

**UTIMCO BOARD OF DIRECTORS  
MEETING AGENDA  
July 26, 2018**

UTIMCO  
210 West 7<sup>th</sup> Street, Suite 1700  
Austin, Texas 78701

Time		Item #	Agenda Item
Begin	End		
8:30 a.m.	8:35 a.m.	1	<b>OPEN MEETING:</b> Call to Order of the Meeting/Discussion and Appropriate Action Related to Minutes of May 18, 2018 Meeting*
8:35 a.m.	9:05 a.m.	2	Presentation by Mr. John Kukral, President and CEO of Northwood Investors
9:05 a.m.	9:45 a.m.	3	Performance and Market Update
9:45 a.m.	10:15 a.m.	4	Real Estate Presentation
10:15 a.m.	10:25 a.m.	5	Report from Audit and Ethics Committee - Discussion and Appropriate Action Related to Corporate Auditor*
10:25 a.m.	10:35 a.m.	6	Report from Risk Committee
10:35 a.m.	11:00 a.m.	7	Report from Policy Committee - Policy Reviews Presentation - Discussion and Appropriate Action Related to: Investment Policy Statements*, ** Liquidity Policy*, ** Derivative Investment Policy*, ** Delegation of Authority Policy* Mandate Categorization Procedure*
11:00 a.m.	11:30 a.m.	8	<b>Executive Session</b> Pursuant to Section 551.074 <i>Texas Government Code</i> , the Board of Directors may convene in Executive Session to deliberate individual personnel compensation matters, including the CEO and Chief Investment Officer <b>Reconvene into Open Session</b> Report from Compensation Committee - Discussion and Appropriate Action Related to the CEO's Base Salary for 2018-2019 Fiscal Year* - Discussion and Appropriate Related to the UTIMCO Compensation Program, Amended and Restated effective July 1, 2018*,**
11:30 a.m.	12:00 p.m.	9	Discussion and Appropriate Action Related to UTIMCO 2018-2019 Budget*,**
12:00 p.m.			<b>Adjourn</b>

\* Action by resolution required

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

<b>Next Regularly Scheduled Meeting: September 20, 2018</b>
---

**RESOLUTION RELATED TO MINUTES**

RESOLVED, that the minutes of the Meeting of the Board of Directors held on **May 18, 2018**, be, and are hereby, approved.

**MINUTES OF MEETING  
OF THE BOARD OF DIRECTORS OF  
THE UNIVERSITY OF TEXAS/TEXAS A&M INVESTMENT MANAGEMENT COMPANY**

The Board of Directors (the "Board") of The University of Texas/Texas A&M Investment Management Company (the "Corporation") convened in an open meeting on **May 18, 2018**, in person at the corporate headquarters located at 210 West 7<sup>th</sup> Street, Suite 1700 in Austin, 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  
J. Kyle Bass  
Robert Gauntt  
Janet Handley  
R. Steven Hicks  
Ray Rothrock  
James C. "Rad" Weaver

thus constituting a majority and quorum of the Board. Former Director Phil Adams was also in attendance. Employees of the Corporation attending the meeting were Britt Harris, President, CEO and Chief Investment Officer; Joan Moeller, Secretary and Treasurer; Cecilia Gonzalez, Corporate Counsel and Chief Compliance Officer; Rich Hall, Deputy Chief Investment Officer; Scott Slayton, Managing Director; Uzi Yoeli, Managing Director; Russell Kampfe, Managing Director; Ryan Ruebsahm, Managing Director; Eddie Lewis, Managing Director; Courtney Powers, Senior Director; and other team members. Other attendees were Charles Schwartz, Chairman of the Board of Regents of The Texas A&M University System; Dr. Ed Yardeni, President of Yardeni Research, Inc.; Robert Cowley and Jason Bell of Deloitte and Touche LLP; Keith Brown of the McCombs School of Business at UT Austin; Jerry Turner and Jerry Kyle of Orrick, Herrington & Sutcliffe LLP; Mark Houser, Roger Starkey, Allen Hah, and Karen Adler of UT System; and David Rejino and Maria L. Robinson of The Texas A&M University System. Chairman Hildebrand called the annual meeting to order at 9:33 a.m. Copies of materials supporting the Board meeting agenda were previously furnished to each member of the Board.

Chairman Hildebrand recognized and welcomed Charles Schwartz to the annual meeting of the Board. He also announced the appointment on April 19, 2018, of Clifton L. Thomas, Jr. as a director of the Board by the Board of Regents of The Texas A&M University System, to replace Mr. Phil Adams.

**Minutes**

The first item to come before the Board was approval of the Minutes of the Board of Directors Meeting held on February 28, 2018. 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 February 28, 2018, be, and are hereby, approved.

## Resolution of Appreciation

Chairman Hildebrand recognized and thanked Phil Adams for his service on the Board. Mr. Schwartz also made remarks about Mr. Adams' service to both the Corporation and the Board of Regents of The Texas A&M University System. Other Directors and Mr. Harris also offered their thanks and praise for Mr. Adams' service to the Corporation. Director Adams thanked everyone for their kind words and said he enjoyed serving on the Board of Directors of UTIMCO. After discussion, Chairman Hildebrand recommended approval of a resolution to honor former Director Phil Adams for his service to UTIMCO. Upon motion duly made and seconded, the following resolution was unanimously adopted:

**WHEREAS**, in recognition of his substantial background and expertise in business and dedication to higher education in the State of Texas, Phil Adams was appointed by the Board of Regents of The Texas A&M University System to the Board of Directors of The University of Texas/Texas A&M Investment Management Company ("UTIMCO") on April 1, 2015; and

**WHEREAS**, Mr. Adams is serving his third six-year term as a member of the Board of Regents of The Texas A&M University System, having been appointed in 2015 by Governor Greg Abbott, and first appointed by Governor Rick Perry in 2001 then again in 2009; and

**WHEREAS**, during his tenure on the Board of Regents of The Texas A&M University System he has served in various capacities, including Vice Chairman of the Board from 2011 to 2013, Chairman of the Board from 2013 to 2015, and Chairman of the Committee on Finance, the Committee on Buildings and Physical Plant, and the Committee on Audit; and

**WHEREAS**, during his tenure on the UTIMCO Board, Mr. Adams served as a member of the Audit and Ethics Committee and the Policy Committee; and

**WHEREAS**, Mr. Adams provided invaluable insight and counsel, drawing on his many years of experience in business and insurance as owner and president of Phil Adams Company, service on the board of directors of American Momentum Bank and former service on the board of directors of First American Bank, and memberships in the National Association of Insurance and Financial Advisors and the Philosophical Society of Texas; and

**WHEREAS**, Mr. Adams's commitment and service as a Director of UTIMCO were exemplary, reflecting his deep devotion to the education, health and development of children and students of all ages, and further evidenced by his service on the Texas A&M Chancellor's Century Council and the Mays Business School Development Council; and

**WHEREAS**, Mr. Adams's unselfish contributions are also evidenced in the civic arena by his service to numerous organizations, including the Texas Public Policy Foundation, the Bryan/College Station Chamber of Commerce, the Central Texas Association of Life Underwriters, and former service as president of the Brazos Valley Estate Council and chairman of the Brazos County Republican party; and

**WHEREAS**, during Mr. Adams's tenure on the UTIMCO Board, UTIMCO managed the Permanent University Fund for the benefit of The University of Texas and The Texas A&M University Systems 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**, during Mr. Adams's tenure on the UTIMCO Board, total assets under management by UTIMCO grew by over \$8 billion or over \$7.5 million per day; and

**WHEREAS**, Mr. Adams's leadership, judgment, and commitment has contributed greatly to UTIMCO's success.

**NOW, THEREFORE,**

**BE IT RESOLVED**, that the Directors of The University of Texas/Texas A&M 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 Phil Adams 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 Phil Adams 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 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 18th day of May 2018.

### **Election of Corporate Officers**

Chairman Hildebrand nominated Director Rothrock and Director Hicks as Vice Chairman and Vice Chairman for Policy, respectively, to serve until the next annual meeting of the corporation or until their resignation or removal. Director Rothrock nominated Chairman Hildebrand to serve as chairman of the Board for the next year. The nominations were accepted, after which Chairman Hildebrand recommended approval of the assignments for the Corporate Officers. Upon motion duly made and seconded, the following resolution was unanimously adopted:

**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.

<u>Name</u>	<u>Office or Offices</u>
Jeffery D. Hildebrand	Chairman
Ray Rothrock	Vice Chairman
R. Steven Hicks	Vice Chairman for Policy
Britt Harris	President, Chief Executive Officer and Chief Investment Officer
Rich Hall	Deputy Chief Investment Officer
Joan Moeller	Senior Managing Director, Treasurer and Secretary
Mark Warner	Senior Managing Director
Susan Chen	Managing Director
Russ Kampfe	Managing Director
Edward Lewis	Managing Director
Ryan Ruebsahm	Managing Director
Scott Slayton	Managing Director
Uzi Yoeli	Managing Director
Uche Abalogu	Chief Technology Officer

### **Committee Assignments**

Chairman Hildebrand nominated Clifton L. Thomas, Jr. to serve as a member of the Audit and Ethics Committee and the Policy Committee. Upon motion duly made and seconded, the following resolutions was unanimously adopted:

BE IT RESOLVED, that Director Clifton L. Thomas, Jr. is hereby designated as a member of 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, and as a member of the Policy Committee of the Board of Directors, to serve until the expiration of his terms, or until his successors have been chosen and qualified, or until his death, resignation, or removal.

### **Update from President of Yardeni Research, Inc.**

Chairman Hildebrand introduced Mr. Ed Yardeni, President of Yardeni Research, Inc., and invited him to share his thoughts on the current market situation. Scott Slayton interviewed Dr. Yardeni on his global investment strategy analysis and views. Dr. Yardeni, Mr. Harris, and Mr. Slayton answered the Directors' questions.

### **Performance and Market Update**

Chairman Hildebrand asked Mr. Harris and Mr. Slayton to give the UTIMCO Performance and Market Update. Mr. Slayton reviewed returns by asset class for the quarter and pointed out that several areas performed ahead of their benchmark, including real estate, natural resources, and venture capital. He also discussed returns for the funds during the quarter ended March 31, 2018. The Permanent University Fund ("PUF") returned 2.98% during the quarter; the Permanent Health Fund ("PHF") returned 3.13% during the quarter; and the Long Term Fund ("LTF") returned 3.13% during the quarter. Total Net Asset Value ("NAV") at the end of March 31, 2108 was \$44.3B. Mr. Slayton and Mr. Harris answered the Directors' questions.

Eddie Lewis and Mark Warner discussed performance highlights of the Real Estate, Natural Resources, and Venture Capital portfolios. Mr. Lewis, Mr. Warner, and Mr. Harris answered the Directors' questions.

### **Update on 1<sup>st</sup> Quarter Priorities**

Chairman Hildebrand asked Mr. Harris and Mr. Hall to present to the Board an update on UTIMCO's priorities for the first quarter of 2018. Mr. Hall discussed action plans for the operations teams and the investment teams, as well as priorities regarding culture and total alignment, human resources, and bureaucracy busting, which apply to all UTIMCO teams. He then addressed some priorities UTIMCO will be working on in the second calendar quarter, including revisions to the investment policies, implementation of a 360 review, Phase II of the fee alignment initiative, and strategic partnership discussions.

### **Hedge Funds Report**

Chairman Hildebrand asked Ryan Ruebsahm and Courtney Powers to update the Board on the Hedge Funds Team and their current work. Mr. Ruebsahm and Mr. Powers presented an overview of hedge funds, historical performance, the role of hedge funds in the portfolio, including current objectives, and efforts on total alignment and the 1 or 30 fee structure. The Team has been successful in negotiations with more than half of their portfolio managers on the revised fee structure. Mr. Ruebsahm and Mr. Powers answered the Directors' questions.

### **Risk Committee Report**

Chairman Hildebrand asked Director Bass to provide a report from the Risk Committee. Director Bass reported that the Risk Committee met via teleconference on May 10, 2018 and approved the minutes of its February 21, 2018 meeting and the categorization of twelve new investment mandates and recategorization of three mandates. He also reported that Ms. Gonzalez reviewed and discussed compliance reporting, and the Committee listened to a market and portfolio risk update from Dr. Yoeli and Mr. Harris.

### **Audit and Ethics Committee Report**

Chairman Hildebrand asked Director Handley to provide a report on behalf of the Audit and Ethics Committee. Director Handley reported that the Committee met via teleconference on May 10, 2018. At the meeting, the Committee approved the minutes from its February 21, 2018 meeting. Ms. Handley reported on the results of the UTIMCO Software Development Life Cycle Review performed by the UT System Audit Office. She also reported that the Committee heard reports on routine matters, including an update on UTIMCO's compliance, reporting, and audit matters; a presentation of unaudited financial statements as of February 28, 2018 for the Investment Funds and the Corporation; a report on new contracts valued at \$100,000 or more entered into since the last Board meeting, including the contracts related to the office move; and the annual report on the Financial Advisor and Service Provider disclosures required by Texas Government Code Section 2263.005.

**Adjourn**

There being no further business to come before the Board, the meeting was adjourned at approximately 12:20 p.m.

Secretary: \_\_\_\_\_  
Joan Moeller

Approved: \_\_\_\_\_ Date: \_\_\_\_\_  
Jeffery D. Hildebrand  
Chairman, Board of Directors of  
The University of Texas/Texas A&M Investment Management Company



**Agenda Item**  
UTIMCO Board of Directors Meeting  
July 26, 2018

**Agenda Item:** Presentation by Mr. John Kukral, President and CEO of Northwood Investors

**Developed By:** Kukral, Lewis, Joshi

**Presented By:** Kukral

**Type of Item:** Information Item

**Description:** Mr. Lewis will introduce Mr. John Kukral, President and Chief Executive Officer of Northwood Investors. Mr. Kukral will present an overview of global real estate market conditions and real estate investment opportunities.

**Reference:** None

**Agenda Item**  
UTIMCO Board of Directors Meeting  
July 26, 2018

**Agenda Item:** Performance and Market Update

**Developed By:** Harris, Standley

**Presented By:** Harris

**Type of Item:** Information Item

**Description:** Mr. Harris will present on performance and provide a market update.

**Reference:** *UTIMCO Performance and Market Update* presentation



# The University of Texas/Texas A&M Investment Management Company

---

## UTIMCO Performance and Market Update

**Britt Harris**

*President, CEO and Chief  
Investment Officer*

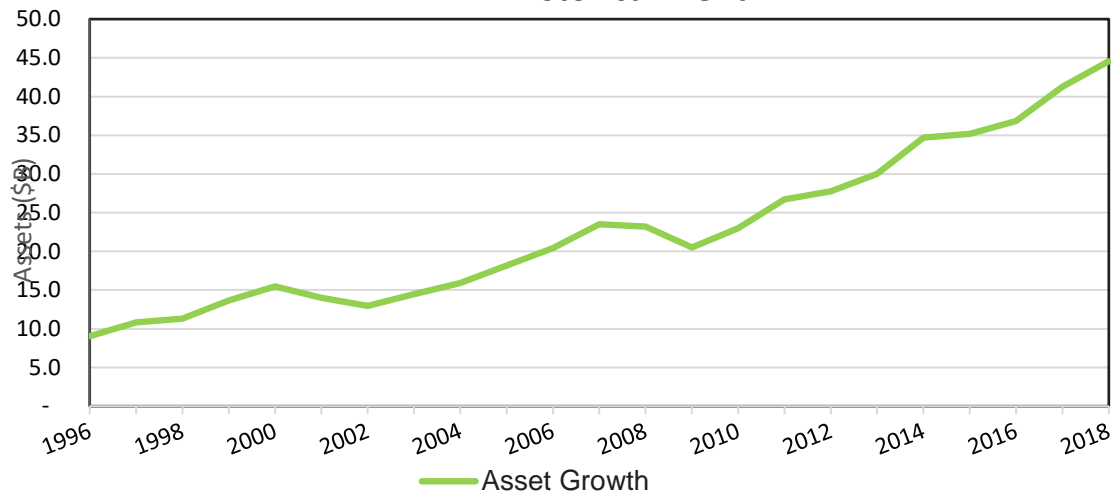
# Overview of Funds

Periods Ending June 30, 2018



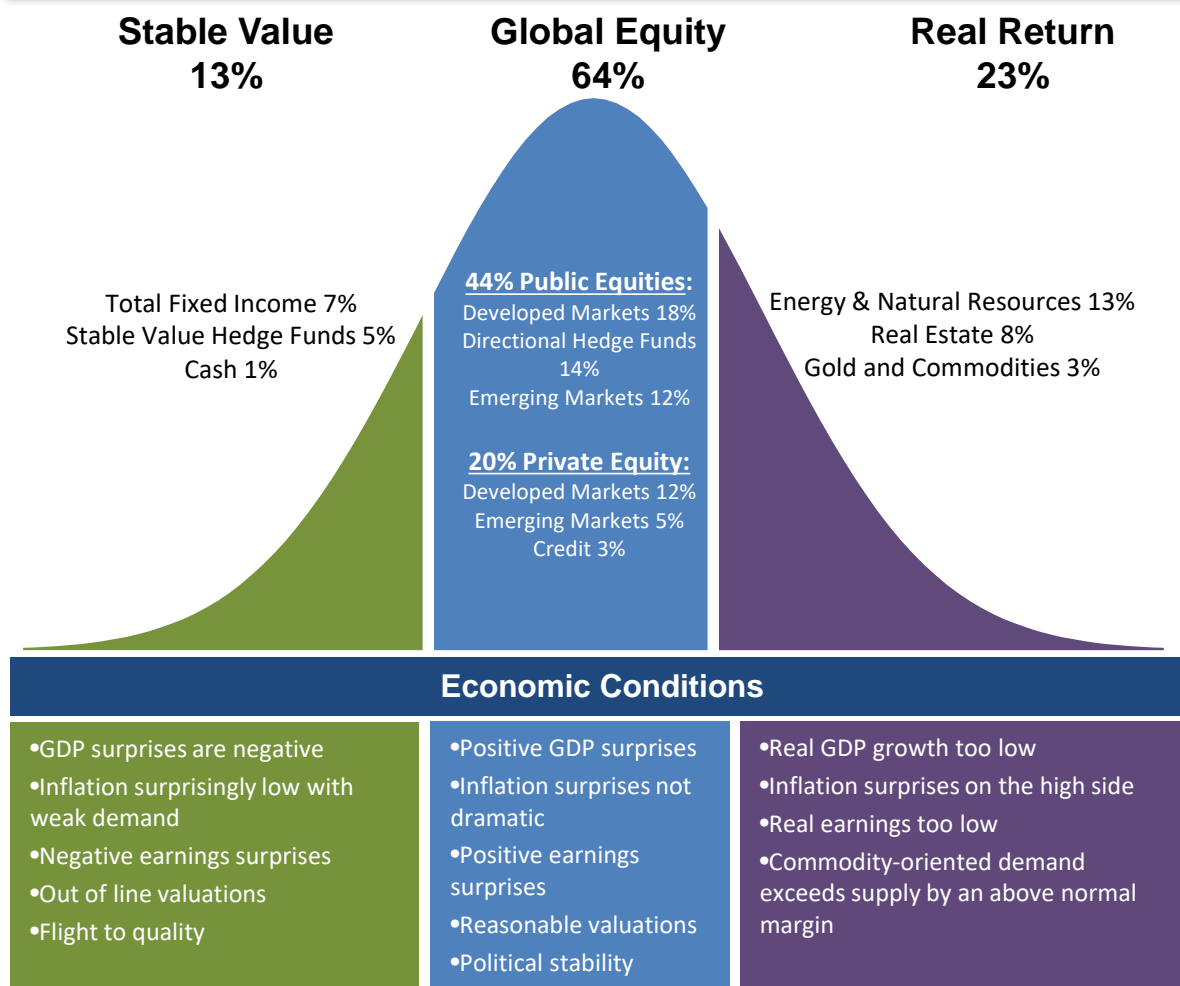
Overview of Funds																	
Periods Ending June 2018 Preliminary																	
Endowment Funds	\$B	Returns							Alpha							Fiscal YTD	
		1 Mth	QTR	YTD	1Y	3Y	5Y	10Y	1 Mth	QTR	YTD	1Y	3Y	5Y	10Y	8 mth	Alpha
PUF	\$ 21.5	(0.34)	1.40	4.42	11.27	7.52	8.28	5.79	0.97	2.03	2.12	1.59	1.50	1.38	1.68	8.29	2.11
PHF	\$ 1.2	(0.38)	1.38	4.55	11.57	7.73	8.44	5.84	0.93	2.01	2.25	1.89	1.71	1.54	1.73	8.77	2.59
LTF	\$ 9.2	(0.38)	1.38	4.55	11.58	7.74	8.45	5.84	0.93	2.01	2.25	1.90	1.72	1.55	1.73	8.78	2.60
Other	\$ 0.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>TOTAL</b>	<b>\$ 32.2</b>																
Operating Funds																	
ITF	\$ 9.9	(0.52)	(0.61)	0.62	5.65	3.88	4.52	3.93	0.26	0.51	1.13	0.40	0.53	0.89	1.57	3.00	0.68
Debt Proceeds	\$ 0.5	0.17	0.51	0.89	1.52	0.89	0.57	N/A	0.00	0.06	0.08	0.16	0.21	0.15	N/A	1.31	0.13
STF	\$ 2.0	0.16	0.47	0.84	1.44	0.76	0.48	0.48	(0.01)	0.02	0.03	0.08	0.08	0.06	0.13	1.25	0.07
<b>TOTAL</b>	<b>\$ 12.4</b>																
All Assets		Increase		Income & Distributions (\$M)				Projected		8/31/2017		8/31/2016					
All Assets	\$ 44.6	\$ 0.3		PUF Land Contributions			\$ 960	\$ 689	\$ 512								
March 2017	\$ 44.3	\$ 1.1		PUF Distribution			\$ (887)	\$ (839)	\$ (773)								
December 2017	\$ 43.2	\$ 1.8		Net Payout (\$M)			\$ 73	\$ (150)	\$ (261)								
September 2017	\$ 41.4	\$ 1.0															
June 2017	\$ 40.4																

Historical Trend



# Review of Current Environment

Periods Ending June 30, 2018



## Benchmark Returns<sup>1</sup>

Time Horizon	Stable Value	Global Equity	Real Return
1 Year	3.1%	10.1%	12.2%
3 Year	2.5%	6.3%	6.9%
5 Year	2.4%	7.6%	7.2%
7 Year	1.9%	6.5%	5.8%
10 Year	2.1%	4.4%	2.8%

