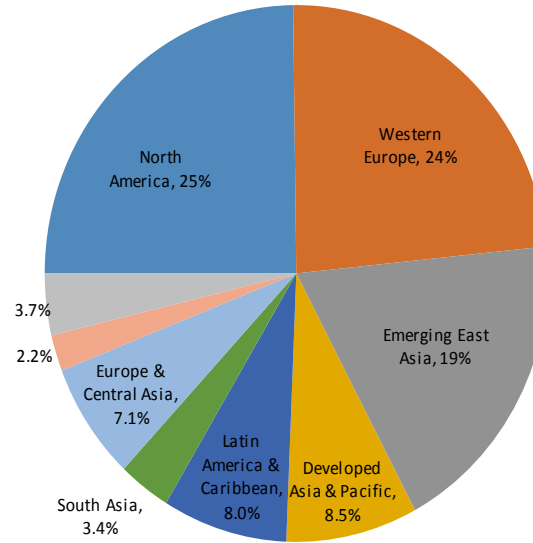
As of August 31, 2016



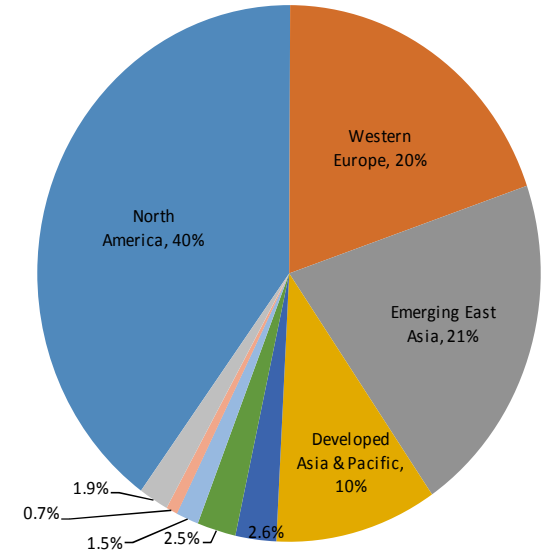
TOTAL Endowment



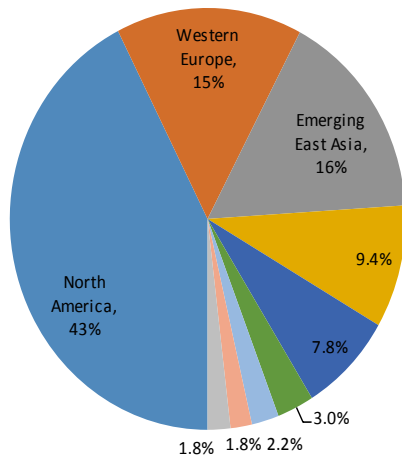
GDP



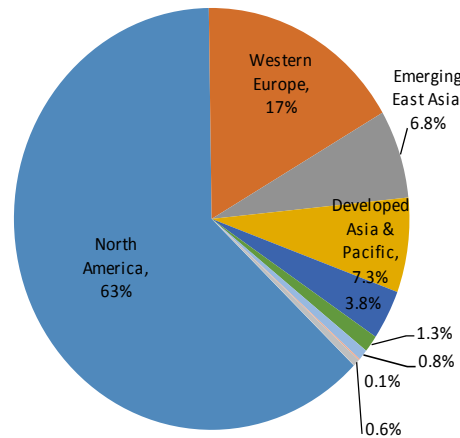
Global Mkt Cap



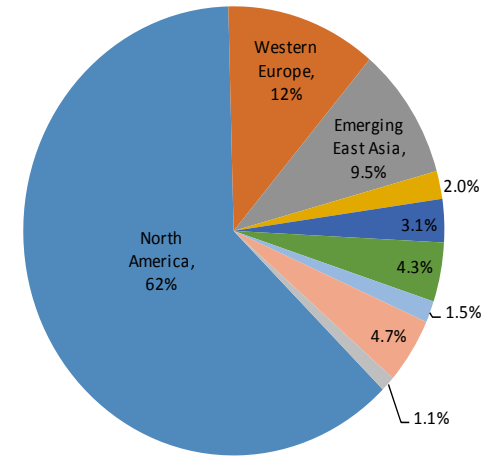
MCC



LCC



PI



■ Developed Asia & Pacific
 ■ Latin America & Caribbean
 ■ South Asia
 ■ Europe & Central Asia
 ■ Sub-Saharan Africa
 ■ Middle East & North Africa