## Correlations<sup>1</sup>

Environment	Stable Value	Global Equity	Real Return
<b>Stable Value</b>	1.00	-0.11	-0.18
<b>Global Equity</b>		1.00	0.66
<b>Real Return</b>			1.00

## Economic Conditions

<ul style="list-style-type: none"> <li>•GDP surprises are negative</li> <li>•Inflation surprisingly low with weak demand</li> <li>•Negative earnings surprises</li> <li>•Out of line valuations</li> <li>•Flight to quality</li> </ul>	<ul style="list-style-type: none"> <li>•Positive GDP surprises</li> <li>•Inflation surprises not dramatic</li> <li>•Positive earnings surprises</li> <li>•Reasonable valuations</li> <li>•Political stability</li> </ul>	<ul style="list-style-type: none"> <li>•Real GDP growth too low</li> <li>•Inflation surprises on the high side</li> <li>•Real earnings too low</li> <li>•Commodity-oriented demand exceeds supply by an above normal margin</li> </ul>
--	--	--

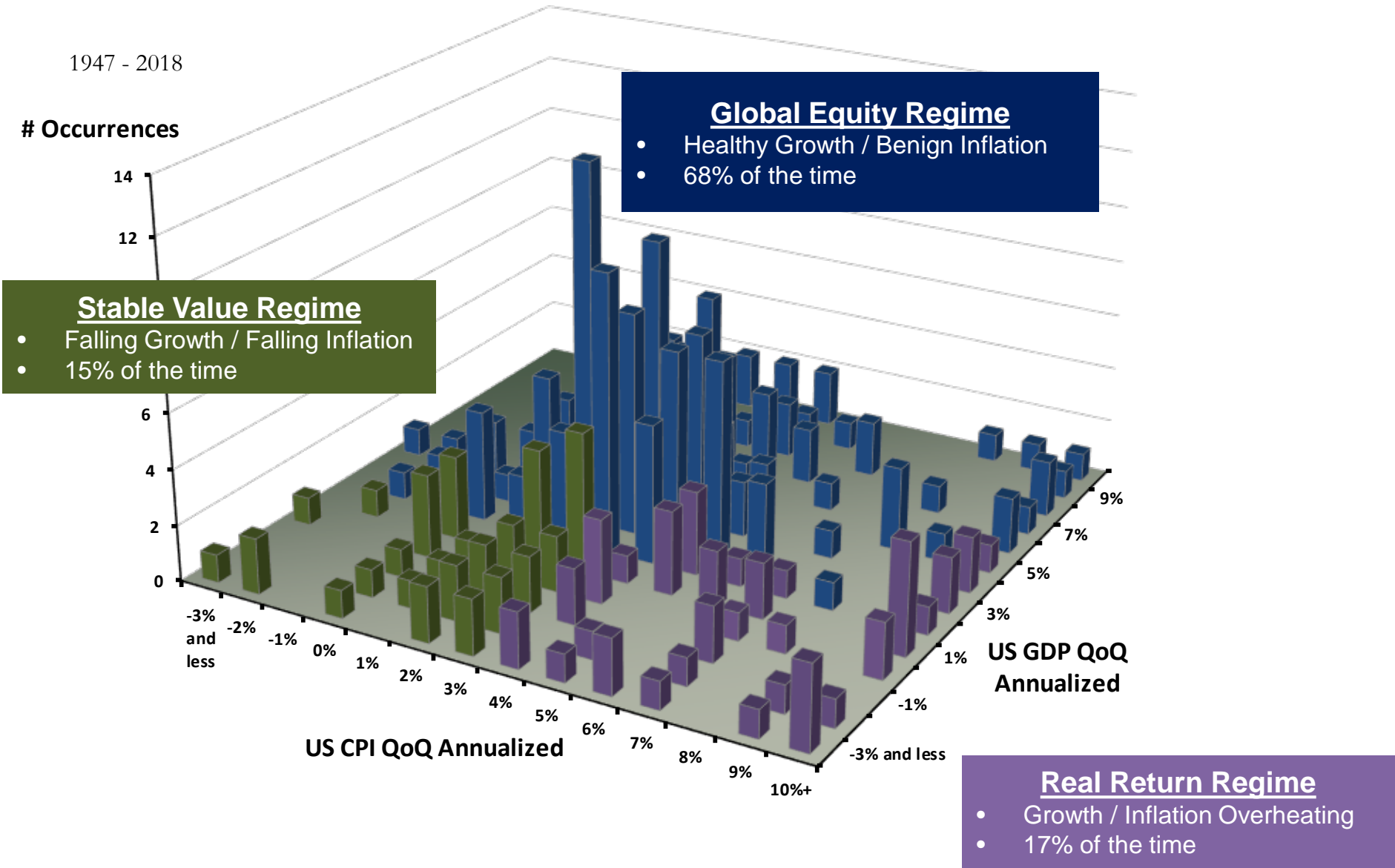
## UTIMCO Regime Portfolio Returns

<b>1 Quarter</b>	<b>(1.8%)</b>	<b>1.6%</b>	<b>3.0%</b>
<b>1 Year</b>	<b>2.5%</b>	<b>10.9%</b>	<b>17.8%</b>
<b>3 Year</b>	<b>1.5%</b>	<b>7.5%</b>	<b>10.2%</b>

<sup>1</sup> Returns and Correlations reflect quarterly benchmark returns and not actual UTIMCO returns (return data from 2008 – 2018)

<sup>2</sup> Reflects actual returns earned in the Permanent University Fund by regime portfolio, periods greater than one year are annualized

# UTIMCO Asset Allocation Framework



Source: Bloomberg, St. Louis Fed

# Total Alignment Map



## Excellence

UTIMCO Vision Tree

Achieve Investment Goals

Effective Risk Management

Fiduciary Excellence

Best-In-Class Technology Platform

Enduring Organizational Health

### UTIMCO Mission:

*We generate superior long-term investment returns to support The University of Texas and Texas A&M University Systems as they provide world-class teaching, push the boundaries of discovery, and achieve excellence in patient healthcare for the people of Texas and beyond*

### UTIMCO Vision:

*We strive to be the world's leading endowment fund, making a lasting positive impact on the future of Texas and beyond*

## Execution

UTIMCO Strategy Tree

Public Equity/  
VC

Fixed Income

Hedge Funds/  
Credit

Real Estate

Private  
Investments

Asset  
Allocation

Risk  
Management

Operations

Info Systems

Human  
Resources

Top  
10

## Environment

Cultural Values

Success Factors

Code of Conduct

# UTIMCO Awarded Top Endowment



## *Endowment of the Year*

*The J. Paul Getty Trust*

*Northwestern University*

*Penn State Office of Investment Management*

*Texas Tech University System*

***University of Texas Investment Management Co. (UTIMCO)***



**Ryan Ruebsahm**  
Managing Director



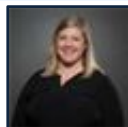
**Courtney Powers**  
Sr. Director



**Drury Morris, CFA**  
Associate Director



**Will Mirshak**  
Associate Director



**Jena Michels**  
Associate



**Jim Ricker**  
Analyst



**Andres Garcia**  
Analyst



**Lori Shaver**  
Executive Assistant





# Review of Current Environment

---

# Global Markets, Risk Premiums and Diversification

Periods Ending June 30, 2018



	Market Returns							Std Dev		Max Drawdown	Corr vs. S&P500	Sharpe Ratio	
	MTD	QTR	YTD	1Y	3Y	5Y	10Y	1	10E			5	10
<b>United States</b>													
CPI <sup>1</sup>	0.42	1.04	2.05	2.80	1.90	1.55	1.51	0.83	1.37	4.43	0.16	1.16	0.84
Cash	0.17	0.45	0.81	1.36	0.68	0.42	0.35	0.10	0.17	0.01	(0.25)		
Long Treasury (Duration)	0.18	0.31	(3.00)	(0.13)	3.40	4.55	6.05	7.90	11.99	15.94	(0.28)	0.43	0.48
Credit (IG)	(0.44)	(2.78)	(1.46)	1.36	2.58	1.49	2.58	3.71	5.68	8.32	0.37	0.24	0.39
High Yield (Default)	(0.45)	(2.17)	(2.53)	1.11	5.49	5.15	7.90	3.18	11.19	33.37	0.74	0.87	0.67
US Dollar Index	0.52	5.00	2.55	(1.21)	(0.36)	2.59	2.69	6.47	8.73	17.13	(0.55)	0.32	0.27
S&P 500	0.62	3.43	2.65	14.37	11.93	13.42	10.17	8.60	14.88	46.41	1.00	1.33	0.66
U.S. Small Cap	0.65	3.89	3.22	14.78	11.58	13.29	10.23	8.21	15.38	46.97	1.00	1.29	0.64
Private Equity <sup>1</sup>	(2.01)	(0.13)	6.77	13.23	9.01	11.54	8.91	6.18	11.69	23.84	0.93	2.01	0.73
Size <sup>1</sup>	5.40	11.03	8.17	8.27	1.93	0.99	2.44	9.69	8.27	15.37	0.24	0.07	0.25
Value <sup>1</sup>	(2.98)	(2.32)	(4.64)	(2.38)	(0.57)	(2.26)	(1.39)	5.54	9.61	25.02	0.33	(0.33)	(0.18)
Momentum <sup>1</sup>	3.95	3.20	11.83	18.85	4.86	4.83	(2.55)	8.35	17.02	57.39	(0.38)	0.41	(0.17)
<b>Non-US Equity</b>													
EAFFE Developed (USD)	(1.22)	(1.24)	(2.75)	6.84	4.90	6.44	2.84	9.16	18.19	52.74	0.89	0.52	0.14
Emerging Markets (USD)	(4.15)	(7.96)	(6.66)	8.20	5.60	5.01	2.26	14.15	22.24	57.97	0.81	0.31	0.09
Global Equity (USD)	(0.54)	0.53	(0.43)	10.73	8.19	9.41	5.80	8.63	16.51	50.97	0.96	0.88	0.33
Europe (USD)	(0.67)	(1.27)	(3.23)	5.28	4.22	6.21	2.36	10.64	20.03	55.38	0.89	0.45	0.10
Europe (Local)	(0.29)	4.08	(0.45)	4.30	5.69	8.71	5.42	7.82	14.48	43.36	0.87	0.80	0.35
Japan (USD)	(2.50)	(2.80)	(1.85)	10.88	6.60	7.70	3.78	8.39	15.40	42.93	0.72	0.63	0.22
<b>Diversifiers (Typical)</b>													
Hedge Funds	(0.21)	0.76	1.47	6.06	2.16	3.59	1.47	3.17	4.96	20.11	0.76	0.97	0.22
Real Estate (Private) <sup>1</sup>	(0.02)	4.38	6.87	13.46	10.07	12.13	4.89	10.43	16.45	42.48	0.73	1.60	0.28
REITS	4.42	10.10	1.19	3.57	8.06	8.26	7.95	12.23	25.11	62.89	0.73	0.56	0.30
TIPS	0.40	0.77	(0.02)	2.11	1.93	1.68	3.03	2.43	5.92	12.19	0.25	0.34	0.45
Infrastructure	(1.54)	11.80	(0.63)	(4.58)	(5.93)	(4.09)	6.46	19.15	19.27	48.51	0.53	(0.25)	0.32
<b>Diversifiers (Other)</b>													
Commodities	(3.50)	0.40	(0.00)	7.35	(4.54)	(6.40)	(9.04)	6.83	16.89	67.02	0.57	(0.58)	(0.56)
Natural Resources	(3.49)	(5.42)	(3.83)	1.04	(1.03)	(1.77)	(5.28)	8.51	17.59	54.23	0.70	(0.19)	(0.32)
Oil	10.61	14.18	22.72	61.05	7.63	(5.14)	(6.16)	18.97	32.02	75.99	0.47	(0.19)	(0.20)
Energy Equipment & Services	(2.80)	4.78	1.35	6.37	(5.32)	(5.39)	1.23	26.35	29.73	67.86	0.70	(0.26)	0.03
Mining	(1.99)	2.11	(1.38)	24.92	11.38	3.60	(5.01)	19.31	32.10	75.11	0.64	0.12	(0.17)
Gold	(3.54)	(5.50)	(3.85)	0.89	2.23	0.29	3.07	8.51	18.39	41.88	0.08	(0.01)	0.15

<sup>1</sup> As of May 31, 2018

<sup>2</sup> Private Market assets are based on independent and/or manager valuations

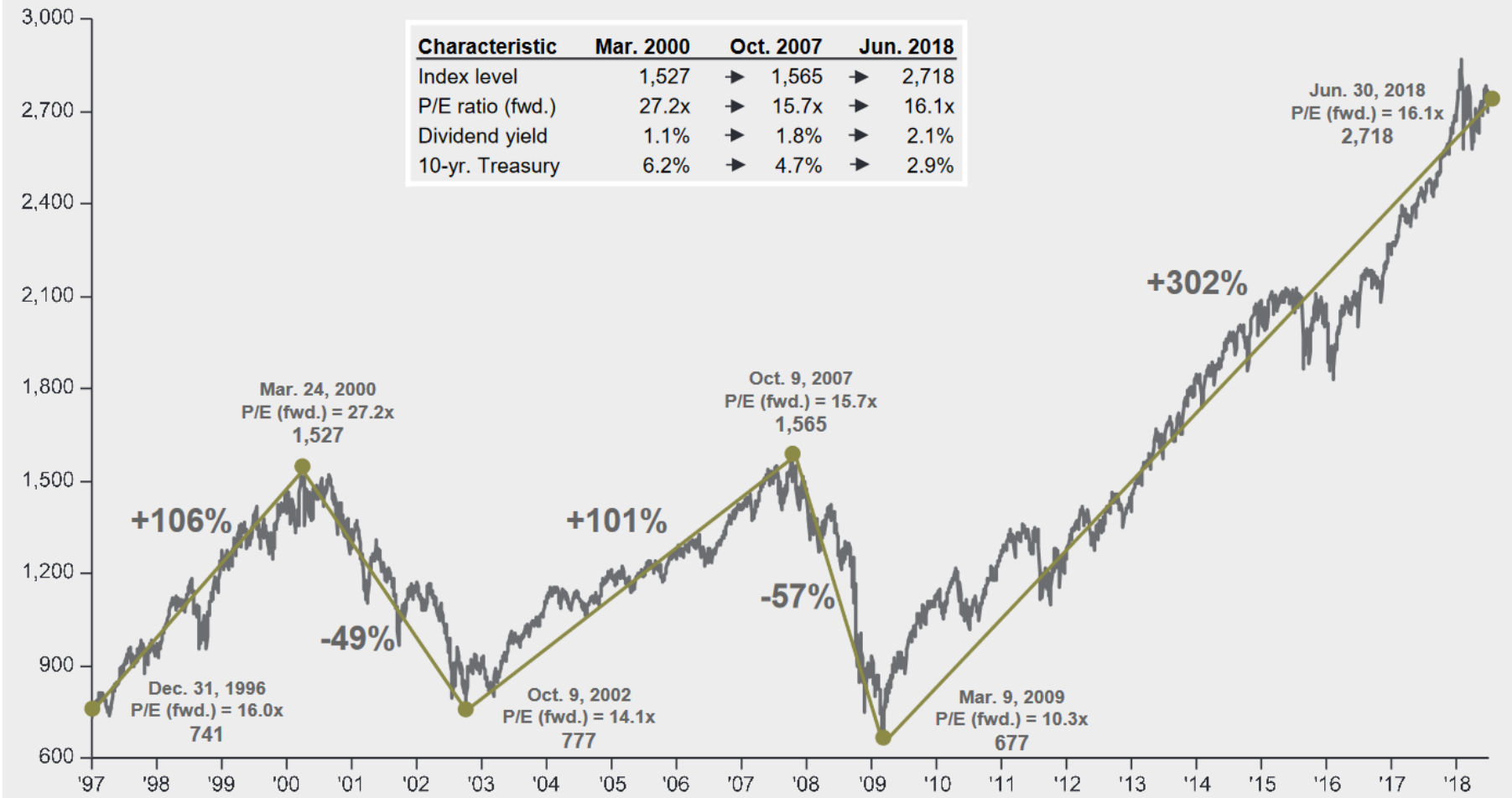
# Review of Current Environment



As of June 30, 2018

## S&P 500 Index at Inflection Points

### S&P 500 Price Index



# Review of Current Environment

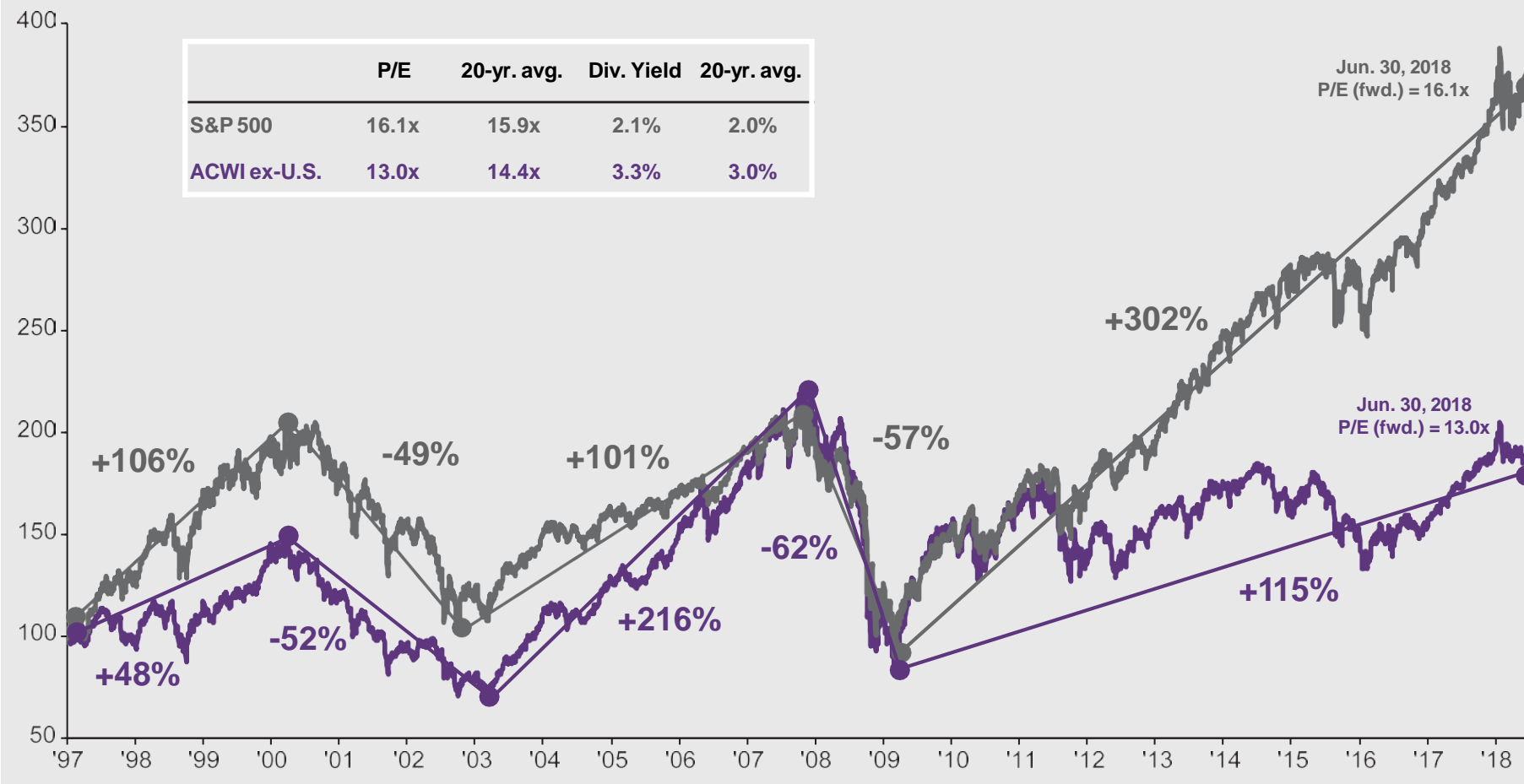


As of June 30, 2018

## U.S. and International Equities at Inflection Points

### MSCI All Country World ex-U.S. and S&P 500 Indices

Dec. 1996 = 100, U.S. dollar, price return

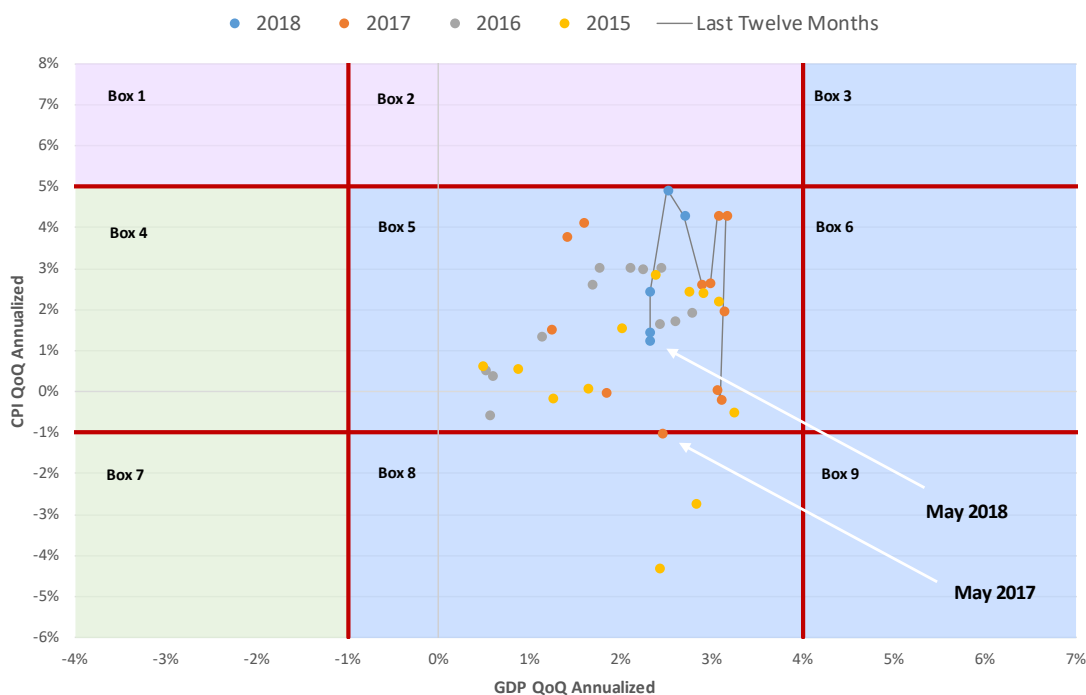


# Review of Current Environment



As of May 31, 2018

## US Policy Signal Chart



## Historical UTIMCO Returns

\*Box returns may vary significantly depending on if we just moved into a new environment/box or if we remained in the same box. Thus, returns are separated in that manner below:

Box #	Move	Stay	Total
1	-	-	-
2	12.6%	-14.9%	-0.4%
3	-	-	-
4	-32.8%	33.8%	-8.1%
5	17.5%	7.8%	9.3%
6	14.3%	11.8%	12.4%
7	-73.5%	-24.0%	-41.6%
8	18.4%	20.2%	19.1%
9	-	-	-

## Global Policy Signals Summary

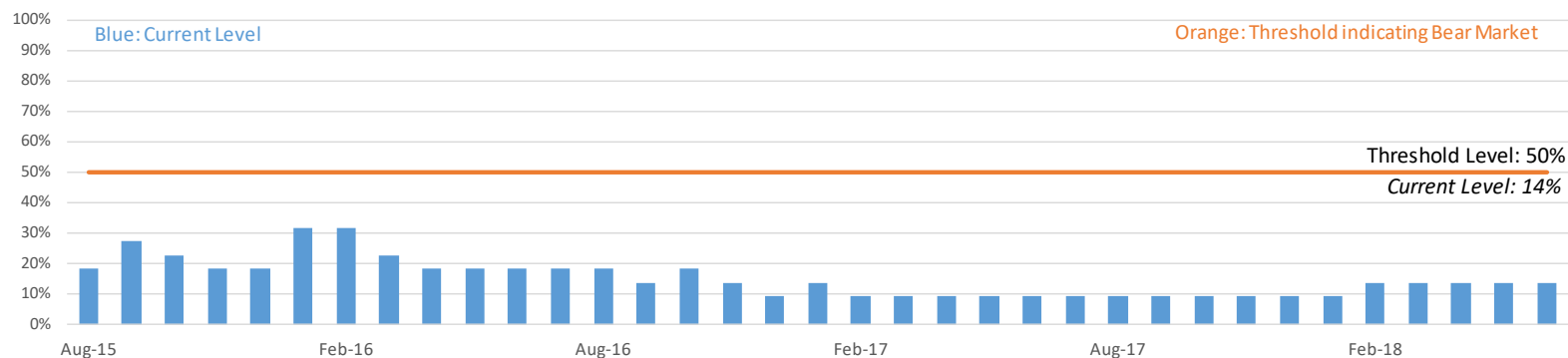
Quarterly Signals	3/31/2018	12/31/2017	9/30/2017
US	5	5	5
Europe	5	5	5
Japan	5	5	5
China	6	6	6

# Review of Current Environment



As of June 30, 2018

## Percentage of Bear Market Indicators On



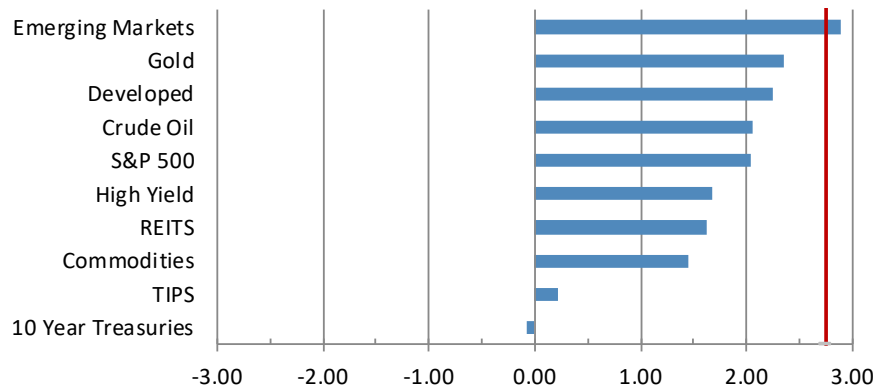
Type	Indicator	On/Off	Indicator Level		Last 36 Months	% On Last 36 Months
			Current	Threshold		
Inflation	5yr Breakeven Inflation < 1.25%	Off	2.08%	1.25%		8%
	10yr Breakeven Inflation > 3%	Off	2.1%	3.0%		0%
	YoY Inflation > 12m Moving Avg	On	2.2%	1.9%		61%
	YoY CPI Energy > 20%	Off	12.0%	20.0%		0%
	YoY PCE Deflator > 3%	Off	2.3%	3.0%		0%
	Employment	Employment Growth < 0%	Off	1.8%	0.0%	
YoY Avg. Hourly Earnings > 3%		Off	2.7%	3.0%		0%
YoY NonFinc Labor Costs > 3.5%		Off	0.9%	3.5%		0%
Consumer Confidence Spread < -20%		Off	1.1%	-20.0%		0%
Growth	Inventory/Sales > Long-term Avg.	On	35.0%	33.2%		100%
	YoY Leading Economic Indicator < 0%	Off	6.1%	0.0%		0%
	Leading/Coincident Ratio Drawdown > 26 months	Off	2.0	26.0		0%
	Fed Recession Probability > 10%	Off	9.9%	10.0%		0%
	Residential Construction (% of GDP) > 5%	Off	2.8%	5.0%		0%
	Total Investment (% of GDP) > 18.5%	Off	14.7%	18.5%		0%

Type	Indicator	On/Off	Indicator Level		Last 36 Months	% On Last 36 Months
			Current	Threshold		
Credit	US HY Yield > Long-term Avg.	Off	6.5%	10.1%		0%
	Non-Mortgage Delinquency Rate > 3.5%	Off	2.3%	3.5%		0%
	Real Rates < 0%	On	-0.9%	0.0%		100%
Market	YoY Equity Markets < -5%	Off	14.8%	-5.0%		3%
	Investment Banks < 12m Moving Avg. - 1 SD	Off	4.7%	0.0%		11%
	Cons. Discretionary < 12m Moving Avg. - 1 SD	Off	16.3%	0.0%		6%
	US Dollar 24m Change > 10%	Off	-1.1%	10.0%		44%

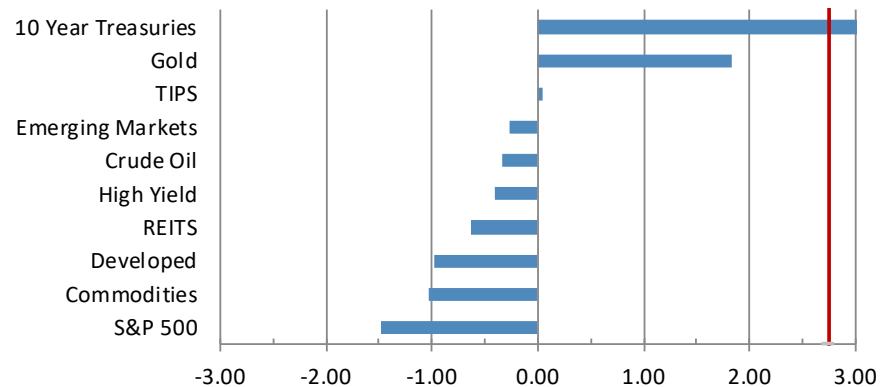
# Review of Current Environment



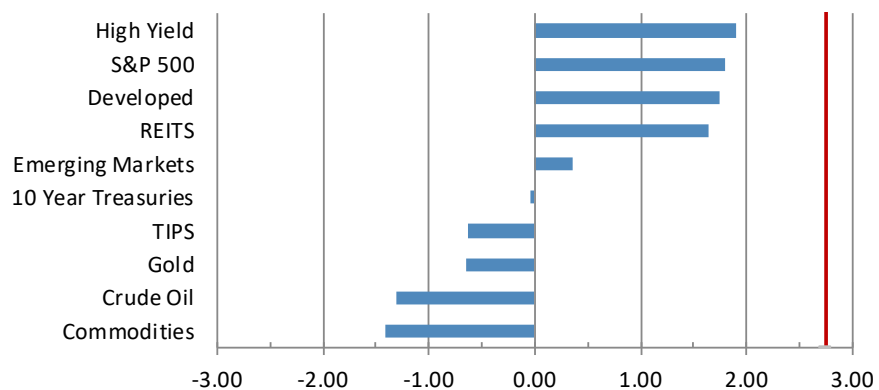
**Bubble Level Monitor: September 2007**



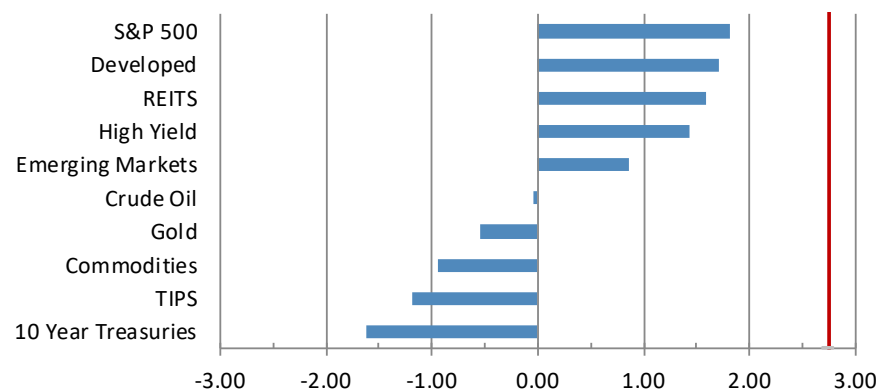
**Bubble Level Monitor: December 2008**



**Bubble Level Monitor: June 2017**



**Bubble Level Monitor: June 2018**



# Review of Current Environment

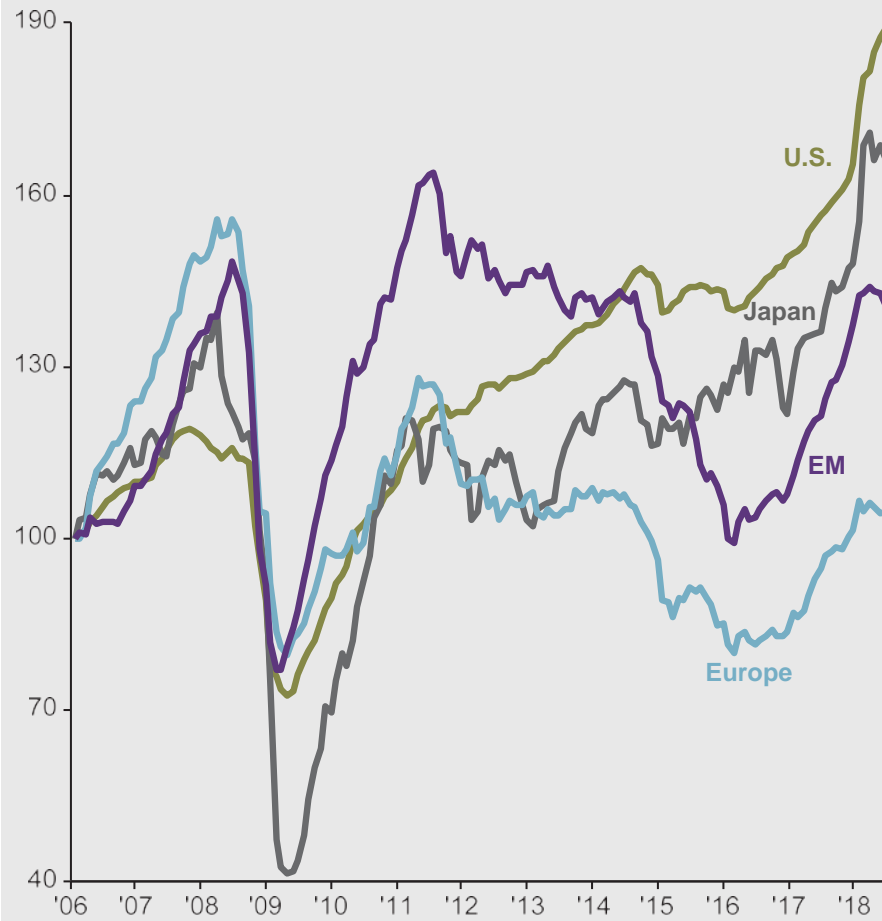


As of June 30, 2018

## International Equity Earnings and Valuations

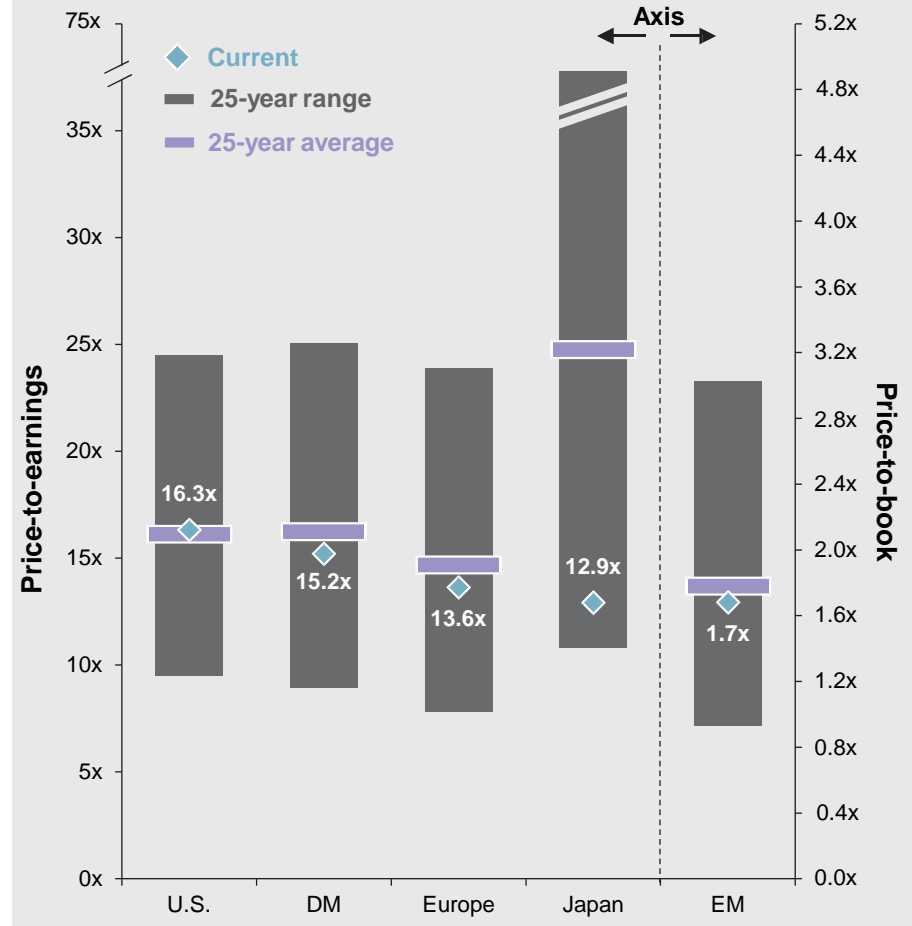
### Global earnings

EPS, U.S. dollar, next 12 months, Jan. 2006 = 100



### Global valuations

Current and 25-year historical valuations\*







# Outlook

---

# Review of Current Environment



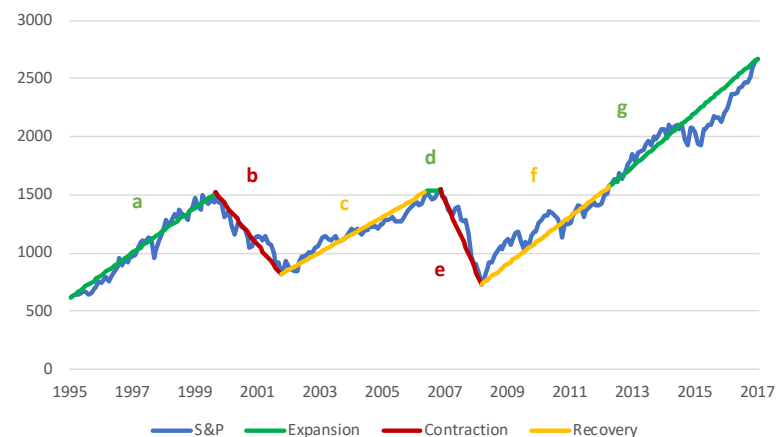
As of December 31, 2017

## Asset Class Real Annualized Returns Across Cycles

		Expansion		Contraction		Recovery		Expansion		Contraction		Recovery		Expansion	
Time Period		1/1996 a	8/2000 b	9/2002 c	5/2007 d	10/2007 e	2/2009 f	3/2013 g	12/2017						
Duration (months)		55	25	56	5	16	49	57							
S&P Return		21%	-25%	14%	4%	-40%	20%	13%							
Publics	DCE	19%	-27%	14%	4%	-42%	21%	14%							
	EM	-2%	-20%	33%	97%	-52%	20%	3%							
	Treasury	3%	9%	0%	10%	8%	2%	0%							
	Intermediate	3%	8%	-1%	10%	8%	1%	0%							
	Long Term	4%	10%	1%	12%	11%	6%	3%							
	Dfnsvie	14%	-13%	11%	5%	-27%	17%	12%							
Gold	-9%	5%	13%	55%	12%	11%	-5%								
HF	Hedge Funds	17%	-2%	13%	12%	-17%	9%	2%							
Privates	PE	25%	-12%	25%	18%	-24%	14%	14%							
	VC	68%	-38%	3%	13%	-14%	7%	14%							
	RE	10%	6%	25%	12%	-34%	3%	11%							
	NR	10%	4%	39%	16%	-5%	10%	0%							
	EM	5%	-17%	16%	43%	-20%	14%	11%							
	Credit	12%	-3%	17%	8%	-21%	16%	9%							
West Texas Land		0.9%	1.3%	2.0%	2.2%	7.5%	5.4%	4.3%							

		1/1996	8/2000	9/2002	5/2007	10/2007	2/2009	3/2013	12/2017
Metrics	Inflation (y/y)	2.6%	4.1%	2.3%	1.7%	1.9%	-2.8%	1.3%	2.1%
	GDP Growth (y/y)	5.6%	5.7%	3.6%	4.9%	4.5%	2.9%	1.7%	2.6%
	10-Yr Nominal	5.6%	5.7%	3.6%	4.9%	4.5%	2.9%	1.7%	2.4%
	10-Yr Real	3.0%	1.6%	1.3%	3.2%	2.6%	5.7%	0.4%	0.3%
	TTM P/E	18.4	28.2	18.1	17.5	17.4	12.0	15.7	22.4
	TTM P/S	1.2	2.2	1.3	1.7	1.7	0.7	1.5	2.2
	Cap Rate	9.5	9.5	8.4	6.5	6.5	7.0	6.8	6.1
	EBITDA Multiple	7.8x	8.0x	5.8x	11.5x	11.5x	6.4x	9.2x	9.7x
	Brent Oil	16.5	31.7	28.8	68.0	90.6	46.4	110.0	66.9
	Natural Gas	2.7	4.8	4.1	7.9	8.3	4.2	4.0	3.0
	Gold	405.6	279.6	323.9	661.0	795.3	942.5	1,594.8	1,302.8

## S&P Cycles (1996 – 2017)



Expected Real Returns in Cycle			
Portfolio	Contraction	Recovery	Expansion
UTIMCO <sup>1</sup>	-15.5%	15.4%	11.3%
S&P	-34.2%	14.1%	14.0%
60/40	-17.1%	8.8%	9.2%

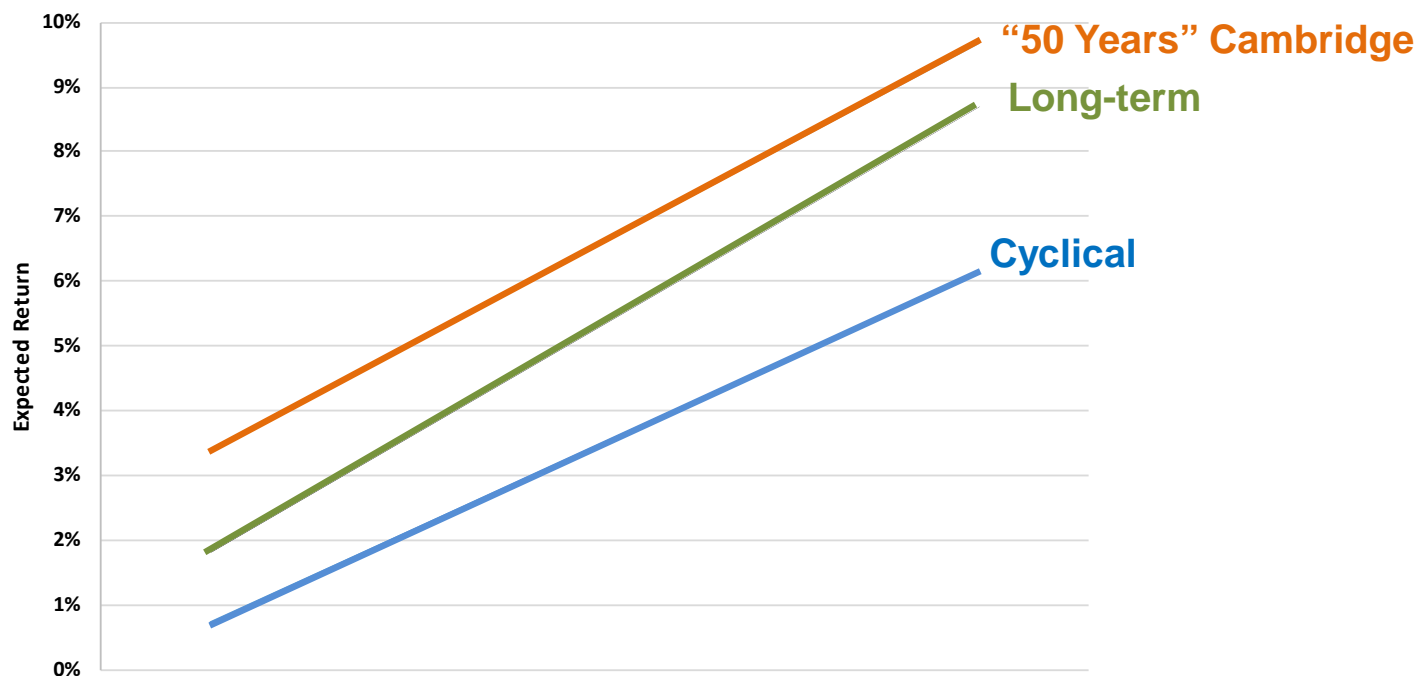
<sup>1</sup> Uses policy allocations

# Aggregated Market Projections



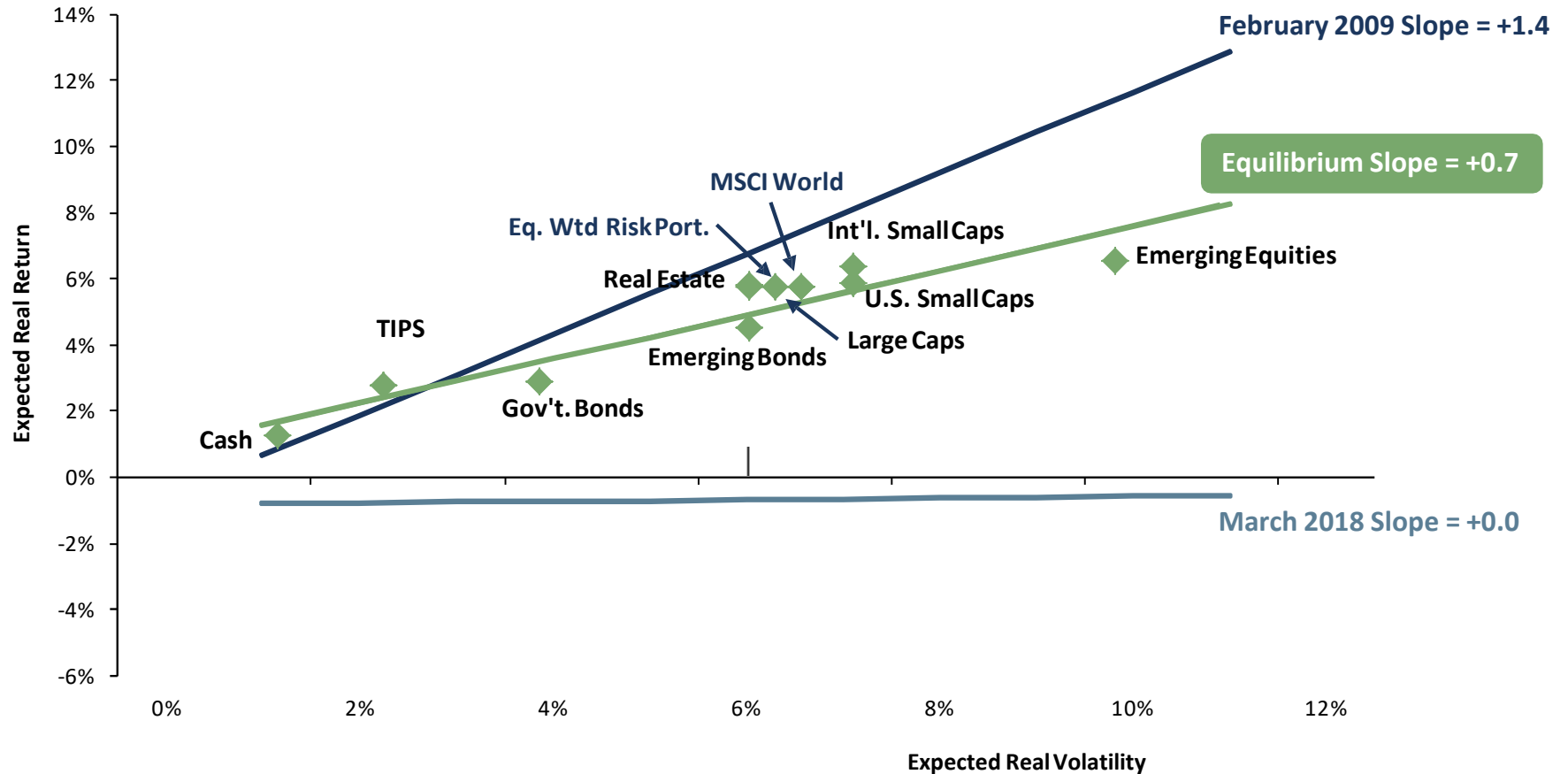
June 2018

	Cyclical	Long-term	50 Years Cambridge
Private Equity	6.4%	8.6%	9.6%
Emerging Markets	6.4%	8.0%	8.4%
EAFE	4.5%	6.4%	7.3%
Hedge Funds	2.8%	3.7%	7.2%
US Equity	3.2%	6.3%	7.7%
US Bonds	2.4%	3.1%	4.8%
Cash	2.0%	2.0%	3.0%
Non-US Bonds	0.6%	2.4%	4.3%



Source: AQR, BCA, Black Rock, Bridgewater, Cambridge, GMO, Goldman Sachs

# Asset Class Volatility/Return Trade-Off

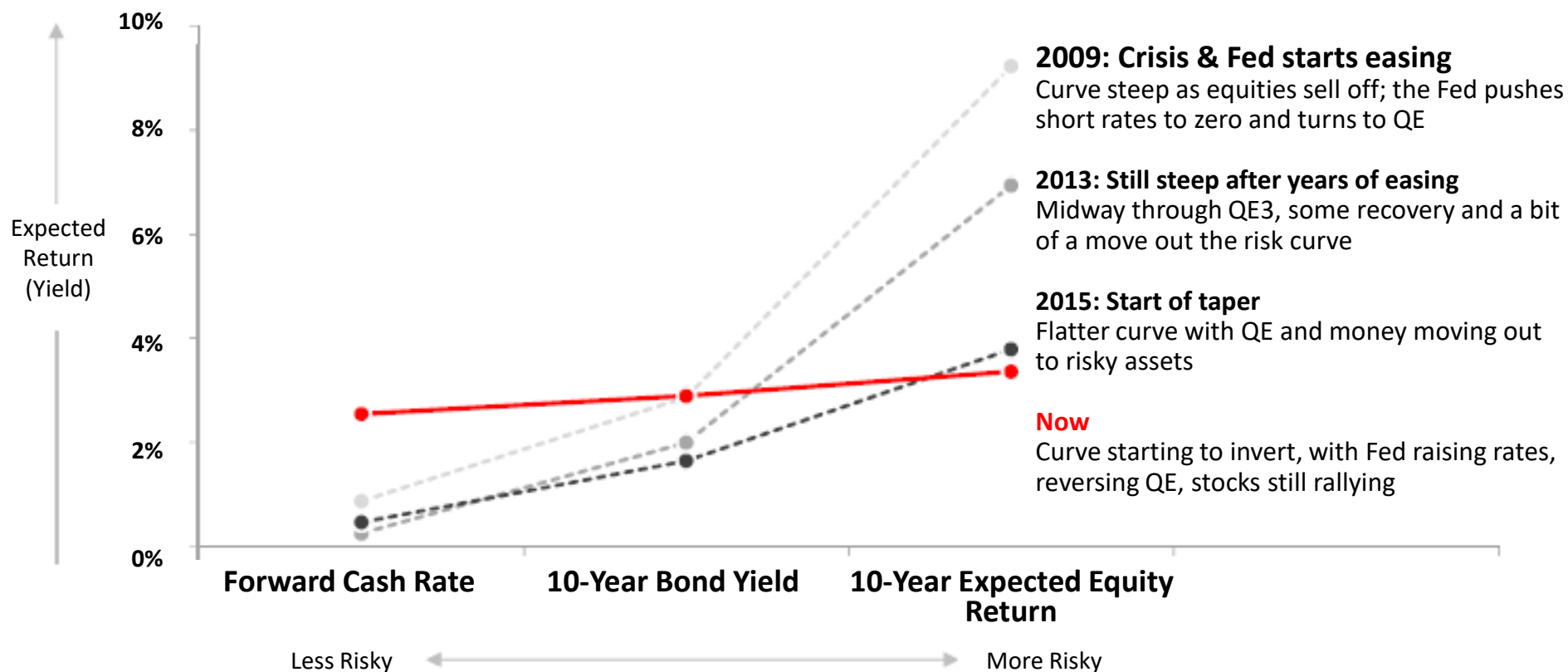


Source:GMO

The return and volatility numbers pictured above for the equilibrium slope (green) represent a theoretical world wherein major asset classes are all priced at their fair value, or what we sometimes call "equilibrium". It does not represent a specific moment in time. The slopes for February 2009 and March 2018 are based on GMO's 7-Year Asset Class Forecasts and expected real volatilities for major asset classes at that point in time.

The expectations provided above are based upon the reasonable beliefs of the Asset Allocation team and are not a guarantee. Expectations speak only as of the date they are made, and GMO assumes no duty to and does not undertake to update such expectations. Expectations are subject to numerous assumptions, risks, and uncertainties, which change over time. Actual results may differ materially from those anticipated in the expectations above.

# The Risk Curve Has Gone from Steep in the Crisis to Flat Today



# Review of Current Environment

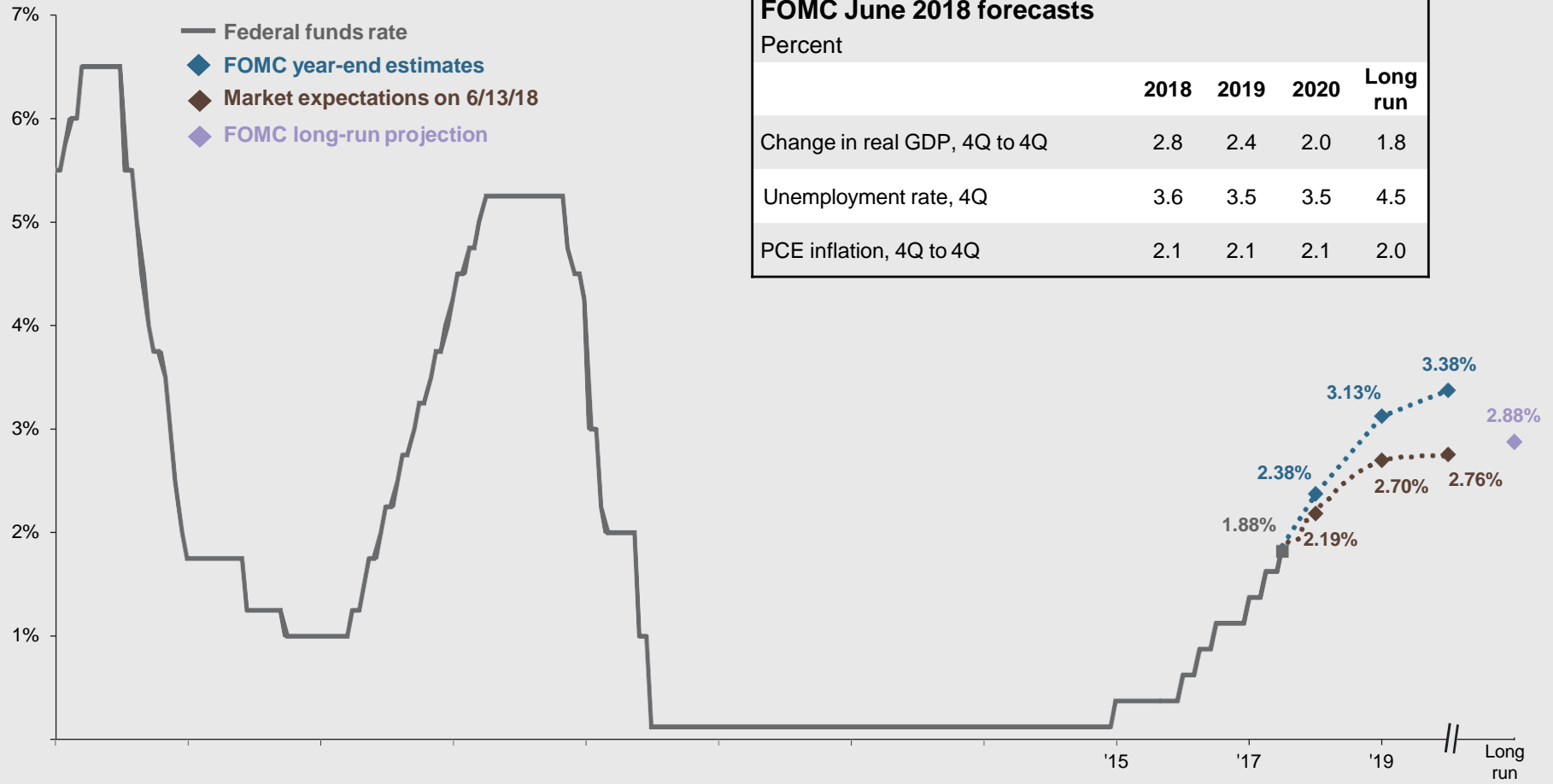


As of June 30, 2018

## The Fed and Interest Rates

### Federal funds rate expectations

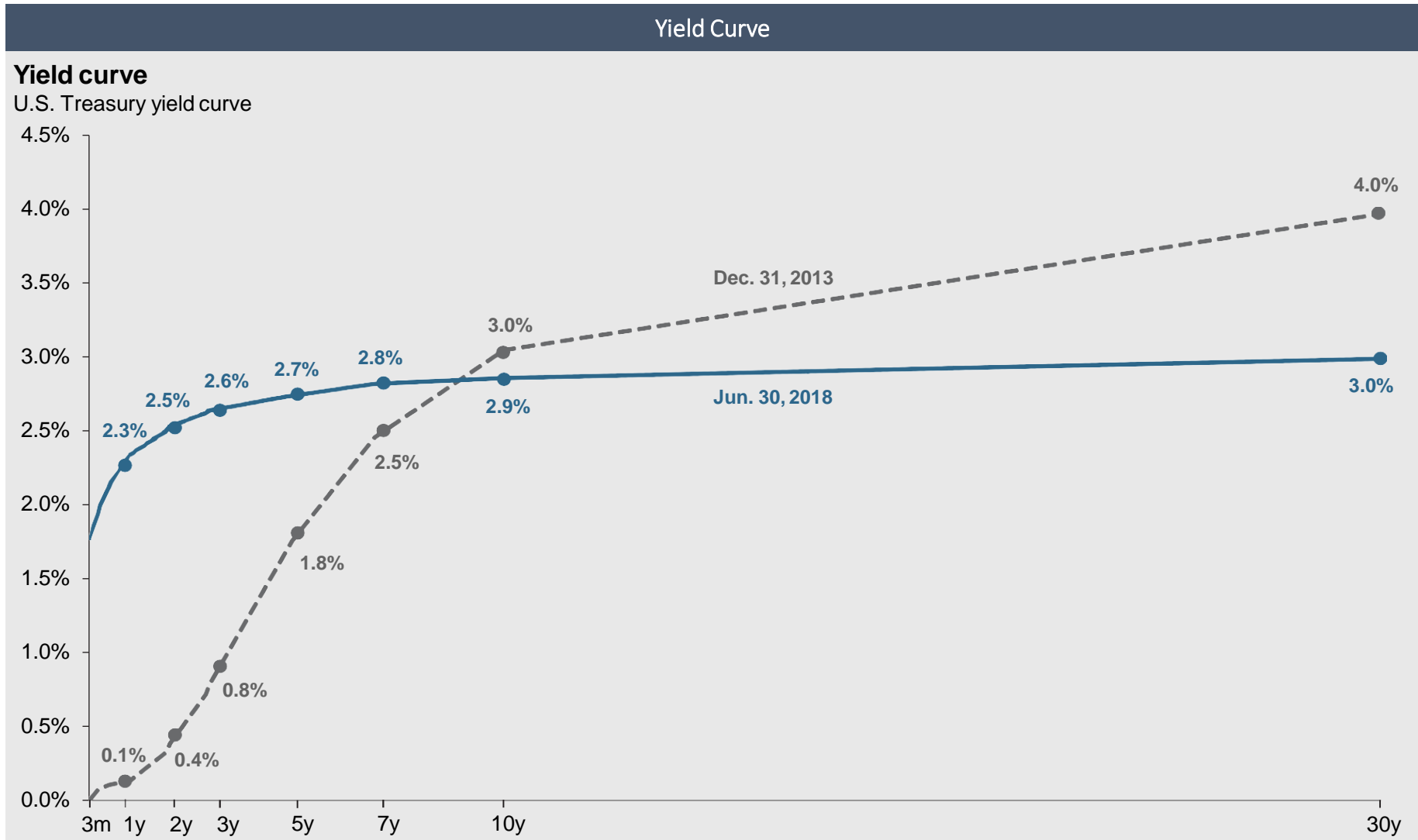
FOMC and market expectations for the fed funds rate



# Review of Current Environment



As of June 30, 2018

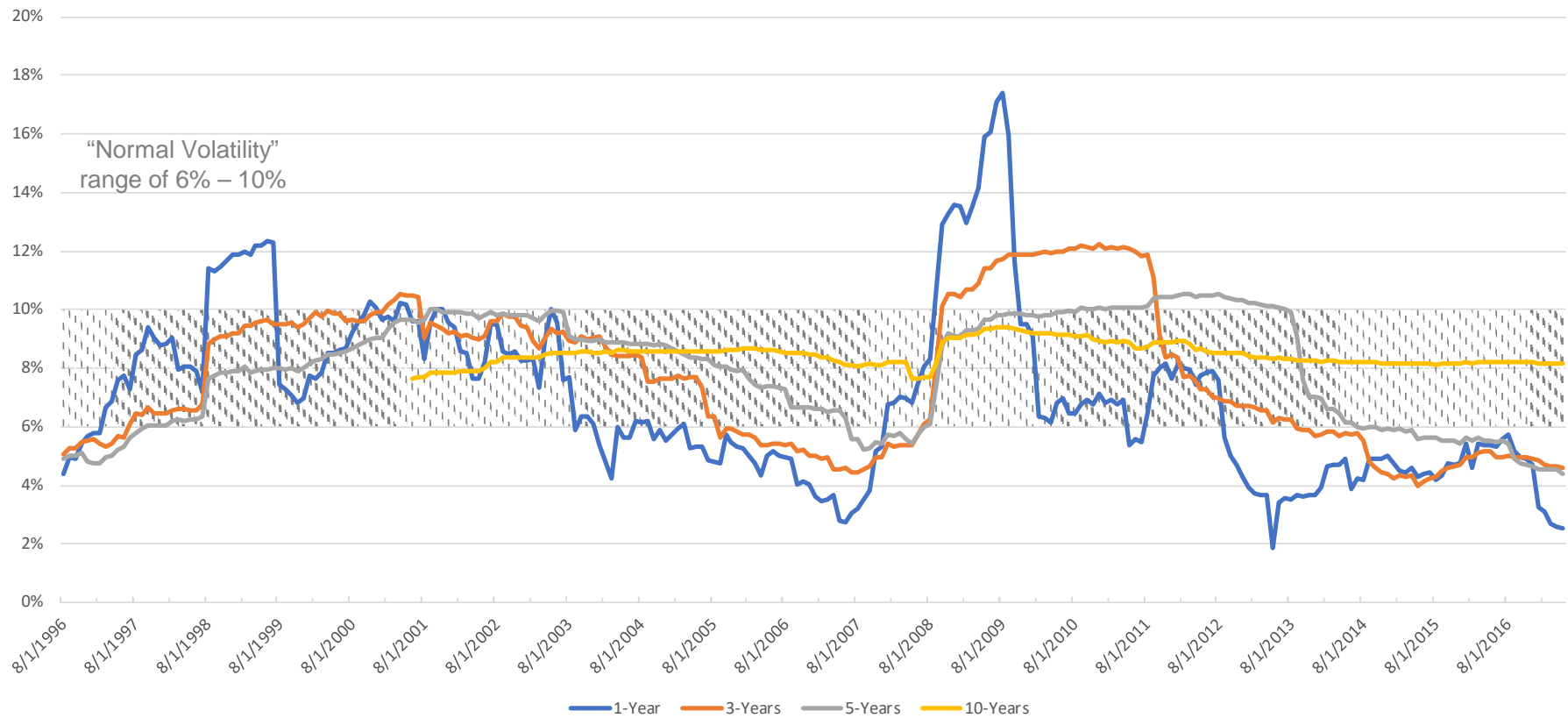


# Long-Term Focus



As of May 31, 2018

## UTIMCO Realized Volatility



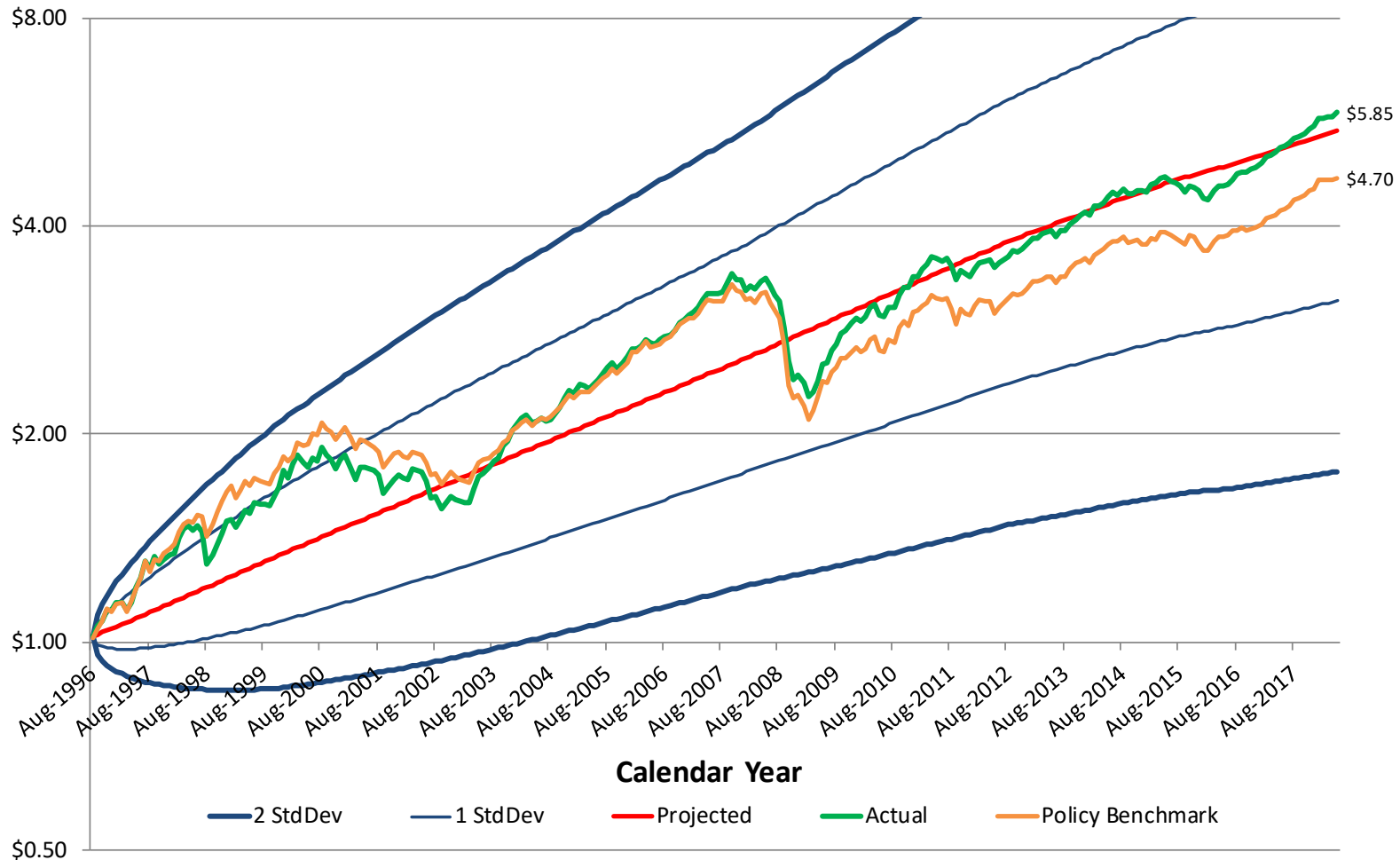
UTIMCO Realized Volatility				
Time Period	1-Year	3-Years	5-Years	10-Years
FYE 1996	4.4%	5.1%	4.9%	-
FYE 2000	9.2%	9.6%	8.7%	-
FYE 2005	4.8%	6.4%	8.1%	8.6%
FYE 2010	6.4%	12.1%	9.9%	9.1%
FYE 2015	4.2%	4.3%	5.6%	8.1%
FYTD 2018	2.6%	4.3%	4.2%	7.8%