Largest Country Exposures

As of August 31, 2016



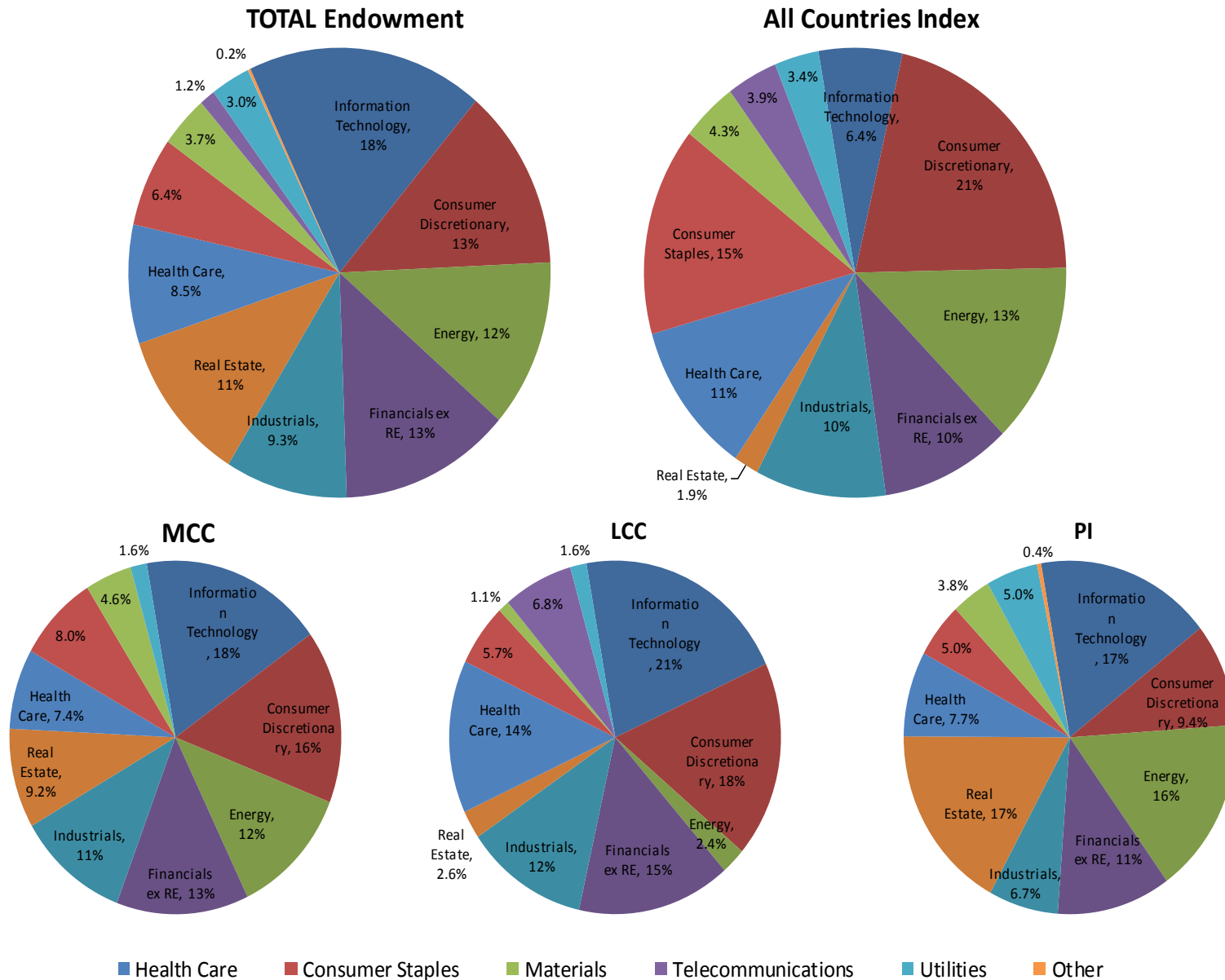
| | MCC | LCC | PI | TOTAL | GDP | Global Mkt Cap |
|-------------------|-------|-------|-------|-------|-------|----------------|
| 1) United States | 42.7% | 61.0% | 57.6% | 53.3% | 22.5% | 37.1% |
| 2) China | 6.0% | 4.9% | 5.5% | 5.5% | 13.4% | 9.1% |
| 3) United Kingdom | 5.6% | 3.2% | 5.8% | 5.0% | 3.8% | 5.2% |
| 4) Japan | 5.7% | 5.2% | 0.3% | 3.6% | 5.9% | 7.8% |
| 5) India | 2.8% | 1.3% | 3.9% | 2.8% | 2.7% | 2.3% |
| 6) Brazil | 4.5% | 0.6% | 2.1% | 2.5% | 3.0% | 1.0% |
| 7) Canada | 2.2% | 1.6% | 3.6% | 2.5% | 2.3% | 2.9% |
| 8) South Korea | 4.1% | 1.1% | 0.0% | 1.7% | 1.8% | 2.0% |
| 9) Australia | 1.4% | 1.8% | 1.1% | 1.4% | 1.9% | 1.7% |
| 10) Germany | 1.0% | 1.2% | 1.1% | 1.1% | 5.0% | 2.9% |
| 11) Rep of Congo | 0.0% | 0.0% | 2.8% | 1.1% | 0.0% | 0.0% |
| 12) France | 2.0% | 0.5% | 0.5% | 1.0% | 3.6% | 3.0% |
| 13) Hong Kong | 1.2% | 0.8% | 0.9% | 1.0% | 0.4% | 6.0% |
| 14) Mexico | 2.5% | 0.2% | 0.0% | 0.9% | 1.7% | 0.6% |
| 15) Thailand | 0.9% | 0.0% | 1.3% | 0.8% | 0.5% | 0.6% |
| 16) Singapore | 1.2% | 0.2% | 0.6% | 0.7% | 0.4% | 0.7% |
| 17) Indonesia | 0.9% | 0.0% | 1.0% | 0.7% | 1.1% | 0.6% |
| 18) Spain | 0.8% | 0.0% | 1.1% | 0.7% | 1.8% | 1.0% |
| 19) Switzerland | 0.9% | 0.7% | 0.1% | 0.5% | 0.9% | 2.4% |
| 20) South Africa | 1.2% | 0.0% | 0.1% | 0.5% | 0.5% | 0.6% |
| 21) Russia | 1.0% | 0.1% | 0.3% | 0.5% | 2.4% | 0.8% |

Sector Exposure – β adjusted

As of December 31, 2015

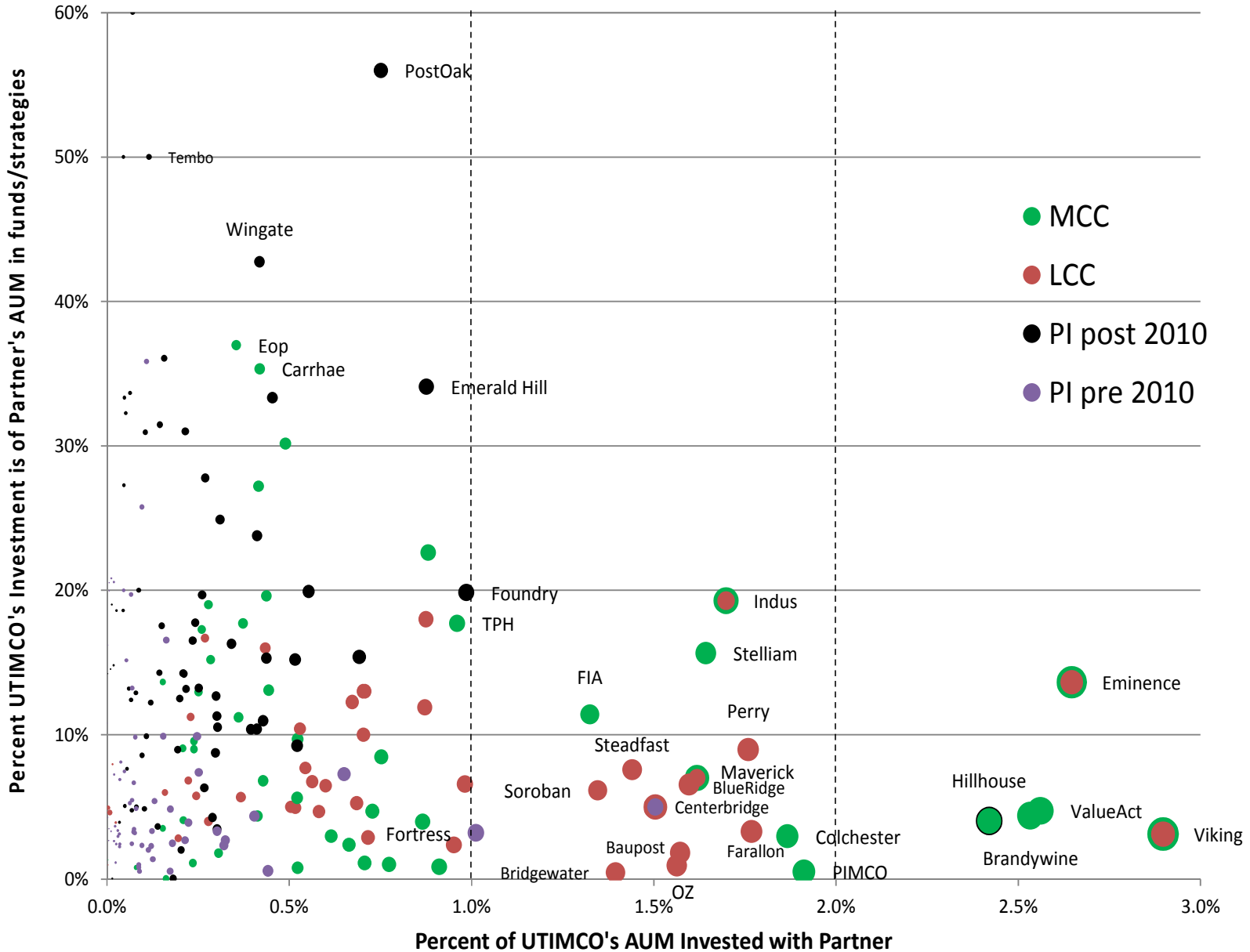


Endowments, excluding Fixed Income and NR commodities



Partner Concentration

As of December 31, 2015



Position Level Concentration



Top Ten Fixed Income and Equity

| Fixed Income | \$ (M) | % of AUM |
|-------------------------|-----------------------|---------------------|
| U.S. Government | \$397 | 1.16% |
| Japanese Sovereign | 310 | 0.91% |
| Mexican Sovereign | 235 | 0.69% |
| Australian Sovereign | 176 | 0.51% |
| New Zealand Sovereign | 151 | 0.44% |
| UK Sovereign | 128 | 0.37% |
| Malaysian Sovereign | 112 | 0.33% |
| Brazilian Sovereign | 92 | 0.27% |
| South African Sovereign | 76 | 0.22% |
| Polish Sovereign | <u>71</u> | <u>0.21%</u> |
| TOTAL | <u>\$1,748</u> | <u>5.11%</u> |