# Long-Term Focus



As of May 31, 2018

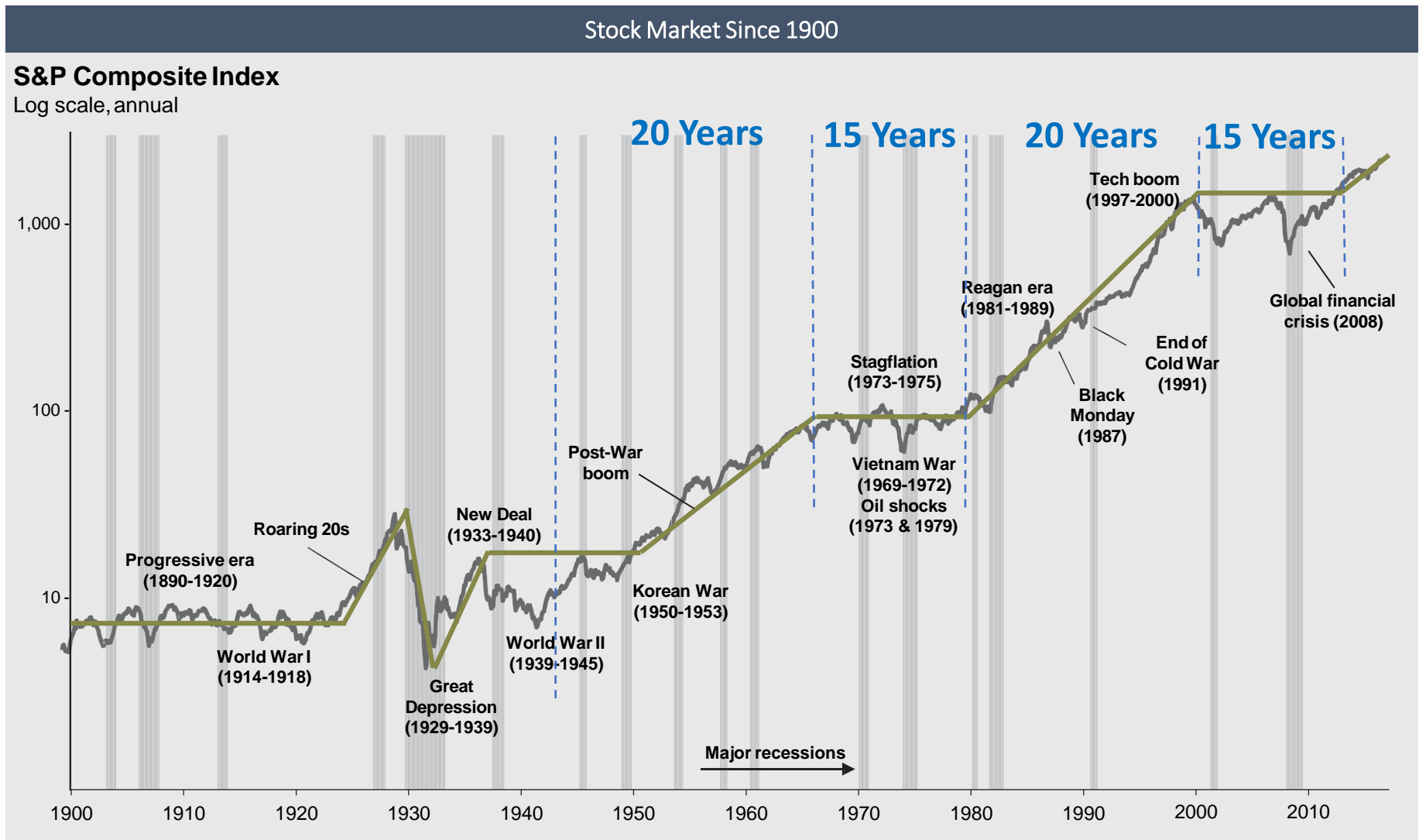


- The Policy portfolio is currently  $\frac{1}{3}$  standard deviation below from expectations – in three out of four cases it would have been further away from the red line

# Review of Current Environment



As of June 30, 2018





# Appendix

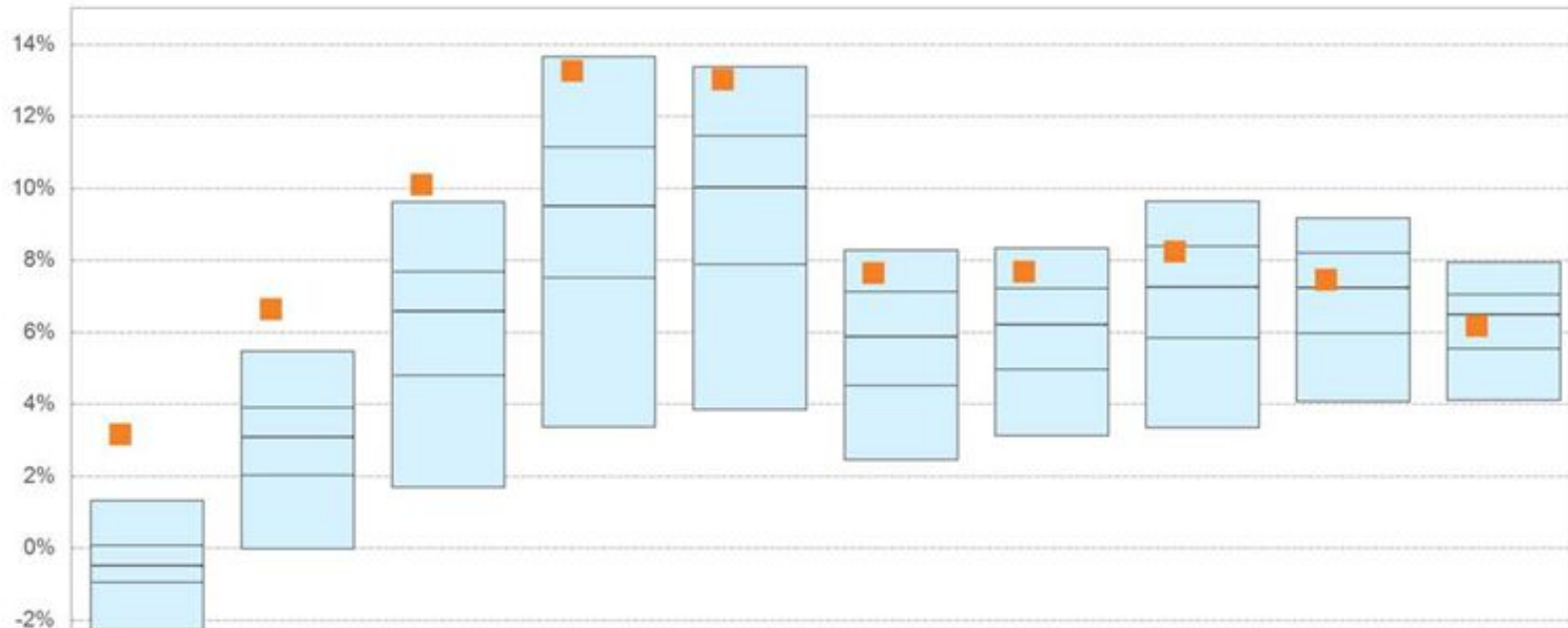
---

# Performance Comparison

Cumulative Periods Ending: March 31, 2018



Total Returns of Master Trusts - All Plans



Percentile Rankings	1 Qtr	2 Qtrs	3 Qtrs	1 Year	2 Years	3 Years	4 Years	5 Years	7 Years	10 Years
5th	1.33	5.48	9.63	13.66	13.39	8.29	8.34	9.64	9.18	7.95
25th	0.08	3.92	7.69	11.15	11.46	7.13	7.23	8.40	8.21	7.06
50th	-0.47	3.10	6.59	9.51	10.03	5.89	6.22	7.26	7.24	6.50
75th	-0.95	2.03	4.80	7.53	7.90	4.53	4.98	5.85	5.98	5.55
95th	-2.28	-0.02	1.70	3.38	3.85	2.47	3.13	3.35	4.09	4.12

No. Of Obs	538	527	517	517	517	510	503	486	445	361
------------	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

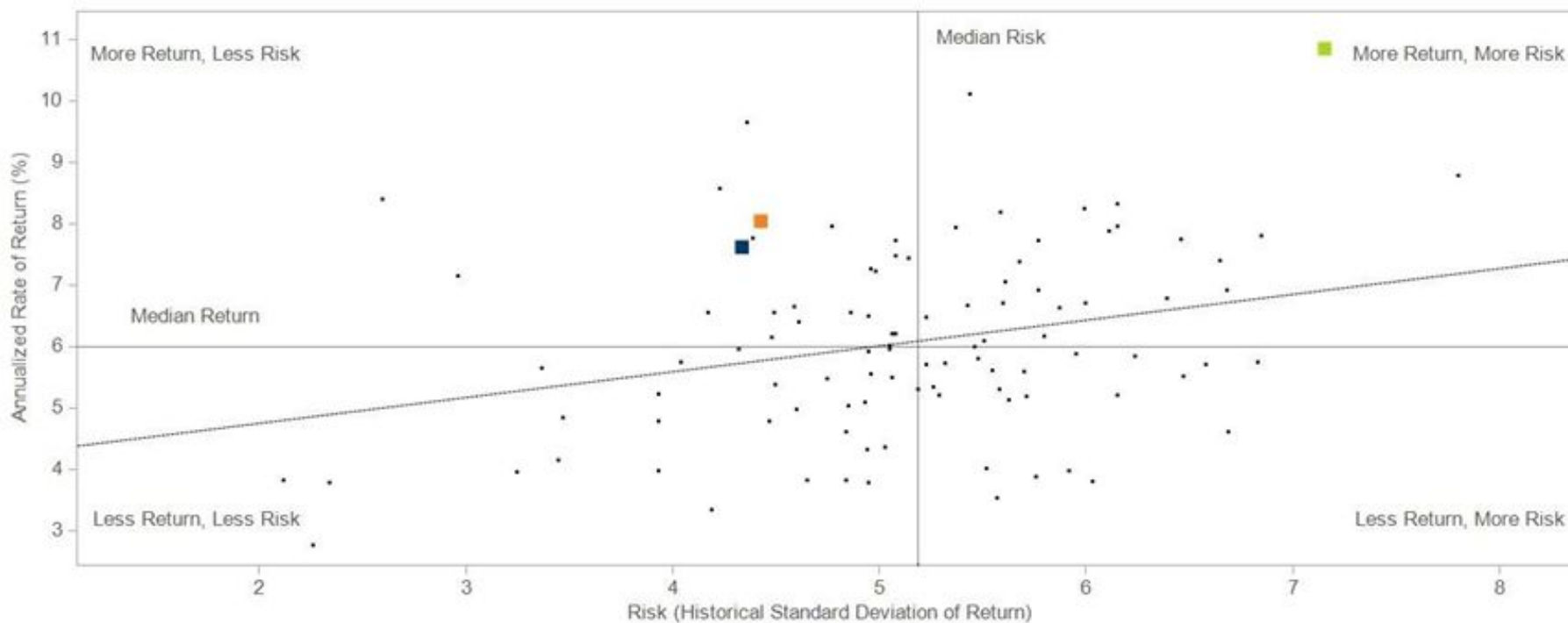
■ PUF TOTALFUND	3.05 (1)	6.53 (1)	10.00 (3)	13.15 (6)	12.92 (7)	7.55 (17)	7.57 (16)	8.13 (32)	7.36 (48)	6.08 (62)
-----------------	----------	----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------

# Risk / Return

Period Ending March 31, 2018



**For past 3 years, PUF and GEF have generated more returns for less risk**



	Risk Value	Risk Rank	Return Value	Return Rank
GEF TOTAL FUND	4.45	81	7.97	12
PUF TOTAL FUND	4.36	84	7.55	21
S&P 500	7.18	2	10.78	1
Median	5.19		6.01	

# Review of Current Environment

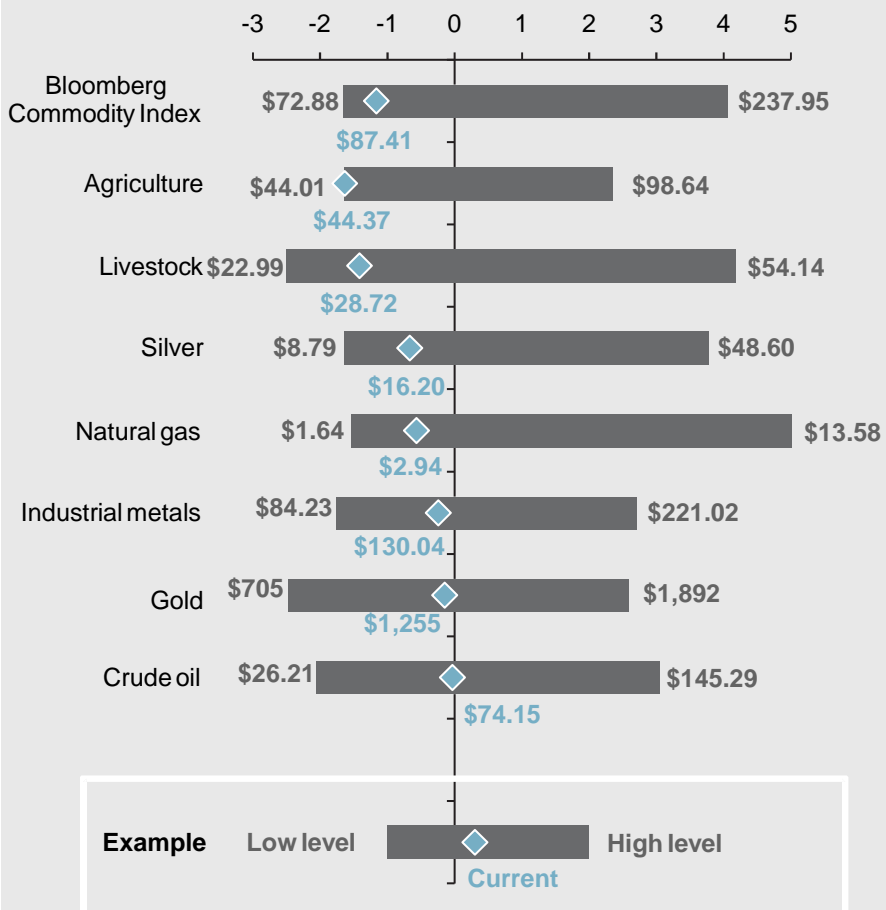


As of June 30, 2018

## Global Commodities

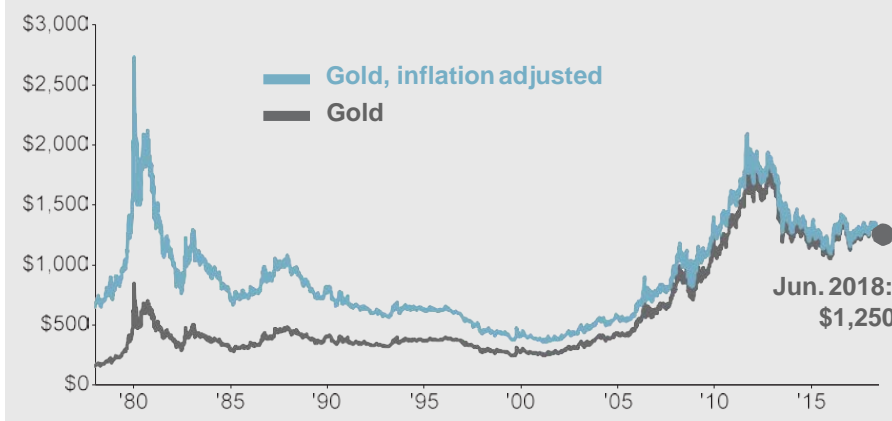
### Commodity prices

Commodity price z-scores



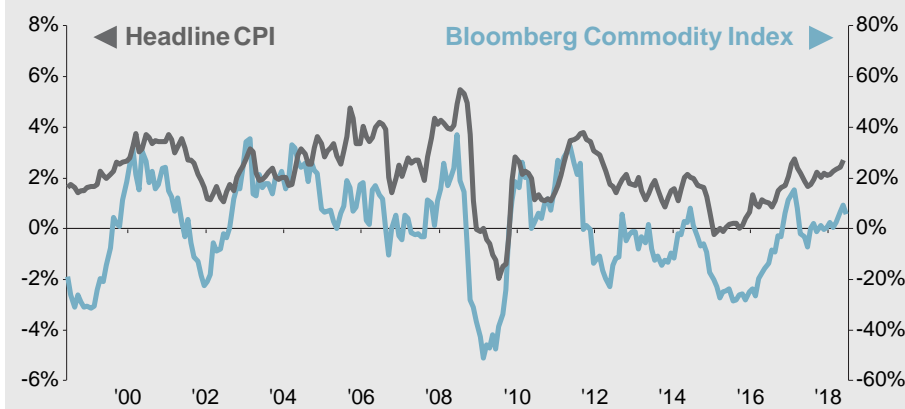
### Gold prices

USD per ounce



### Commodity prices and inflation

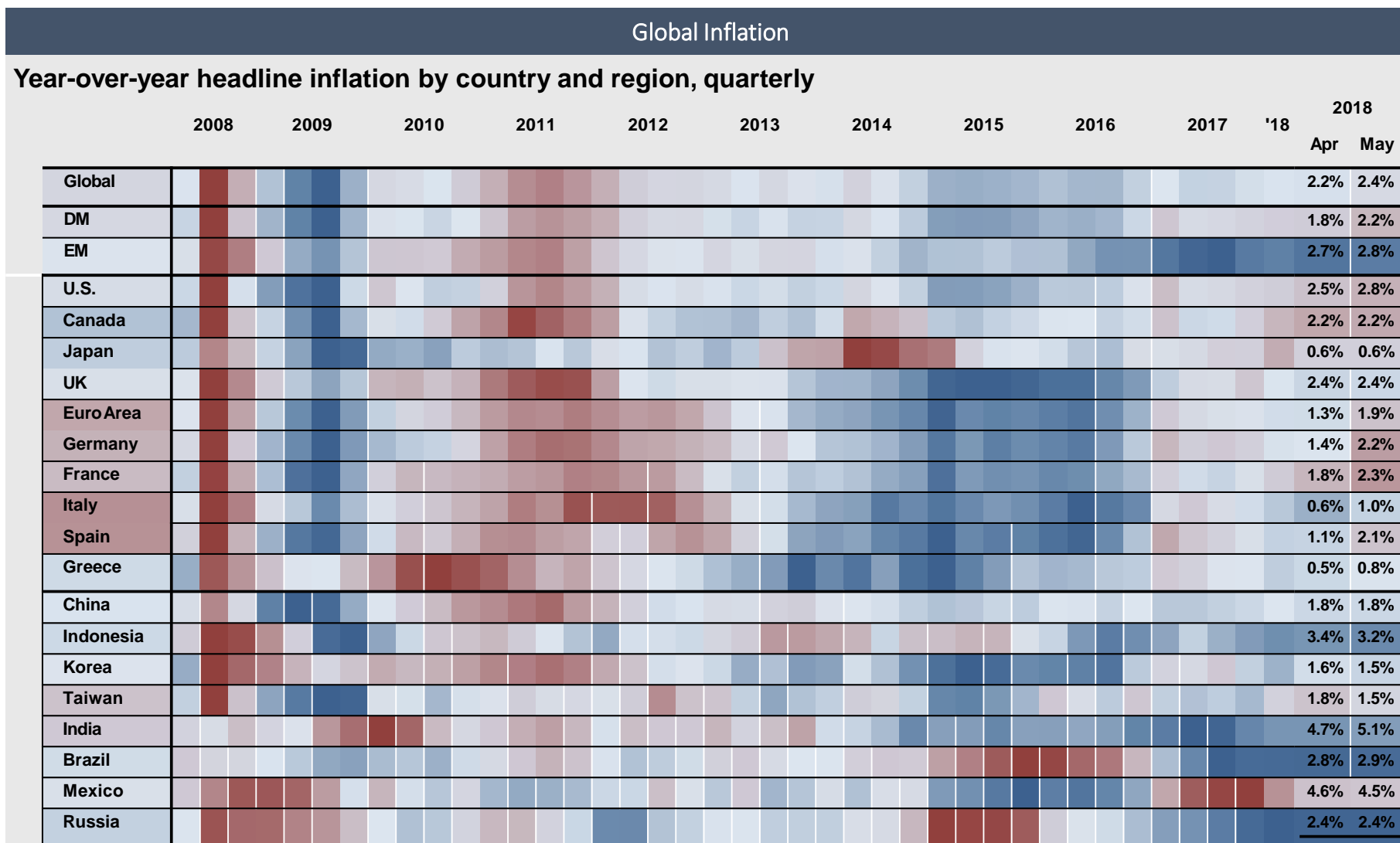
Year-over-year % change



# Review of Current Environment



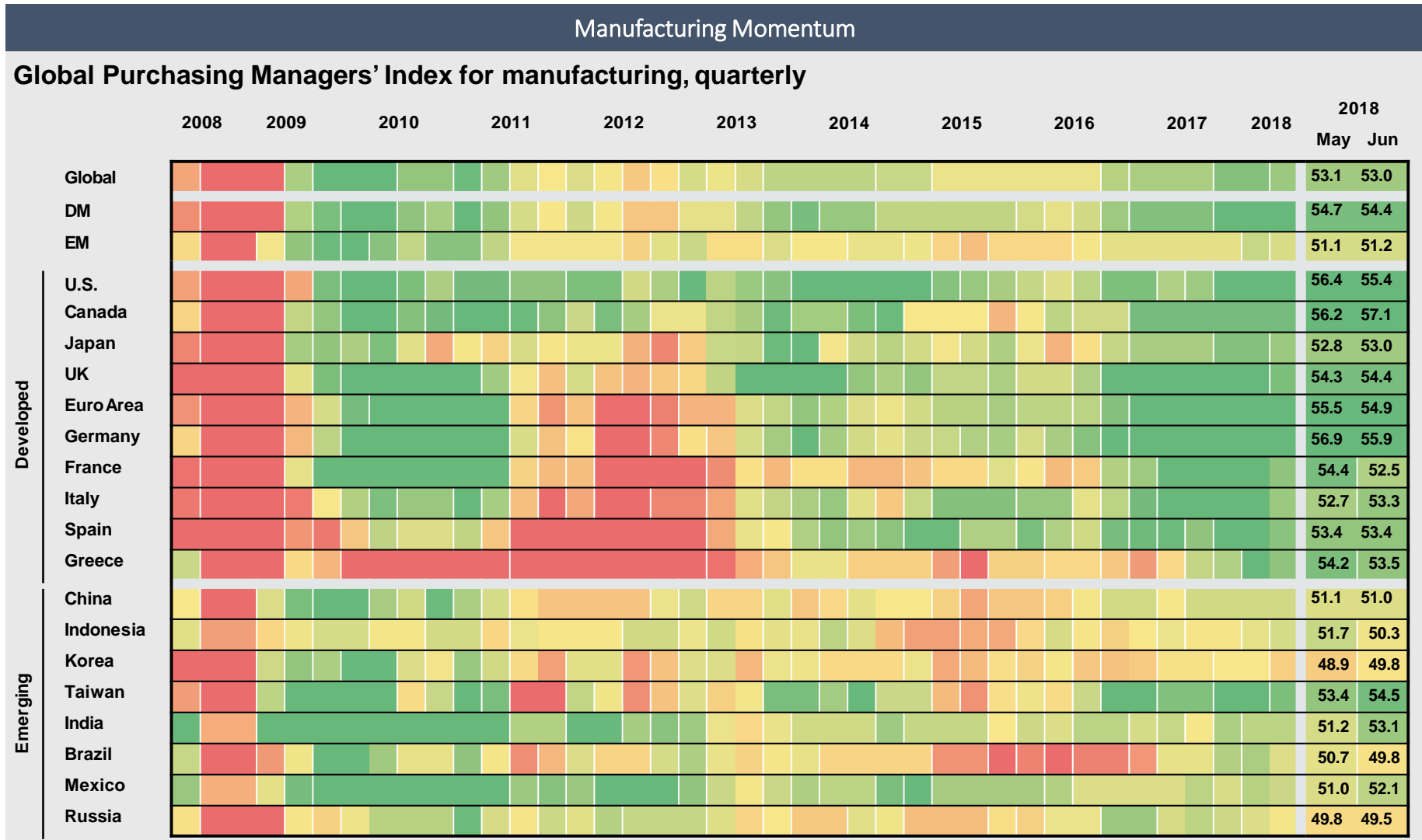
As of June 30, 2018



# Review of Current Environment



As of June 30, 2018





# Review of Current Environment

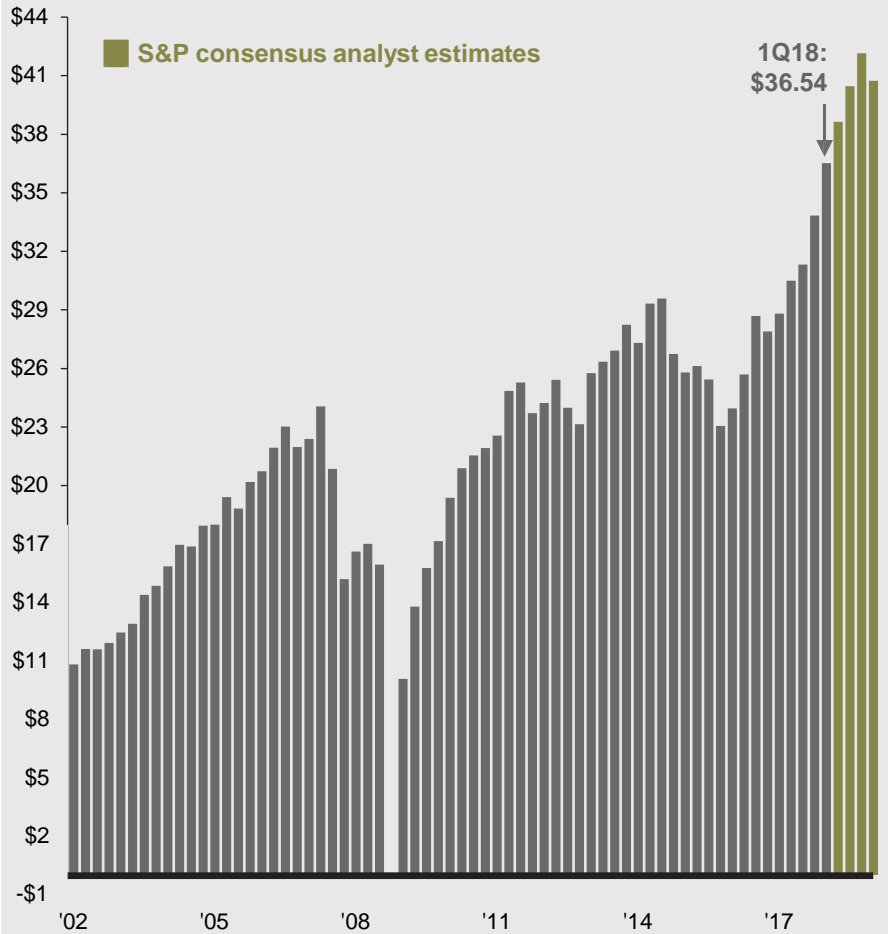


As of June 30, 2018

## Corporate Profits

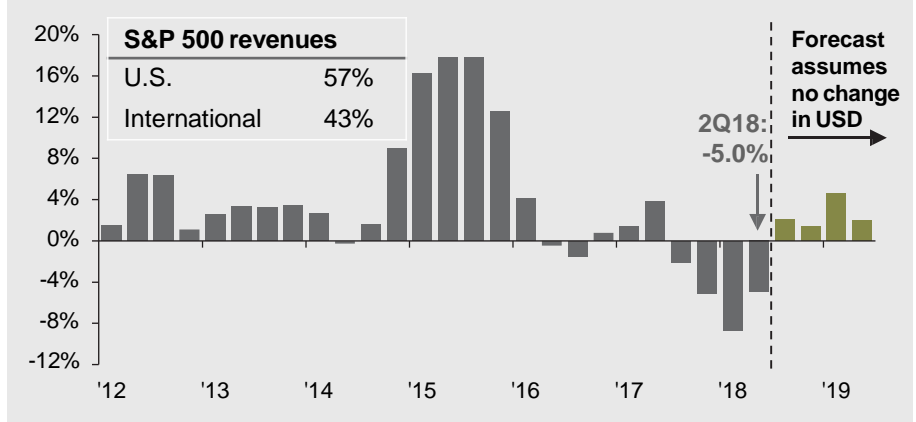
### S&P 500 earnings per share

Index quarterly operating earnings



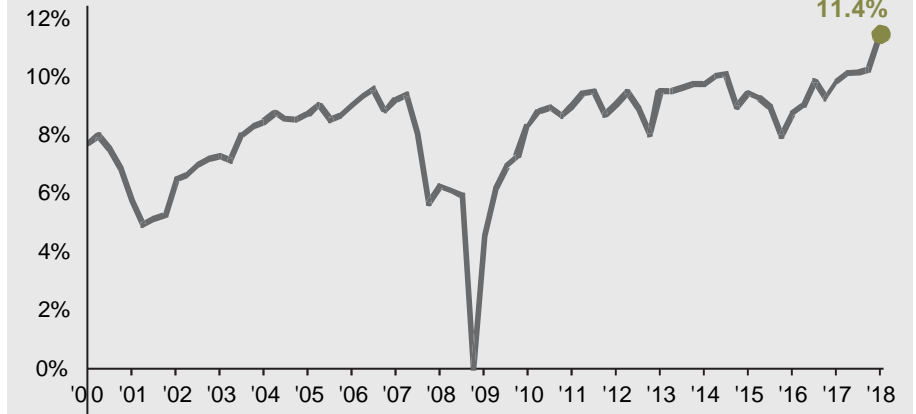
### U.S. dollar

Year-over-year % change\*, quarterly, USD major currencies index



### S&P 500 profit margins

Quarterly operating earnings per share/sales per share



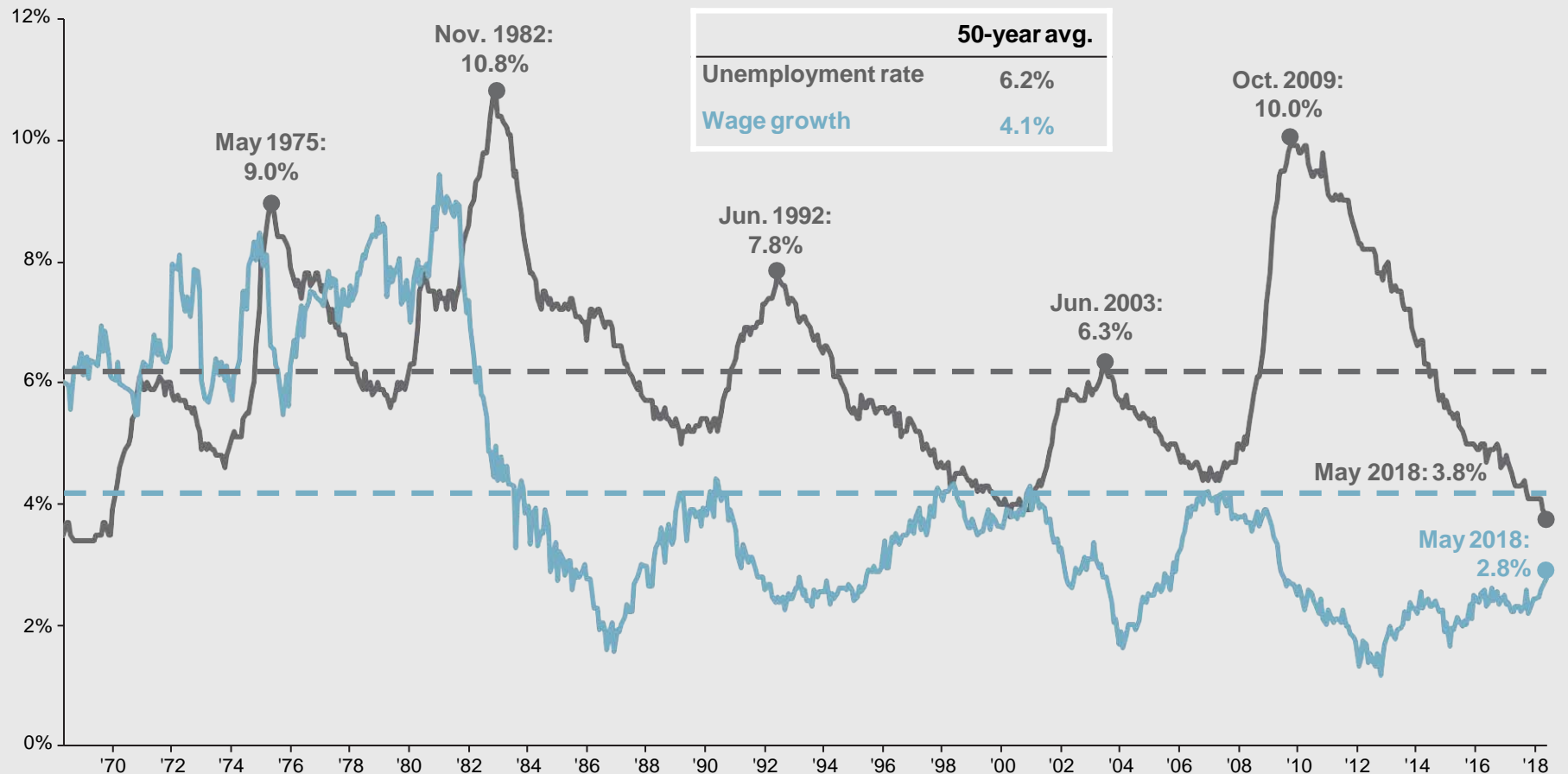
# Review of Current Environment



As of June 30, 2018

## Unemployment and Wages

**Civilian unemployment rate and year-over-year wage growth for private production and non-supervisory workers**  
Seasonally adjusted, percent



# Review of Current Environment

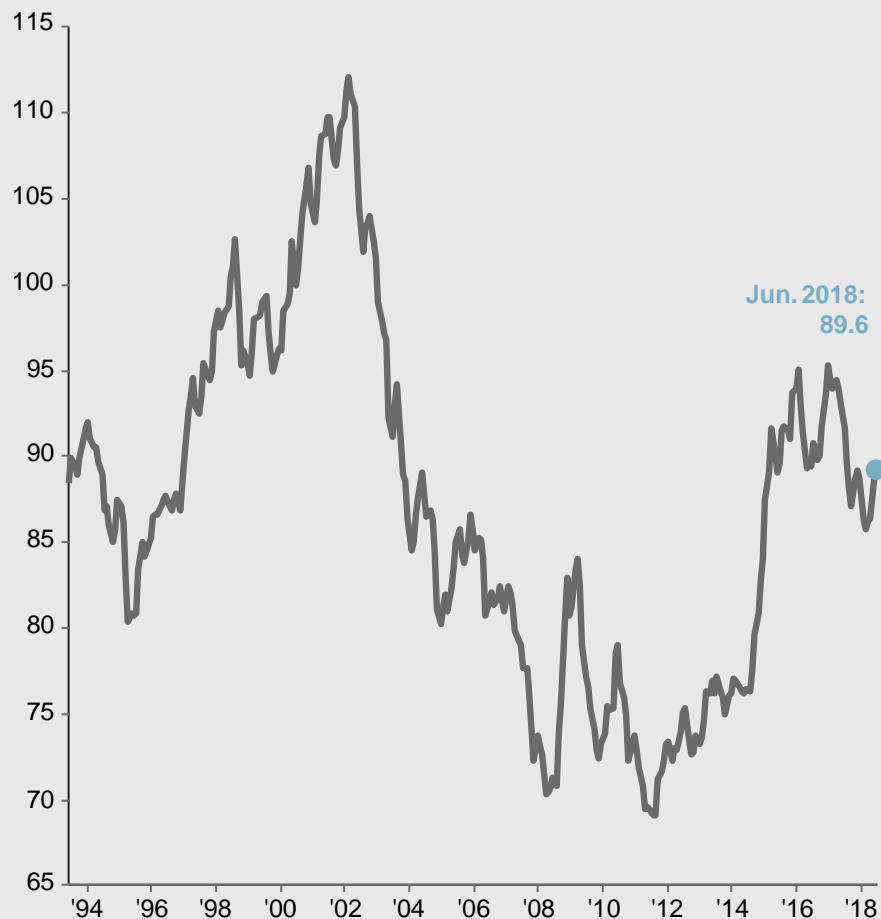


As of June 30, 2018

## Dollar Drivers

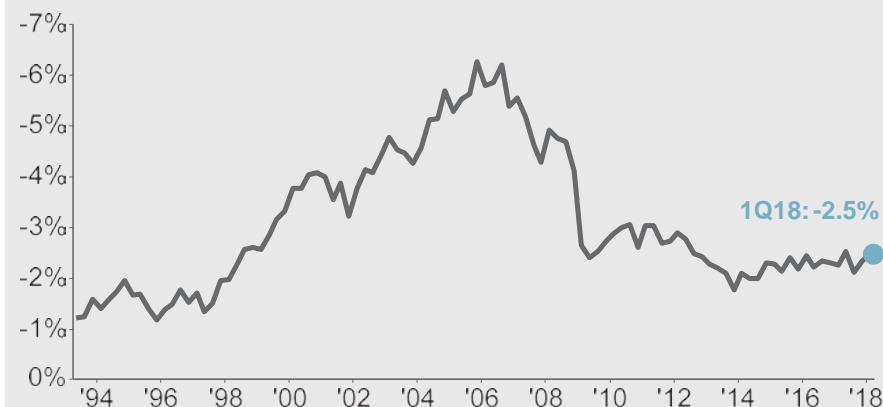
### The U.S. dollar

Monthly average of major currencies nominal trade-weighted index



### The U.S. trade balance

Current account balance, % of GDP



### Developed markets interest rate differentials

Difference between U.S. and international 10-year yields\*



# Review of Current Environment

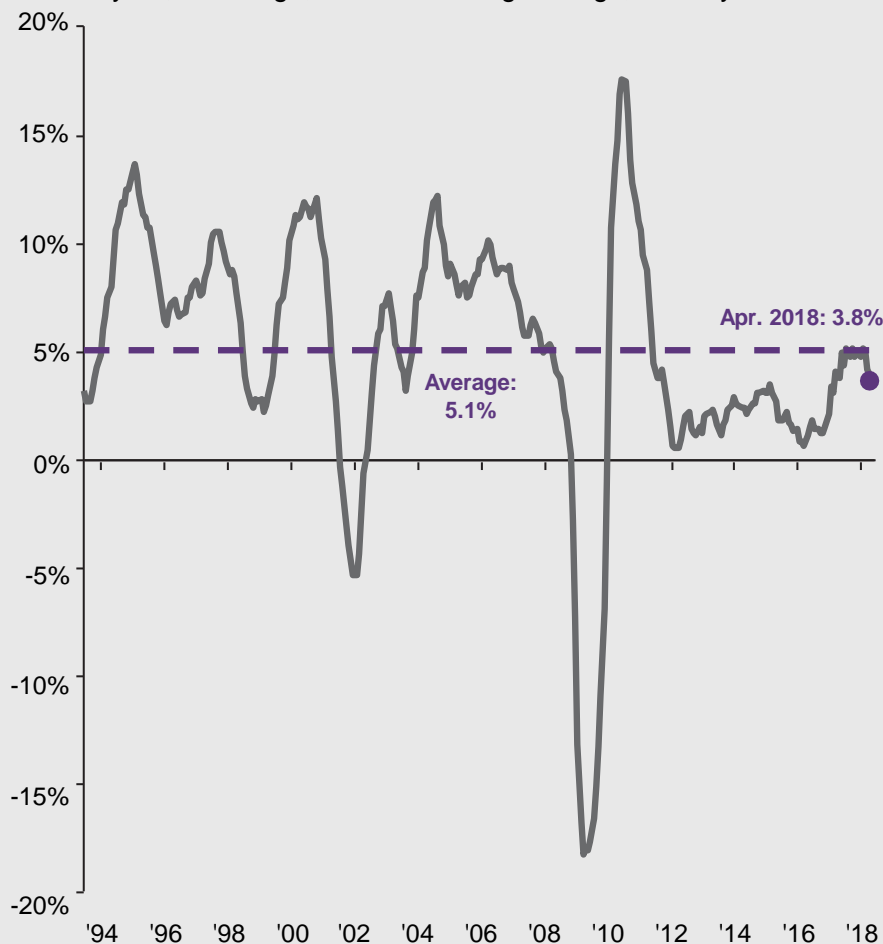


As of June 30, 2018

## Global Trade

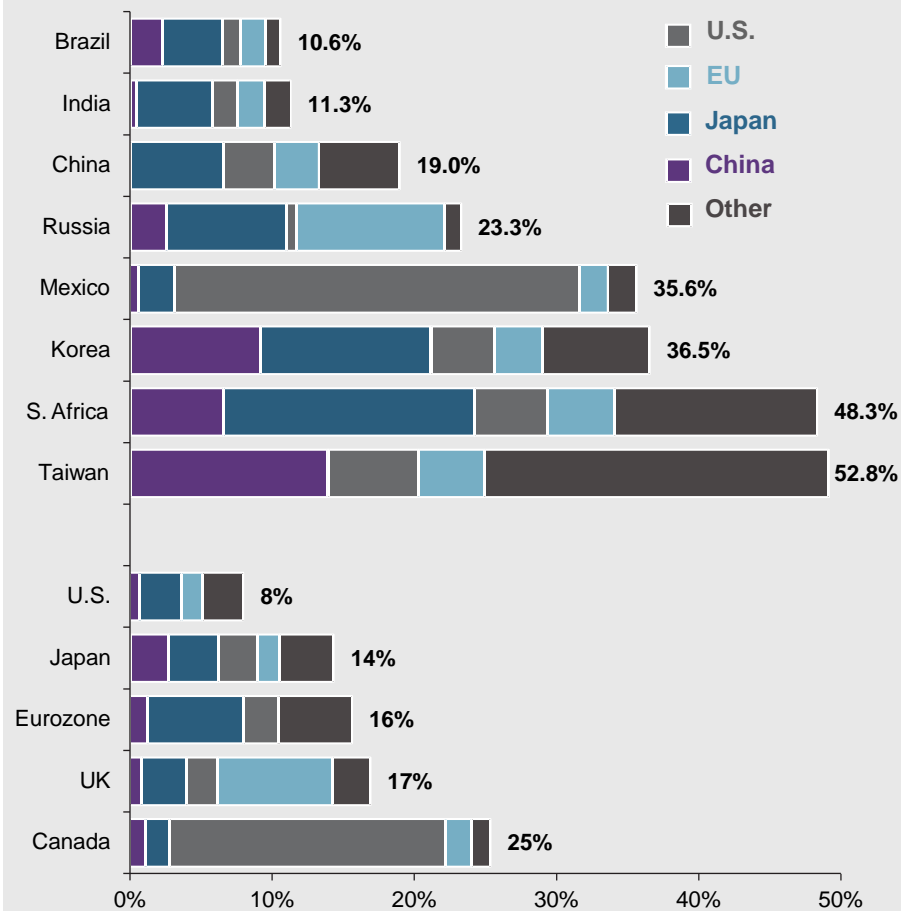
### World trade volume

Year-on-year, % change, 3-month moving average, monthly



### Exports as a share of GDP

Goods exports, 2017



**Agenda Item**  
UTIMCO Board of Directors Meeting  
July 26, 2018

**Agenda Item:** Real Estate Presentation

**Developed By:** Real Estate Team

**Presented By:** Lewis, Joshi

**Type of Item:** Information Item

**Description:** Mr. Lewis will lead the presentation on Real Estate, with Mr. Joshi leading a discussion on performance and portfolio metrics.