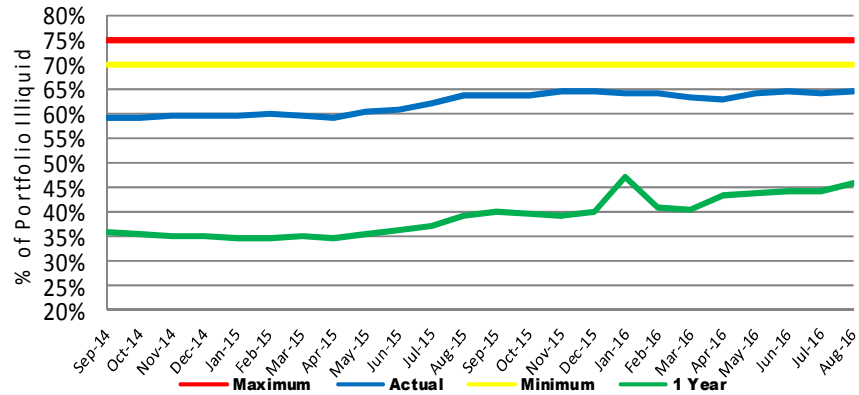
| Equity | \$ (M) | % of AUM |
|-----------------------------|-----------------------|---------------------|
| Private consumer company | \$426 | 1.24% |
| Autodesk | 228 | 0.67% |
| Private resource company | 226 | 0.66% |
| Microsoft | 167 | 0.49% |
| Google (Alphabet) | 163 | 0.48% |
| Charter Communications | 160 | 0.47% |
| Amazon | 152 | 0.44% |
| Facebook | 136 | 0.40% |
| Private real estate company | 126 | 0.37% |
| JD.com | <u>113</u> | <u>0.33%</u> |
| TOTAL | <u>\$1,896</u> | <u>5.54%</u> |