**Reference:** *Real Estate Portfolio Overview* presentation



# **The University of Texas/Texas A&M Investment Management Company**

---

## **Real Estate Portfolio Overview**

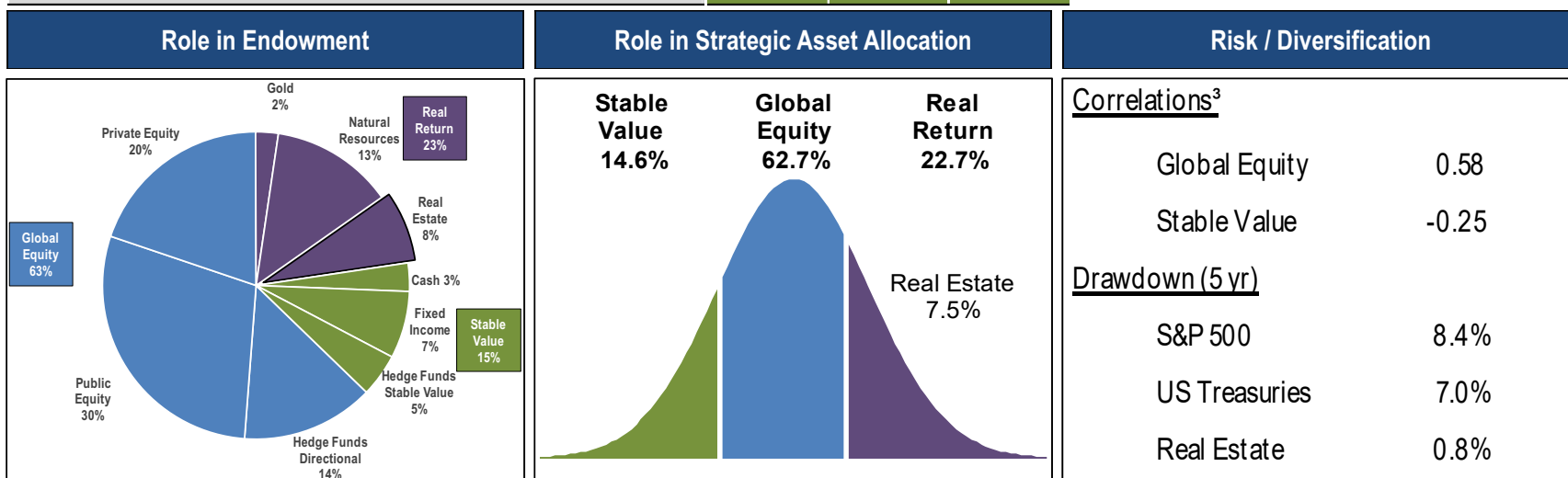
**Edward Lewis & Mukund Joshi - July 2018**

# UTIMCO Real Estate Portfolio Review



As of May 31, 2018

Private Real Estate Portfolio	NAV (\$MM)	% of Portfolio	Investment Results			Risk		Premier List Relationships
			1 Yr (TWR)	3 Yrs (TWR)	5 Yrs (TWR)	5 Yr SD	Sharpe Ratio	(\$ Millions)
<b>By Region:</b>								
US/Canada	\$1,239	52.4%	29.4%	20.2%	22.3%	8.8%	2.5	\$1,054
Global	\$519	22.0%	24.5%	15.2%	11.7%	5.8%	2.0	519
Europe	\$456	19.3%	17.5%	16.3%	18.9%	10.0%	1.9	390
Latin America	\$108	4.6%	10.8%	-	-	-	-	108
Asia-Pacific	\$41	1.7%	14.2%	14.5%	16.0%	13.2%	1.2	20
<b>Total Portfolio</b>	<b>\$2,363</b>	<b>100.0%</b>	<b>24.2%</b>	<b>17.3%</b>	<b>18.4%</b>	<b>6.0%</b>	<b>3.0</b>	<b>\$2,090</b>
<b>Benchmark<sup>1</sup></b>			12.0%	8.7%	11.8%			
Alpha			12.2%	8.6%	6.5%			
<b>Peer Rank<sup>2</sup></b>			1st	1st	1st			



Notes: (1) Preliminary Cambridge Associates Real Estate Opportunistic Benchmark as of 3/31/2018; (2) Trust Universe Comparison Services (TUCS) as of 3/31/2018; (3) Correlations reflect 1y returns over rolling quarters from 2008-2018

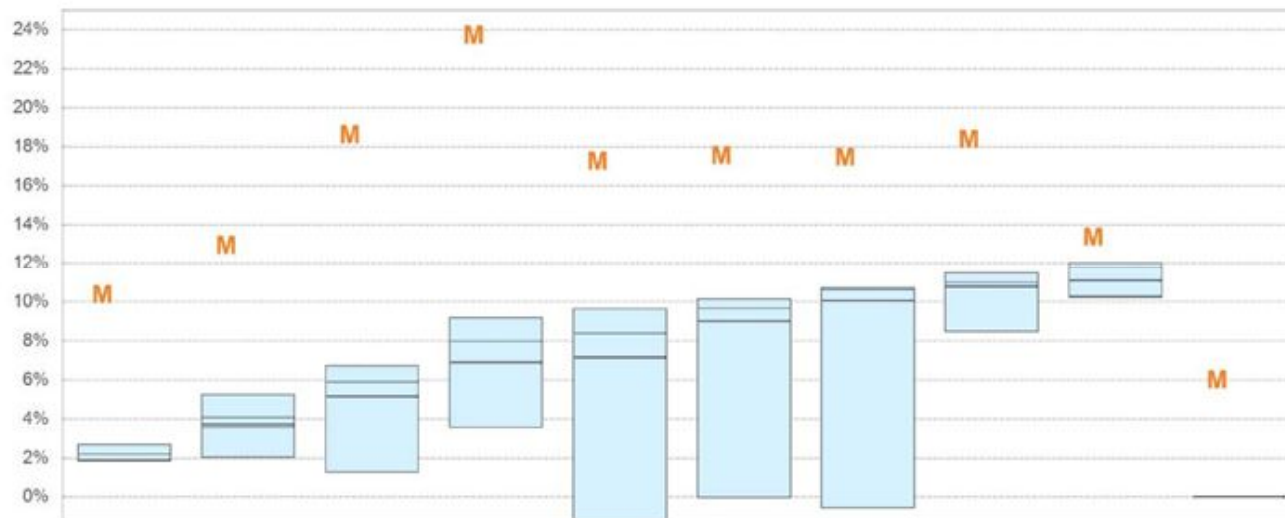
Real Estate | 2

# Trust Universe Comparison Service (TUCS)



## Trust Universe Comparison Service Performance Comparison

Total Returns of Private (Appraisal Based) Real Estate Portfolios  
Cumulative Periods Ending : March 31, 2018



Percentile Rankings	1 Qtr	2 Qtrs	3 Qtrs	1 Year	2 Years	3 Years	4 Years	5 Years	7 Years	10 Years
5th	2.69	5.24	6.72	9.20	9.65	10.16	10.74	11.50	12.02	-
25th	2.19	4.09	5.89	7.97	8.40	9.66	10.62	11.00	11.79	-
50th	1.90	3.70	5.16	6.89	7.16	9.02	10.06	10.79	11.10	-
75th	1.89	3.56	5.14	6.88	7.14	9.00	10.04	10.78	10.30	-
95th	1.84	2.04	1.29	3.58	-1.23	-0.01	-0.54	8.48	10.23	-
No. Of Obs	21	21	21	21	21	21	21	19	14	6
<b>M PUF Real Estate Pool</b>	10.24 (1)	12.79 (1)	18.49 (1)	23.59 (1)	17.11 (1)	17.41 (1)	17.32 (1)	18.26 (1)	13.24 (1)	5.86 (1)

Source: Wilshire Trust Universe Comparison Service (TUCS) as of March 31, 2018



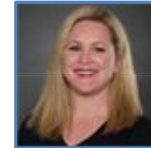
# Real Estate Team



**EDWARD LEWIS**  
 Managing Director  
 - 18 years total work experience / 13 years RE  
 - 7 years with UTIMCO  
 Education  
 - BS Civil Engineering, Texas A&M University  
 - MBA, University of Chicago  
 Personality  
 - Myers-Briggs: ESTJ  
 - Personal Constraints: Critic



**MALLORY GLUSBAND**  
 Associate, CFA  
 - 10 years total work experience / 10 years RE  
 - 3 years with UTIMCO  
 Education  
 - BSBA Finance, Washington University in St. Louis  
 Personality  
 - Myers-Briggs: ESTJ  
 - Personal Constraints: Ostrich / Critic



**TARA HAMILTON**  
 Investment Team Coordinator  
 - 15 years total work experience  
 - 1 year with UTIMCO  
 Education  
 - BA History, Eastern Washington University  
 Personality  
 - Myers-Briggs: ESTJ  
 - Personal Constraints: Iceberg / Bulldozer



**MUKUND JOSHI**  
 Director, CFA  
 - 16 years total work experience / 9 years RE  
 - 9 years with UTIMCO  
 Education  
 - BE Mechanical Engineering, Kuvempu University  
 - MS Electrical Engineering, University of Houston  
 - MBA, University of Texas at Austin  
 Personality  
 - Myers-Briggs: ENTP  
 - Personal Constraints: Critic



**SPENCER BRANCH**  
 Senior Analyst  
 - 7 years total work experience / 5 years RE  
 - 5 years with UTIMCO  
 Education  
 - BBA Finance, University of Texas at Austin  
 Personality  
 - Myers-Briggs: INFJ  
 - Personal Constraints: Critic / Ostrich / Turtle



**ADAM HARRISON**  
 Analyst  
 - 1 year total work experience / 1 year RE  
 - 1 year with UTIMCO  
 Education  
 - BBA Finance, University of Texas at Austin  
 Personality  
 - Myers-Briggs: ESTJ  
 - Personal Constraints: Critic / Turtle / Bulldozer

Notes: Personal Constraints with scores over 5 are provided

# 2018 Real Estate Total Alignment



Premier List	Critical Processes	Strategic Portfolio Review	Enhance Co-Investment Program	Deliver Results
<ul style="list-style-type: none"> <li>Finalize premier list with CEO (Q1 2018)                             <ul style="list-style-type: none"> <li>Tier ranking of existing managers</li> <li>Comparison to Townsend and GCM Grosvenor</li> </ul> </li> <li>Selectively identify new managers (Ongoing 2018)                             <ul style="list-style-type: none"> <li>Identify any gaps in real estate portfolio construction</li> <li>Agreement on initial prospects on premier list</li> </ul> </li> <li>Reverse Relationship Management (Ongoing 2018)                             <ul style="list-style-type: none"> <li>Preferred destination</li> <li>Growth of relationship – target \$500 million to \$1 billion of exposure over the next 10 years</li> </ul> </li> <li>Review use of secondary markets to dispose of assets, or managers, that are no longer part of the go-forward strategy (Q4 2018)</li> <li>Identify 2-3 firms that can be considered for Strategic (multi-asset class) Partnerships (work alongside Private Equity &amp; Natural Resources)</li> </ul>	<ul style="list-style-type: none"> <li>Finalize real estate critical processes (Q1 2018)                             <ul style="list-style-type: none"> <li>Create process maps on three most impactful processes</li> </ul> </li> <li>Enhance productivity (Q2 2018)                             <ul style="list-style-type: none"> <li>Develop baseline for time spent on critical processes</li> <li>Is there a cost associated with completing tasks?</li> <li>Target 20% improvement in efficiency</li> </ul> </li> <li>Eliminate bureaucracy (Q2 2018)                             <ul style="list-style-type: none"> <li>Identify committees where participation is not of added value</li> <li>Find processes that can be improved by eliminating unnecessary bureaucracy</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>Develop a long-term valuation framework for Real Estate (Q4 2018)</li> <li>Real estate strategy presentation (Q2 2018)                             <ul style="list-style-type: none"> <li>CEO full understanding of existing portfolio</li> <li>Review charge to only invest in “opportunistic” real estate. How will this strategy perform in latter part of cycle?</li> <li>Explore merits of additional risk diversification</li> </ul> </li> <li>Allocation                             <ul style="list-style-type: none"> <li>If portfolio changes are introduced, develop framework for additional allocations or reallocation over time</li> <li>Benchmark review if new strategies are introduced</li> </ul> </li> <li>Collaborate on ITF asset allocation review (Q3 2018)</li> </ul>	<ul style="list-style-type: none"> <li>Create framework to grow co-investment platform (Q1 2018)                             <ul style="list-style-type: none"> <li>Goal of creating dedicated co-investment rights or vehicles across most platinum/gold partners</li> </ul> </li> <li>UTIMCO Way (Q2 2018)                             <ul style="list-style-type: none"> <li>Collaborate on unified approach to underwriting co-investments</li> <li>Collaborate on developing a process map</li> </ul> </li> <li>Scale the program (Q4 2018)                             <ul style="list-style-type: none"> <li>Target co-investments which have greater impact on the returns of the endowment</li> </ul> </li> <li>Target long-term goal of 20% of NAV in attractive co-investments (Ongoing 2018)                             <ul style="list-style-type: none"> <li>Year-end goal of greater than 10% of real estate NAV in co-investments, without sacrificing quality</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>Increase the visibility of team (Ongoing 2018)                             <ul style="list-style-type: none"> <li>Active involvement by Associates in PREA and other industry organizations and conferences</li> <li>Director/Managing Director to each participate as a speaker or industry leader in one conference</li> <li>Each team member, besides Junior Analyst, to present an investment opportunity to the Internal Investment Committee</li> </ul> </li> <li>Individual Accountability (Ongoing 2018)                             <ul style="list-style-type: none"> <li>Each team member to bring the rest of the team on-board with at least one new investment idea</li> <li>Generate at least 100 bps of alpha over benchmarks</li> </ul> </li> </ul>



Drive deeper investment relationships with most important partners	Improves efficiency, reduces bureaucracy, and focuses on most impactful activities	Create optimal real estate portfolio meeting return and diversification objectives	Co-investments should generate 200 to 500 bps of additional return over funds	Enhances market perception of the team and its quality
--	--	--	---	--

Completed Initiatives
  Initiatives In-Progress



# Performance and Strategy

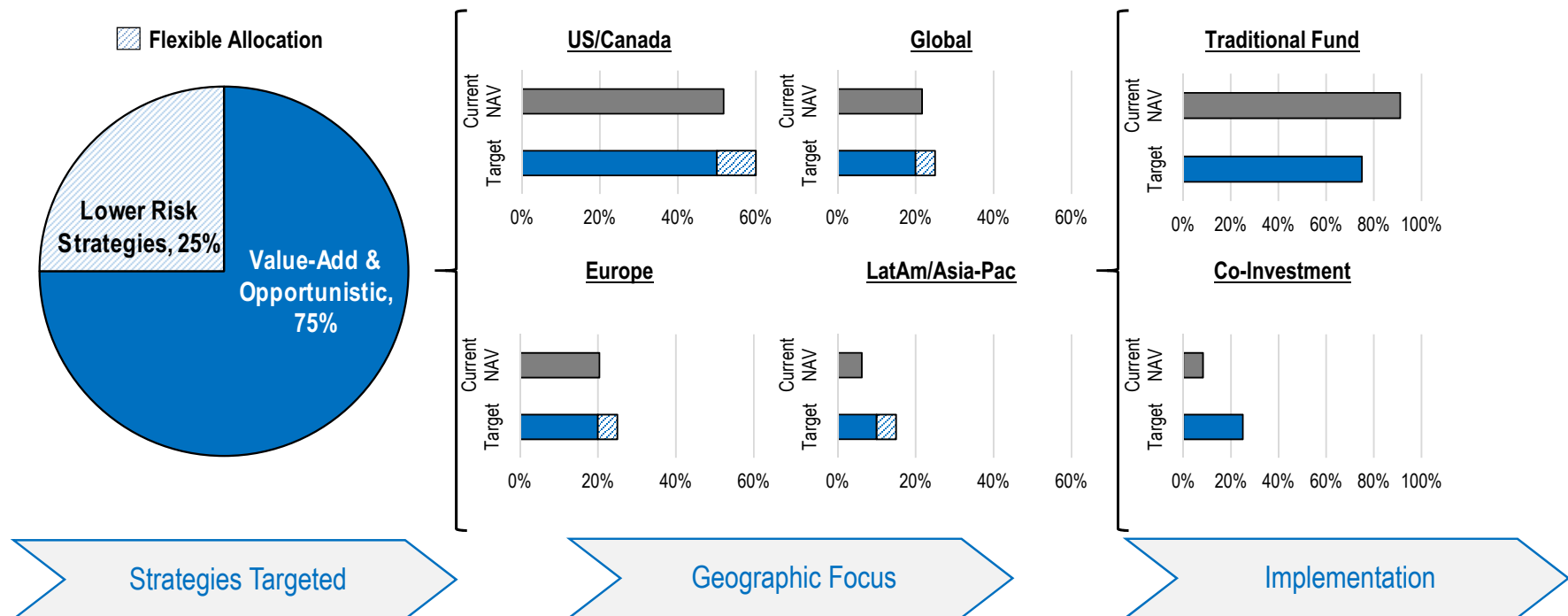
---

# Real Estate Strategy & Objectives



as of May 31, 2018

- Build a global portfolio of real estate holdings capable of generating **superior risk-adjusted returns** through a combination of current cash flow and value add initiatives at the property level while offering real return **diversification benefits** to other strategies
- Create a **developed markets focused portfolio** with structural long-term exposure to North America and Europe with a tactical exposure to developed Asia and emerging markets
- Consolidate capital** with premier list managers, **create partnerships** which drive co-investments and advantaged economics, identify emerging real estate investment talent, and **structure unique partnerships** providing additional governance and control on investments for the endowment

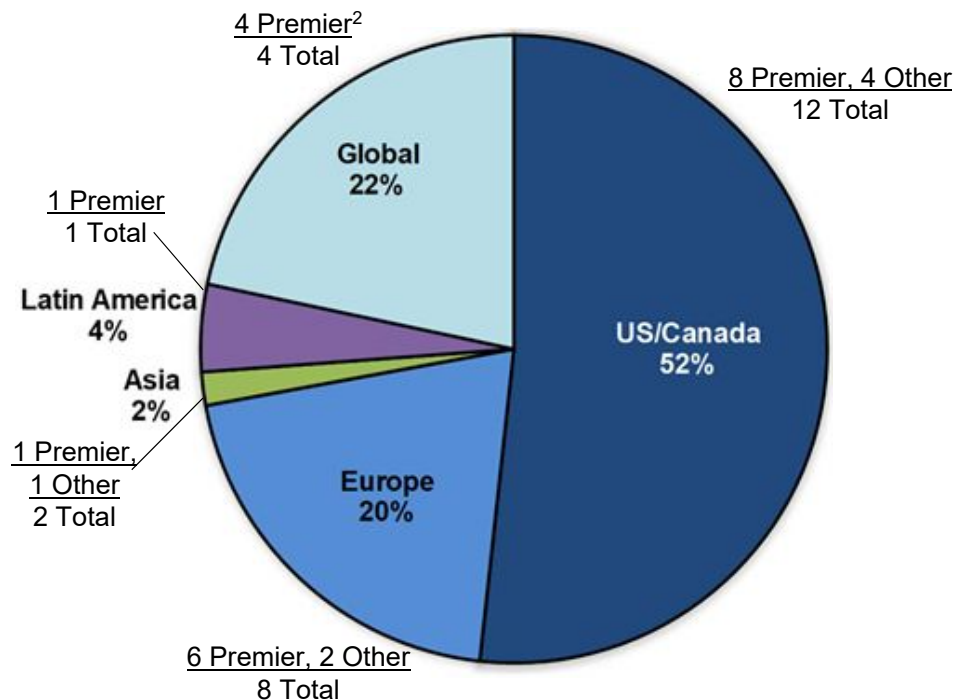


# Real Estate – Performance



NAV, Unfunded, and Investment Returns (TWR) as of 5/31/18 to reflect 3/31/18 private RE marks  
 Preliminary Cambridge Opp RE Benchmark as of 3/31/18, TUCS as of 3/31/18, FTSE EPRA/NAREIT Developed Net TRI  
 as of 5/31/18

**\$2,395M NAV; \$1,442M Unfunded**



Real Estate Portfolio (as of 5/31/2018)	NAV (\$M)	Investment Returns (TWR)			
		1 Year	3 Years	5 Years	7 Years
<b>Private Real Estate</b>	<b>2,363</b>	<b>24.2%</b>	<b>17.3%</b>	<b>18.4%</b>	<b>13.3%</b>
CA - Opp RE Index (Pooled Benchmark)	--	12.0%	8.7%	11.8%	11.0%
Value Add - CA Opp RE Index	--	12.2%	8.6%	6.5%	2.3%
TUCS Median	--	6.9%	9.0%	10.8%	11.1%
Value Add - TUCS	--	17.3%	8.3%	7.6%	2.2%
TUCS Percentile <sup>(1)</sup>	--	1.0%	1.0%	1.0%	1.0%
<b>Public Real Estate</b>	<b>32</b>	<b>13.8%</b>	<b>5.6%</b>	<b>5.9%</b>	<b>4.0%</b>
FTSE EPRA/NAREIT Developed Net TRI	--	4.9%	3.8%	5.1%	5.8%
Value Add - Public Benchmark	--	8.9%	1.8%	0.8%	-1.7%
<b>Total Real Estate Portfolio</b>	<b>2,395</b>	<b>24.1%</b>	<b>14.3%</b>	<b>14.1%</b>	<b>9.9%</b>

## Returns:

- Outperformance relative to the Cambridge RE Opportunistic benchmark over the one year period driven by investments in U.S. communications infrastructure investments and European real estate, particularly German residential
- Consistent outperformance relative to the Cambridge RE Opportunistic benchmark over all periods driven by strong performance across all regions and the vast majority of real estate partnerships
- Limited underperformance confined to a co-investment in a London based data center and an early fund investment in China

(1) TUCS Percentile with 1% being the best and 99% the worst  
 (2) Total number of managers equals 27 due to three investment vehicles spread across multiple geographical mandates; Total number of active managers equals 24 (17 Premier List, 7 Other)