Endowment Fund Liquidity

As of August 31, 2016

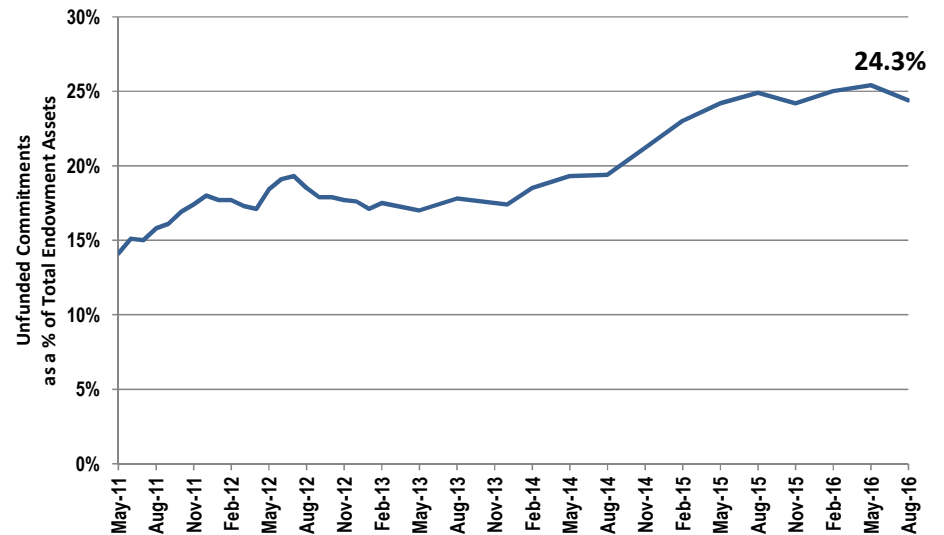


Actual Illiquidity vs. Trigger Zones

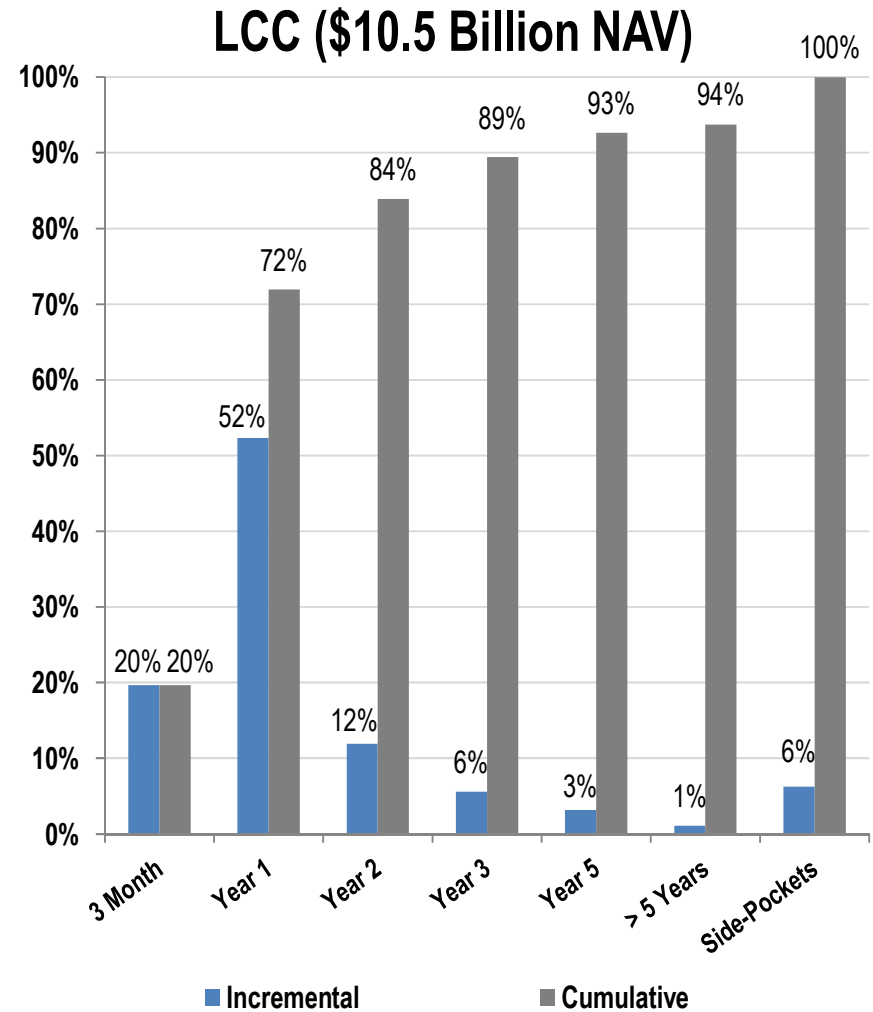
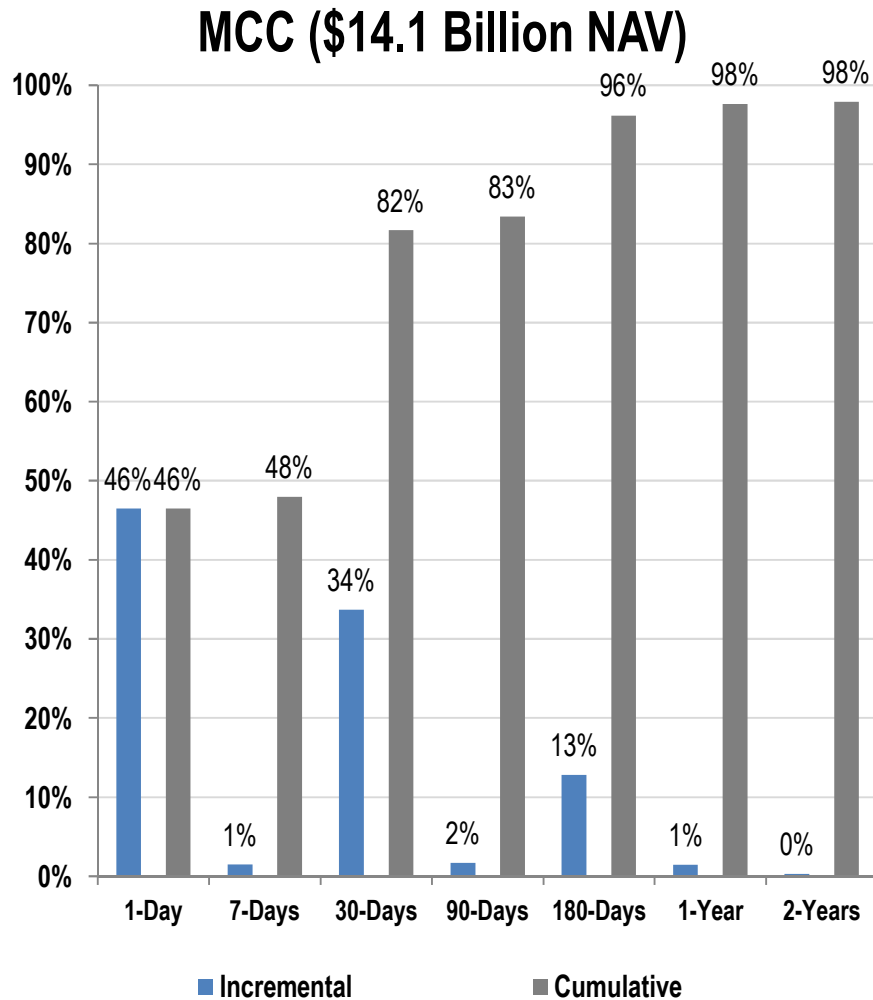


Three Month Liquidity \$ 9,339 million One Year Liquidity \$ 14,245 million

Unfunded Commitments



Estimated Run-Off Liquidity*



*Actual point in time liquidity varies from “smoothed” Policy Liquidity methodology

Non-Insurance Related Internal Derivatives

As of August 31, 2016 (in millions)



| Manager | Derivative Strategy | Net Notional Value (\$ millions) | Activity from previous report (5/31/2016) (\$ millions) |
|--|--|---|--|
| <u>Developed Country Equity</u> | | | |
| EuroStoxx 50 Futures | Purchased futures to gain exposure to European markets. | - | (44) |
| Developed Country FX hedges | Sale of Euro forw ards to hedge the currency exposure in the MCC accounts | - | 45 |
| Japanese Yen FX Hedges | Sale of Japanese Yen forw ards to hedge the currency exposure in the MCC accounts | (126) | 19 |
| <u>Emerging Markets Equity</u> | | | |
| Chinese Yuan FX Hedges | China Forw ards: Sale of Chinese Yuan forw ards to hedge the currency exposure in the MCC accounts | (417) | 3 |

Agency Account Derivatives

As of August 31, 2016 (in millions)



| Manager | Derivative Strategy | Net Notional Value (\$ millions) |
|---|---|---|
| <u>Investment Grade Fixed Income</u> | | |
| Brandywine | Currency forwards used to hedge foreign currency exposure | 190 |
| Colchester | Currency forwards used to hedge foreign currency exposure | (14) |
| First International Advisors | Currency forwards used to hedge foreign currency exposure | 99 |
| PIMCO Global Bonds | Currency forwards used to underwrite the US dollar | (67) |
| | Long US and Non-US futures used to overweight duration in Eurozone | 286 |
| | Long futures used to overweight front end of US and UK yield curves | (38) |
| | Receive Interest rate swaps used to overweight duration in the Eurozone and underwrite intermediate portion of the Japanese yield curve | 360 |
| | Pay Interest rate swaps used to overweight duration in the Eurozone and underwrite intermediate portion of the Japanese yield curve | (576) |
| | Interest rate swaps used to overweight front end of US and UK yield curves | 46 |
| | Short/Written credit default swaps used to overweight credit risk | 231 |
| | Long/Purchased credit default swaps used to underwrite credit risk | (24) |
| | Written options used to increase portfolio yield | (159) |
| | Purchased options used to increase portfolio yield | 415 |
| <u>Natural Resources</u> | | |
| Wellington Commodities SPV | Exchange-traded commodity futures, options and/or swaps | 268 |
| <u>Developed Equity</u> | | |
| Albert Bridge | Currency forward contracts for hedging purposes. | (58) |
| | Contracts for Differences to gain efficient access to certain European markets. | 70 |
| Cantillon | Currency forward contracts for hedging purposes or to provide efficient investment exposure. | (21) |
| Eminence | Currency forward contracts for hedging purposes or to provide efficient investment exposure. | (100) |
| International Value Advisors | Currency forward contracts for hedging purposes or to provide efficient investment exposure. | (5) |
| <u>Non-US Emerging Equity</u> | | |
| Dynamo | Written covered call and put options to increase portfolio income and purchased put options to hedge portfolio | 192 |
| Saga Tree | Currency forward contracts for hedging purposes or to provide efficient investment exposure. | (73) |

OTC Derivative Counterparty Report

As of August 31, 2016 (in millions)



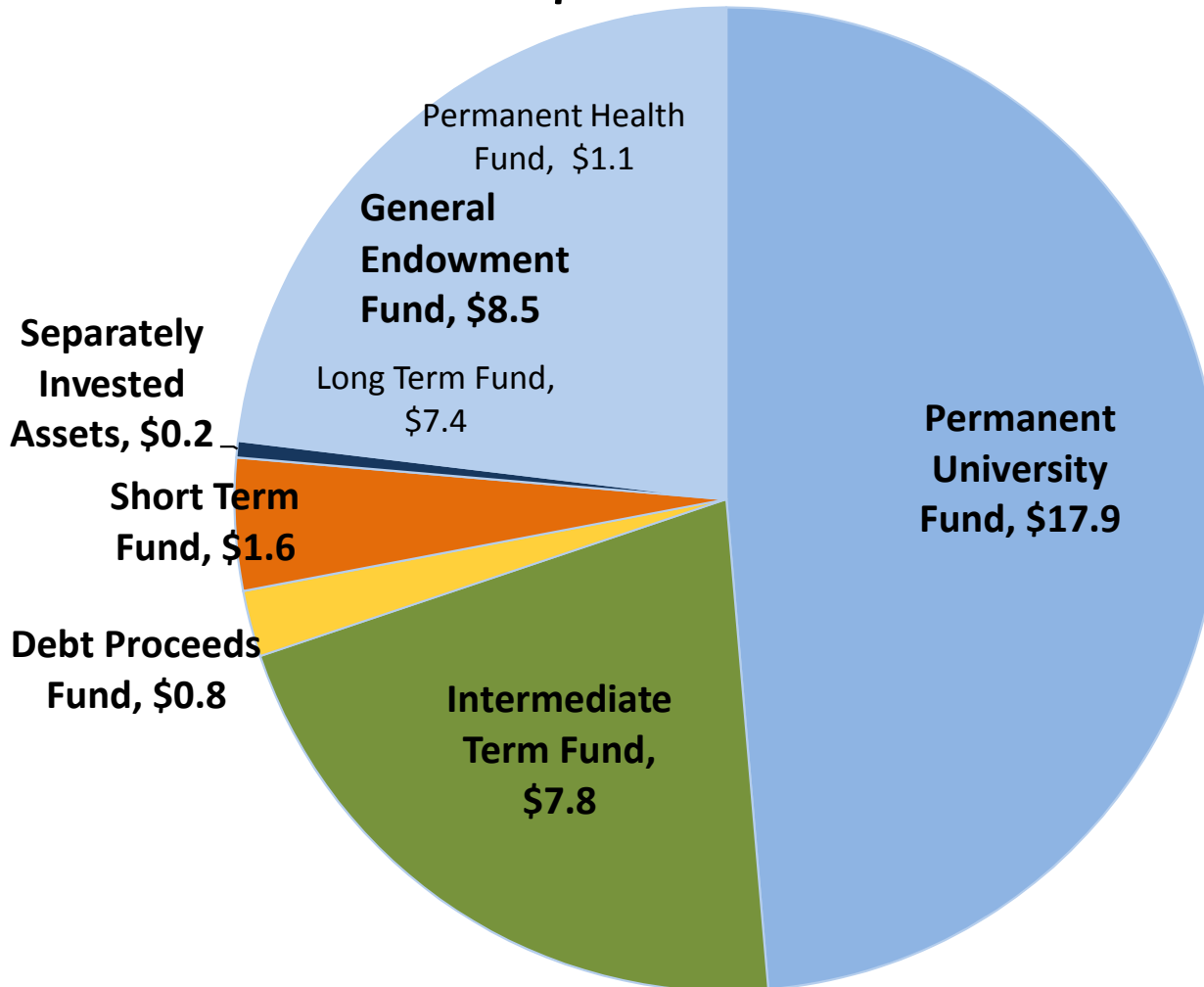
| Counterparty | S & P / Moody Counterparty Rating | \$ millions | | | | | | Percentage of Total Funds |
|-------------------------------------|---|---|---|--------------------------|-----------------------------|--|--------|---------------------------------|
| | | Mark-to- Market Owed by Broker | Mark-to- Market Owed by UTIMCO | Total Mark- to-Market | (Held)/Posted Collateral | Total Mark- to-Market net of Collateral | | |
| BANK OF AMERICA | A- | \$ 53.0 | \$ (50.7) | \$ 2.3 | \$ (2.5) | \$ (0.2) | 0.00% | |
| GOLDMAN SACHS | A | 51.8 | (64.2) | (12.4) | 11.3 | (1.1) | 0.00% | |
| CITIBANK NY | A- | 30.3 | (28.7) | 1.6 | (1.9) | (0.3) | 0.00% | |
| HSBC BK USA, NEW YORK | A | 12.1 | (10.5) | 1.6 | (1.9) | (0.3) | 0.00% | |
| BANK OF NEW YORK | A | 10.1 | (11.2) | (1.1) | - | (1.1) | 0.00% | |
| UBS A G, ZURICH | A- | 8.1 | (8.1) | - | - | - | 0.00% | |
| MORGAN STANLEY | A- | 6.9 | (4.6) | 2.3 | (1.5) | 0.8 | 0.00% | |
| MACQUARIE BANK LTD, SYDNEY | A | 5.4 | (6.0) | (0.6) | 0.7 | 0.1 | 0.00% | |
| BARCLAYS | A- | 5.3 | (3.7) | 1.6 | (0.9) | 0.7 | 0.00% | |
| BNP PARIBAS | A | 2.6 | (2.7) | (0.1) | - | (0.1) | 0.00% | |
| CITIBANK NA, LONDON | A | 2.1 | (5.6) | (3.5) | - | (3.5) | -0.01% | |
| ROYAL BANK OF CANADA | AA- | 1.9 | (1.8) | 0.1 | - | 0.1 | 0.00% | |
| MERRILL LYNCH | A- | 1.9 | (0.7) | 1.2 | - | 1.2 | 0.00% | |
| STANDARD & CHARTERED BK, LONDON | A- | 0.4 | (0.5) | (0.1) | - | (0.1) | 0.00% | |
| J P MORGAN, CHASE | A+ | 0.1 | (4.9) | (4.8) | 5.2 | 0.4 | 0.00% | |
| UBS AG, STAMFORD | A+ | 0.1 | (0.2) | (0.1) | - | (0.1) | 0.00% | |
| CHASE MANHATTAN | A- | 0.1 | (0.1) | - | - | - | 0.00% | |
| CS FIRST BOSTON GBL FOREIGN EXCH | A | - | (0.2) | (0.2) | - | (0.2) | 0.00% | |
| MELLON BANK | A | - | (0.1) | (0.1) | - | (0.1) | 0.00% | |
| SOCIETE GENERALE, PARIS | A | - | (0.1) | (0.1) | - | (0.1) | 0.00% | |
| CREDIT SUISSE FIRST | A | - | - | - | 1.8 | 1.8 | 0.01% | |
| BARCLAYS CAPITAL, LONDON (BARCGB33) | A- | - | - | - | - | - | 0.00% | |
| NOMURA GLOBAL FINANCIAL, NEW YORK | A- | - | (0.1) | (0.1) | - | (0.1) | 0.00% | |
| AUSTRALIA & NZ BANK LTD | AA- | - | - | - | - | - | 0.00% | |
| SOCIETE GENERALE, NEW YORK | A | - | - | - | - | - | 0.00% | |
| ROYAL BANK OF SCOTLAND PLC | A- | - | - | - | - | - | 0.00% | |
| Grand Total | | \$ 192.2 | \$ (204.7) | \$ (12.5) | \$ 10.3 | \$ (2.2) | 0.00% | |

UTIMCO Assets Under Management

August 31, 2016



\$36.8 Billion



Combined PUF and GEF Exposure

As of August 31, 2016 (in millions)



| Asset Group | Asset Class | More Correlated and Constrained (Long Only) | | Less Correlated and Constrained (Hedge Funds) | | Private Investments | | Total | | Unfunded Commitments |
|---------------------------|------------------------------------|---|--------------|---|--------------|---------------------|--------------|-----------------|---------------|----------------------|
| | | | | | | | | | | |
| Fixed Income | Investment Grade Credit-Related | \$1,909 | 7.2% | \$656 | 2.5% | \$0 | 0.0% | \$2,565 | 9.7% | \$0 |
| | | 31 | 0.1% | 1,060 | 4.0% | 961 | 3.6% | 2,052 | 7.7% | 492 |
| Fixed Income Total | | 1,940 | 7.3% | 1,716 | 6.5% | 961 | 3.6% | 4617 | 17.4% | 492 |
| Real Assets | Real Estate | 431 | 1.6% | 0 | 0.0% | 1,707 | 6.5% | 2,138 | 8.1% | 1,440 |
| | Natural Resources | 1,652 | 6.3% | 0 | 0.0% | 2,590 | 9.8% | 4,242 | 16.1% | 1,884 |
| Real Assets Total | | 2,083 | 7.9% | 0 | 0.0% | 4,297 | 16.3% | 6,380 | 24.2% | 3,324 |
| Equity | Developed Country | 3,276 | 12.4% | 4,713 | 17.9% | 3,182 | 12.1% | 11,171 | 42.4% | 1,742 |
| | Emerging Markets | 2,564 | 9.7% | 495 | 1.9% | 1,153 | 4.4% | 4,212 | 16.0% | 832 |
| Equity Total | | 5,840 | 22.1% | 5,208 | 19.8% | 4,335 | 16.5% | 15,383 | 58.4% | 2,574 |
| Total | | \$9,863 | 37.3% | \$6,924 | 26.3% | \$9,593 | 36.4% | \$26,380 | 100.0% | \$6,390 |
| Number of Partners | | 51 | | 46 | | 156 | | 253 | | 24% |

Current Tactical Allocation



| | Underweight | Overweight | Net Tactical Position |
|----------------|--------------------|--------------------|--------------------------|
| MCC IGFI | – | 0.9% | 0.9% |
| LCC | 2.8% | – | (2.8%) |
| PI Credit | – | 0.1% | 0.1% |
| <u>RE</u> | | | |
| MCC | 0.9% | – | (0.9%) |
| Privates | – | 1.0% | 1.0% |
| TOTAL | <u>0.9%</u> | <u>1.0%</u> | <u>0.1%</u> |
| <u>Nat Res</u> | | | |
| MCC-NRE | – | 0.8% | 0.8% |
| Commodities | 1.7% | – | (1.7%) |
| Gold | 0.3% | – | (0.3%) |
| Privates | – | 2.3% | 2.3% |
| TOTAL | <u>2.0%</u> | <u>3.1%</u> | <u>1.1%</u> |
| <u>DCE</u> | | | |
| MCC | 1.6% | – | (1.6%) |
| Privates | – | 1.1% | 1.1% |
| TOTAL | <u>1.6%</u> | <u>1.1%</u> | <u>(0.5%)</u> |
| <u>EM</u> | | | |
| MCC | – | 0.2% | 0.2% |
| Privates | – | 0.9% | 0.9% |
| TOTAL | <u>0.0%</u> | <u>1.1%</u> | <u>1.1%</u> |
| TOTAL | <u>7.3%</u> | <u>7.3%</u> | <u>0.0%</u> |



ITF

ITF Performance Summary

Periods Ending August 31, 2016

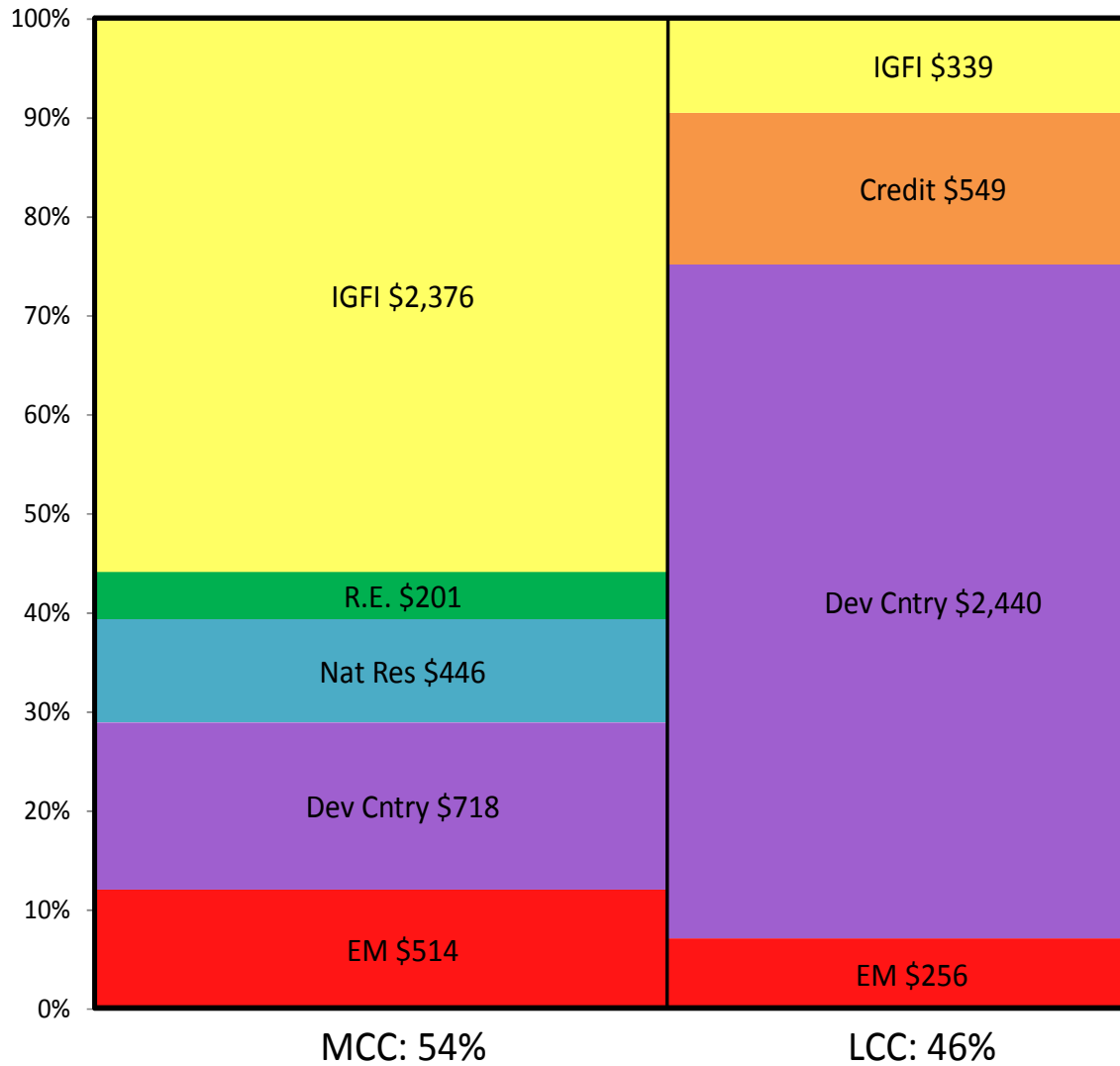


| | One Year | Three Years | Five Years | Ten Years |
|---------------------------------|---------------|----------------|---------------|---------------|
| Actual Returns | 3.27% | 3.33% | 3.58% | 4.17% |
| Policy Portfolio Returns | 4.24% | 2.79% | 2.41% | 2.28% |
| Actual vs. Policy | -0.97% | 0.54% | 1.17% | 1.89% |
| CPI + 3% | 4.09% | 4.01% | 4.27% | 4.73% |
| Actual vs. CPI + 3% | -0.82% | -0.68% | -0.69% | -0.56% |
| Cash | 0.24% | 0.12% | 0.13% | 1.15% |
| Actual vs. Cash | 3.03% | 3.21% | 3.45% | 3.02% |

ITF



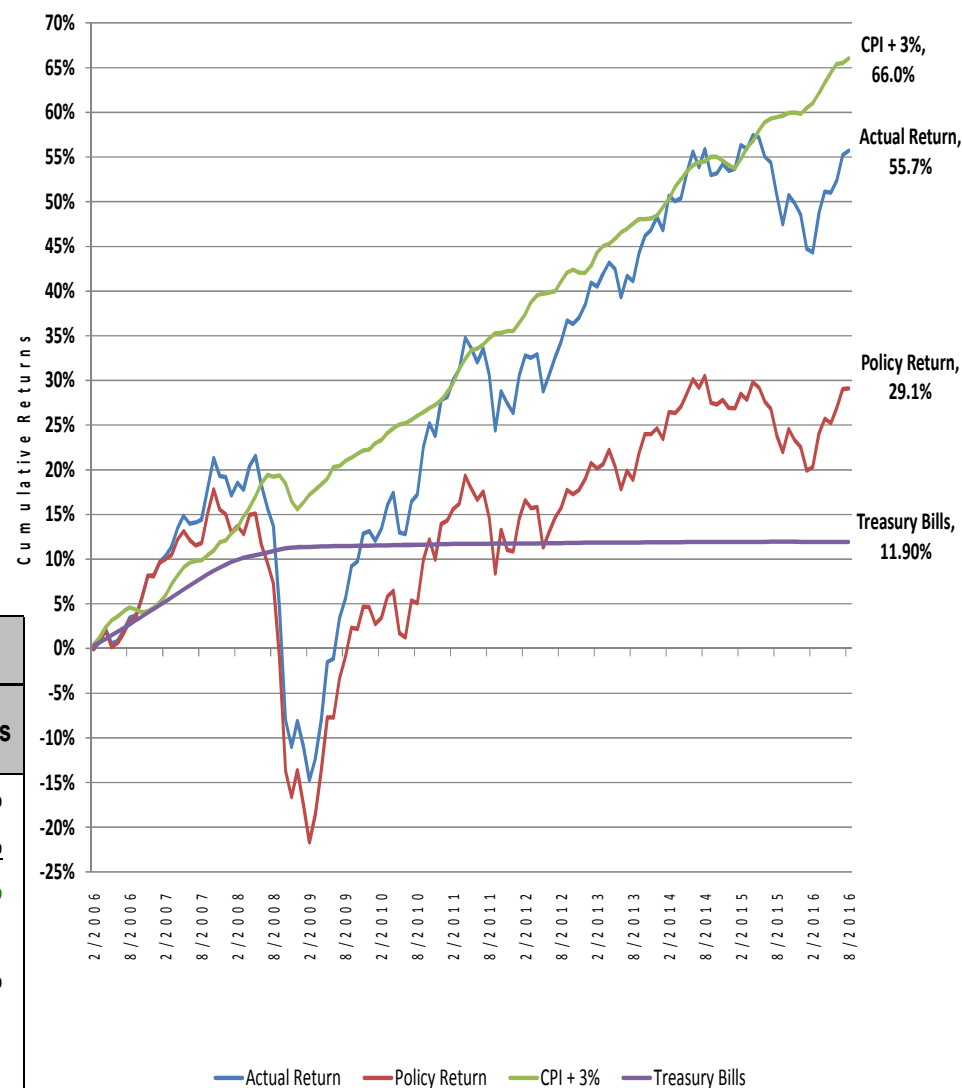
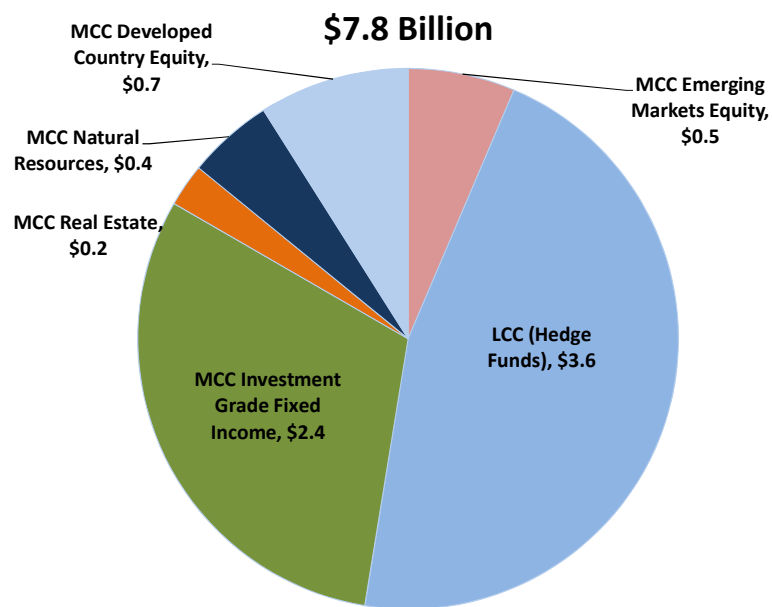
ITF NAV: \$7,838M



| Downside Volatility (trailing three years) | |
|---|-------------|
| Actual | % of Policy |
| 4.81% | 104.6% |

| Liquidity | |
|--------------|----------|
| Three months | One Year |
| 59.3% | 85.3% |

| Insurance Hedges NAV | |
|----------------------|---|
| CMS Caps | - |
| JPY FX rate | - |



| Investment Returns | | | | | |
|---------------------------|-------------|-------------|-------------|-------------|-------------|
| | 1 Year | 3 Years | 5 Years | 7 Years | 10 Years |
| Actual Return | 3.3% | 3.3% | 3.6% | 5.7% | 4.2% |
| Benchmark Return | <u>4.2%</u> | <u>2.8%</u> | <u>2.4%</u> | <u>3.9%</u> | <u>2.3%</u> |
| Value Add | -0.9% | 0.5% | 1.2% | 1.8% | 1.9% |
| Actual Standard Deviation | 5.9% | 4.9% | 5.6% | 6.0% | 8.3% |
| Sharpe Ratio | 0.5 | 0.7 | 0.6 | 0.6 | 0.5 |
| Information Ratio | -0.7 | 0.4 | 0.8 | 0.8 | 1.2 |

Statistics for periods longer than a year are annualized

ITF Returns and Ratios

Periods Ending August 31, 2016



| ITF | Net Asset Value (in millions) | ITF Returns | | | | | | | | 1 year | | | 3 year | | | 5 year | | | 10 year | | |
|---|----------------------------------|---------------|---------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------------|---------------|---------------|--------------------|--------------|-------------|--------------------|--------------|-------------|--------------------|--------------|-------------|
| | | 1 year | vs. Bench | 3 year | vs. Bench | 5 year | vs. Bench | 10 year | vs. Bench | Standard Deviation | Sharpe Ratio | Info Ratio | Standard Deviation | Sharpe Ratio | Info Ratio | Standard Deviation | Sharpe Ratio | Info Ratio | Standard Deviation | Sharpe Ratio | Info Ratio |
| More Correlated and Constrained | | | | | | | | | | | | | | | | | | | | | |
| Fixed Income | | | | | | | | | | | | | | | | | | | | | |
| Investment Grade | \$ 2,372 | 7.38% | -1.41% | 2.59% | -0.05% | 2.10% | 0.95% | 4.45% | 0.25% | 5.56% | 1.29 | (0.94) | 4.23% | 0.59 | (0.03) | 4.13% | 0.49 | 0.61 | 5.47% | 0.64 | 0.13 |
| 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 | 201 | 7.63% | -9.70% | 5.32% | -4.77% | 6.90% | -2.66% | 2.32% | -0.18% | 15.10% | 0.49 | (2.04) | 12.06% | 0.43 | (1.26) | 15.49% | 0.44 | (0.77) | 22.14% | 0.06 | (0.05) |
| Natural Resources ex Gold | 290 | 0.76% | 1.71% | -11.87% | -2.17% | -9.50% | -1.43% | -3.44% | 0.35% | 26.20% | 0.02 | 0.17 | 20.76% | (0.58) | (0.30) | 19.87% | (0.48) | (0.25) | 21.98% | (0.20) | 0.07 |
| Equity | | | | | | | | | | | | | | | | | | | | | |
| Developed Markets | 719 | 0.54% | -6.15% | 8.65% | 1.26% | 12.27% | 2.76% | 6.55% | 2.29% | 14.33% | 0.02 | (1.50) | 11.40% | 0.75 | 0.33 | 11.74% | 1.04 | 0.73 | 15.19% | 0.37 | 0.66 |
| Emerging Markets | 515 | 12.56% | 0.73% | 5.92% | 4.80% | 3.73% | 4.15% | 4.40% | 0.50% | 15.68% | 0.79 | 0.11 | 14.35% | 0.41 | 0.82 | 16.08% | 0.23 | 0.80 | 21.90% | 0.16 | 0.11 |
| MCC subtotal | 4,097 | 6.51% | -2.49% | 3.08% | 0.25% | 3.10% | 0.87% | N/A | N/A | 8.04% | 0.78 | (1.28) | 6.49% | 0.46 | 0.15 | 7.24% | 0.41 | 0.53 | N/A | N/A | N/A |
| Less Correlated and Constrained | | | | | | | | | | | | | | | | | | | | | |
| Fixed Income | | | | | | | | | | | | | | | | | | | | | |
| Investment Grade | 340 | -2.25% | -0.80% | -0.23% | -2.75% | 0.35% | -2.23% | N/A | N/A | 6.89% | (0.36) | (0.12) | 7.27% | (0.05) | (0.45) | 6.25% | 0.04 | (0.40) | N/A | N/A | N/A |
| Credit Related | 549 | 5.11% | 6.56% | 4.03% | 1.52% | 7.08% | 4.50% | N/A | N/A | 5.26% | 0.93 | 2.10 | 4.42% | 0.89 | 0.47 | 4.41% | 1.59 | 1.51 | N/A | N/A | N/A |
| Real Assets | | | | | | | | | | | | | | | | | | | | | |
| Real Estate | - | 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 |
| Natural Resources | - | 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 |
| Equity | | | | | | | | | | | | | | | | | | | | | |
| Developed Markets | 2,440 | -2.33% | -0.88% | 4.49% | 1.98% | 6.98% | 4.40% | N/A | N/A | 6.73% | (0.38) | (0.32) | 5.99% | 0.73 | 0.70 | 5.58% | 1.24 | 1.65 | N/A | N/A | N/A |
| Emerging Markets | 255 | 6.22% | 7.67% | 8.63% | 6.12% | 4.81% | 2.23% | N/A | N/A | 7.51% | 0.80 | 1.52 | 6.72% | 1.27 | 1.10 | 5.87% | 0.80 | 0.44 | N/A | N/A | N/A |
| LCC subtotal | 3,584 | -0.85% | 0.59% | 4.14% | 1.62% | 6.05% | 3.47% | 5.82% | 5.41% | 6.00% | (0.18) | 0.29 | 5.20% | 0.78 | 0.81 | 4.76% | 1.25 | 1.82 | 6.28% | 0.77 | 2.29 |
| Total Before Insurance, Tactical, Hedging Derivatives and Gold | 7,681 | 3.07% | -1.18% | 3.57% | 0.78% | 4.27% | 1.86% | 4.39% | 2.12% | 6.02% | 0.47 | (0.70) | 5.05% | 0.69 | 0.53 | 5.62% | 0.74 | 1.26 | 8.31% | 0.41 | 1.39 |
| Insurance, Tactical and Hedging Derivatives Impact on Total Return | - | 0.00% | 0.00% | -0.02% | -0.02% | -0.20% | -0.20% | -0.13% | -0.13% | | | | | | | | | | | | |
| Gold Impact on Total Return | 155 | 0.20% | 0.20% | -0.21% | -0.21% | -0.49% | -0.49% | -0.09% | -0.09% | | | | | | | | | | | | |
| Grand Total | \$ 7,836 | 3.27% | -0.97% | 3.33% | 0.54% | 3.58% | 1.16% | 4.17% | 1.90% | 5.94% | 0.51 | (0.69) | 4.94% | 0.65 | 0.42 | 5.58% | 0.63 | 0.80 | 8.29% | 0.39 | 1.23 |



Contract Update

Contract Update



Existing Contracts, Leases and Other Commerical Arrangements as of September 30, 2016

(Total Obligation per Agreement greater than \$100,000)

Reported on an annual basis per the Delegation of Authority Policy

| Agreement | Purpose | Contract Term | Annual Amount |
|-----------------------------|--|---|---------------|
| Albourne America LLC | Advisor to Marketable Alternative staff | Renews monthly via invoice | \$240,000 |
| Bloomberg | Portfolio Order Management System | Renews quarterly via invoice | \$180,000 |
| Bloomberg | All-in-one investment platform for trading, analysis and information | Each user agreement automatically renews every 2 years | \$619,522 |
| Factset Research Systems | Analytical tool for performance | Renews monthly via invoice | \$392,226 |
| International Fund Services | Risk System | Quarterly invoice – fees increased as underlying accounts are added | \$292,000 |
| Dynamo Software * | Portfolio and relationship management system with full mobile access for travelers | 11/15/2016 - 11/14/2018 | \$400,000 |
| Burgiss Group | Private Informant & Private Q - enhance Private I with benchmarking support and transparency | 1/1/2016 - 1/1/2017 | \$122,000 |

* New Contracts, Leases and Other Commercial Agreements for the period of July 1, 2016 through September 30, 2016.