# Performance Breakdown



Investment Returns (Net IRR) as of 3/31/18; Preliminary Cambridge Opp RE Benchmark, Preliminary Cambridge FoF Benchmark, NCREIF-ODCE, and FTSE EPRA/NAREIT Developed Net TRI as of 3/31/18

Private Real Estate Portfolio	NAV	1-Year Net IRR			3-Year Net IRR			5-Year Net IRR		
		UTIMCO	Global Bench	Alpha	UTIMCO	Global Bench	Alpha	UTIMCO	Global Bench	Alpha
<b>By Region:</b>										
US/Canada	\$1,239	30.7%			21.1%			23.0%		
Global	\$519	14.5%			14.5%			16.7%		
Europe	\$456	28.0%			15.9%			12.6%		
Latin America	\$108	10.8%			-			-		
Asia-Pacific	\$41	15.1%			15.1%			17.0%		
<b>Total Portfolio</b>	<b>\$2,363</b>	<b>25.1%</b>	<b>12.0%</b>	<b>13.1%</b>	<b>17.8%</b>	<b>8.7%</b>	<b>9.1%</b>	<b>18.7%</b>	<b>11.8%</b>	<b>6.8%</b>
Private Real Estate Portfolio	NAV	UTIMCO	Global Bench	Alpha	UTIMCO	Global Bench	Alpha	UTIMCO	Global Bench	Alpha
<b>By Structure:</b>										
Funds	\$2,152	25.5%			18.1%			19.0%		
Co-Investments	\$211	21.0%			15.2%			15.9%		
<b>Total Portfolio</b>	<b>\$2,363</b>	<b>25.1%</b>	<b>12.0%</b>	<b>13.1%</b>	<b>17.8%</b>	<b>8.7%</b>	<b>9.1%</b>	<b>18.7%</b>	<b>11.8%</b>	<b>6.8%</b>
<b>Private RE Returns (TWR)<sup>1</sup></b>		24.2%			17.3%			18.4%		
<b>Alpha Target - 100 bps (Over, In-Line, Under)</b>				<b>Over</b>			<b>Over</b>			<b>Over</b>
<b>Cambridge Associates - Private RE Opportunistic (Pooled)</b>			12.0%			8.7%			11.8%	
<b>FTSE EPRA/NAREIT Developed (Public RE)</b>			3.2%			1.5%			4.1%	
<b>NCREIF-ODCE (Private Core RE)</b>			7.1%			9.0%			10.4%	
<b>Cambridge Associates - Fund of Funds (Pooled)</b>			15.9%			10.2%			12.4%	

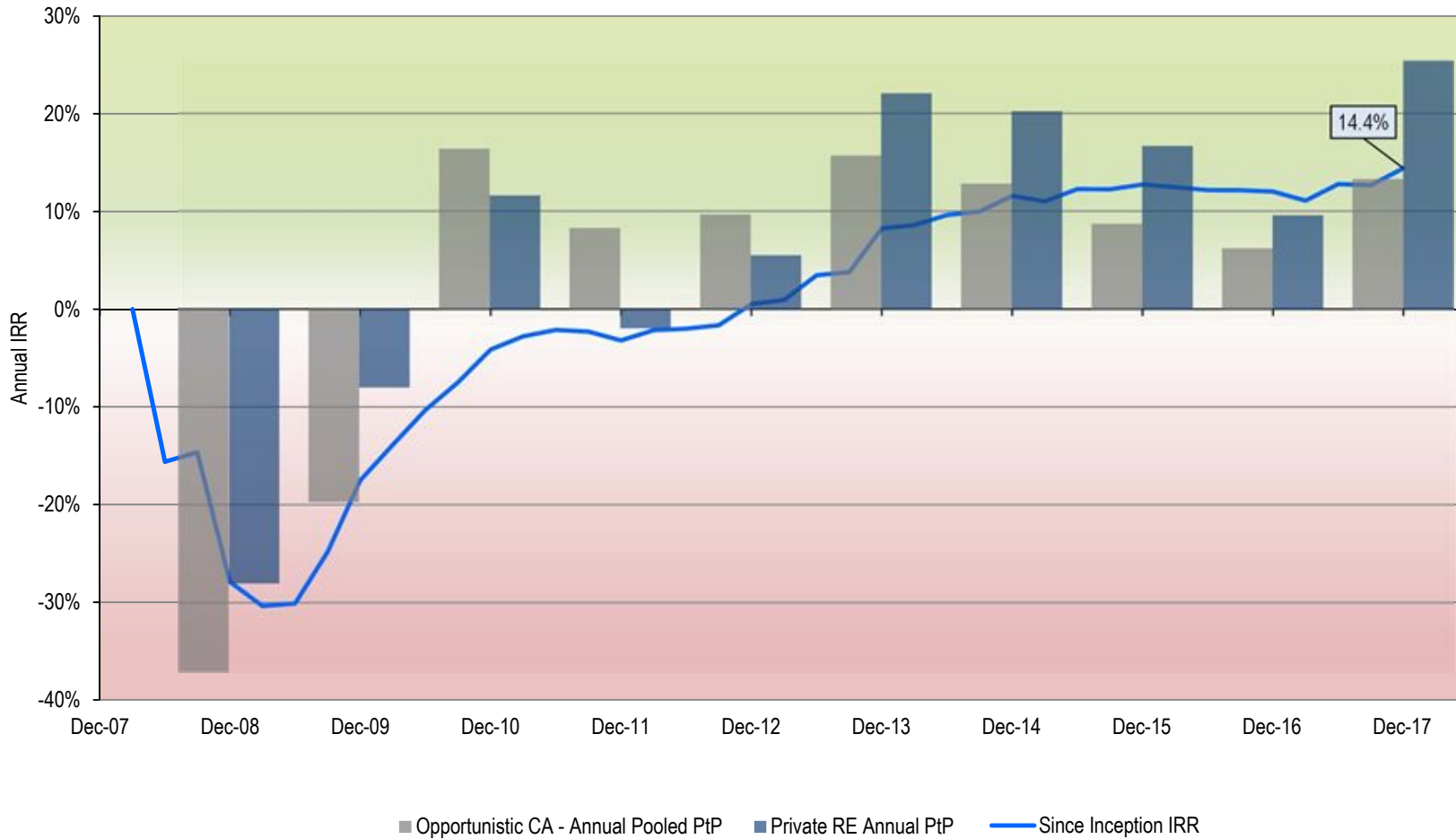
Source: Burgiss, Cambridge Associates

(1) Private RE Time Weighted Returns (TWR) sourced from Accounting Workpapers as of 5/31/18 to reflect 3/31/18 private RE marks

# Real Estate Performance Over Time



as of December 31, 2017



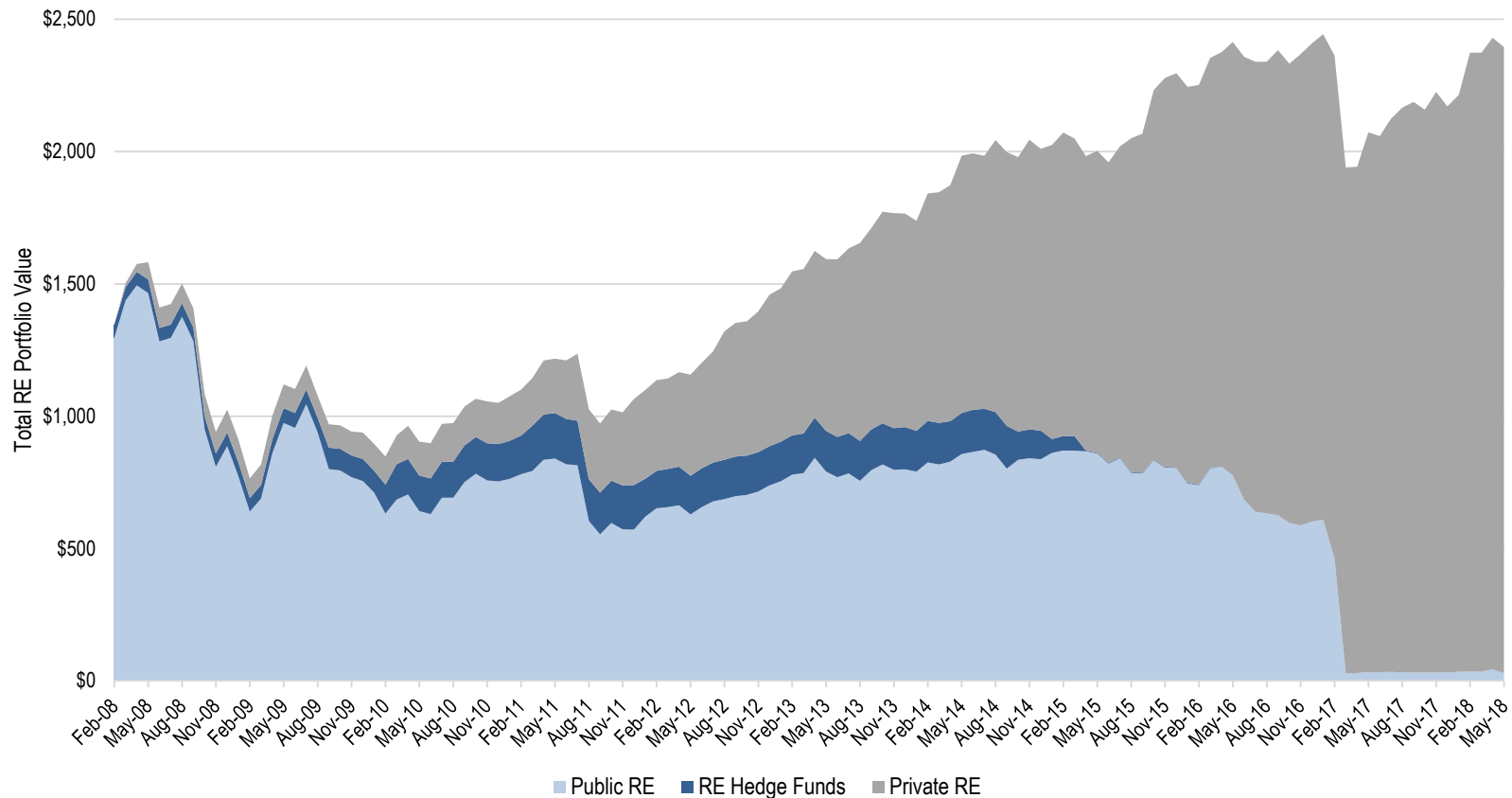
Source: Burgiss, Cambridge Associates Real Estate Opportunistic PtP Returns as of 12/31/17

# Real Estate Portfolio Since Inception



as of May 31, 2018 (values in \$ millions)

- Real Estate team has slowly replaced public REIT exposure with Private real estate investments which have provided higher returns with less price volatility



Source: BNY Mellon

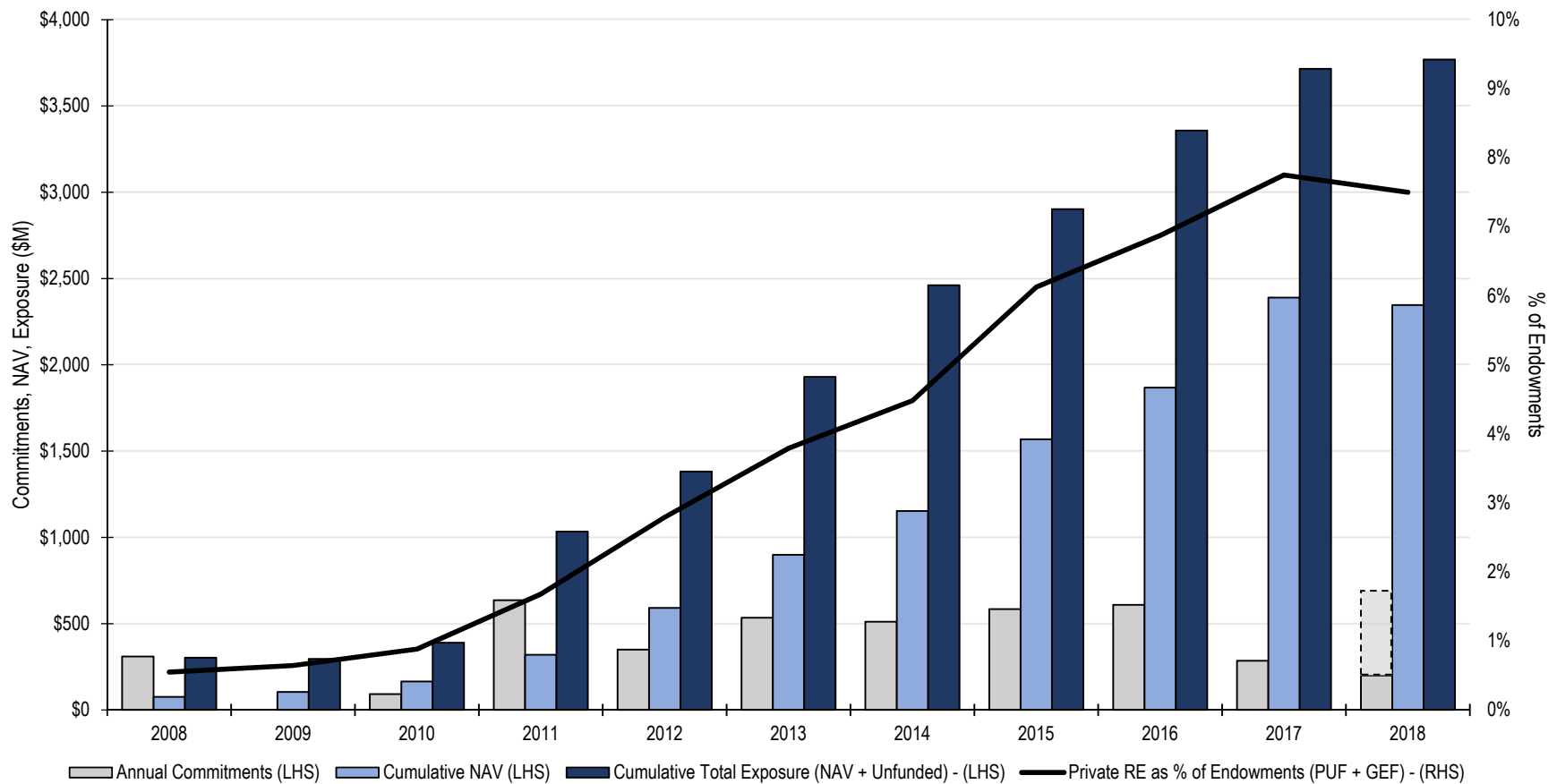


# Evolution of Private RE Portfolio



as of May 31, 2018 (values in \$ millions)

- Real estate represents 7.5% of the Endowments against a policy allocation of 7.0%



Source: Burgiss, BNY Mellon

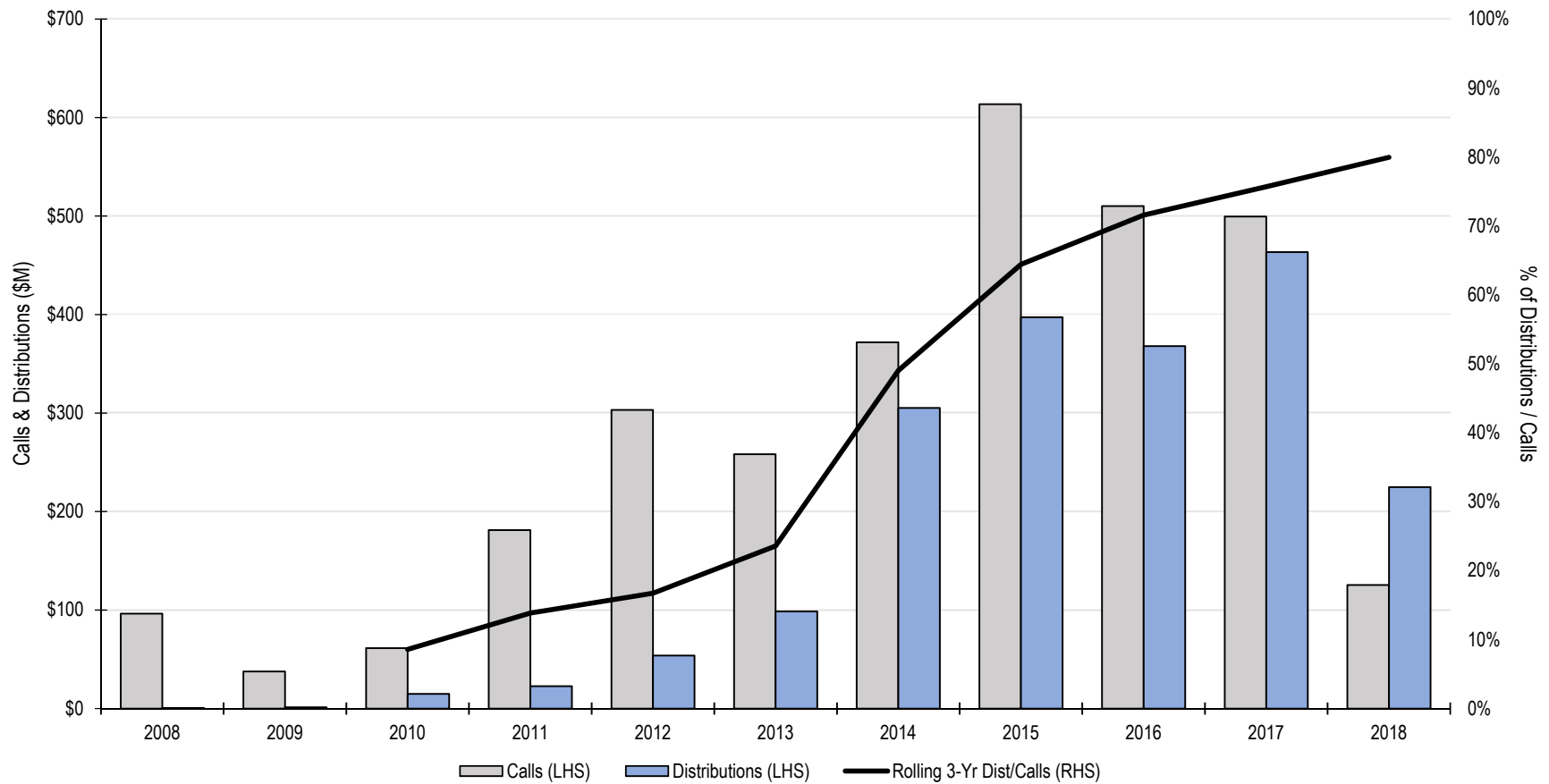
Real Estate | 12

# RE Privates – Calls & Distributions



as of May 31, 2018 (values in \$ millions)

- The real estate private portfolio is expecting to become self funding in 2018



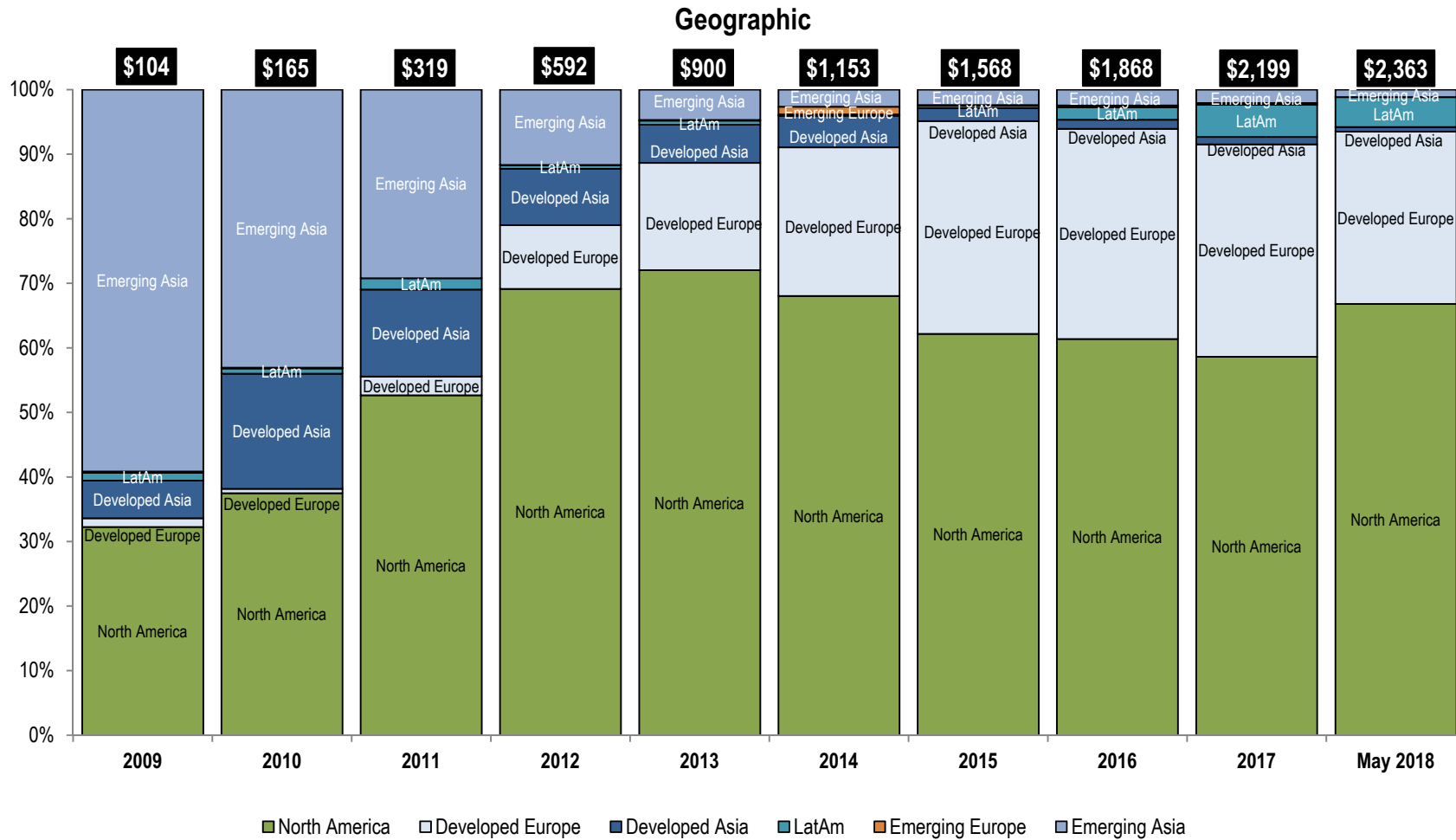
Source: Burgiss, BNY Mellon

Real Estate | 13

# Geographic NAV Since 2009



as of May 31, 2018 (values in \$ millions)



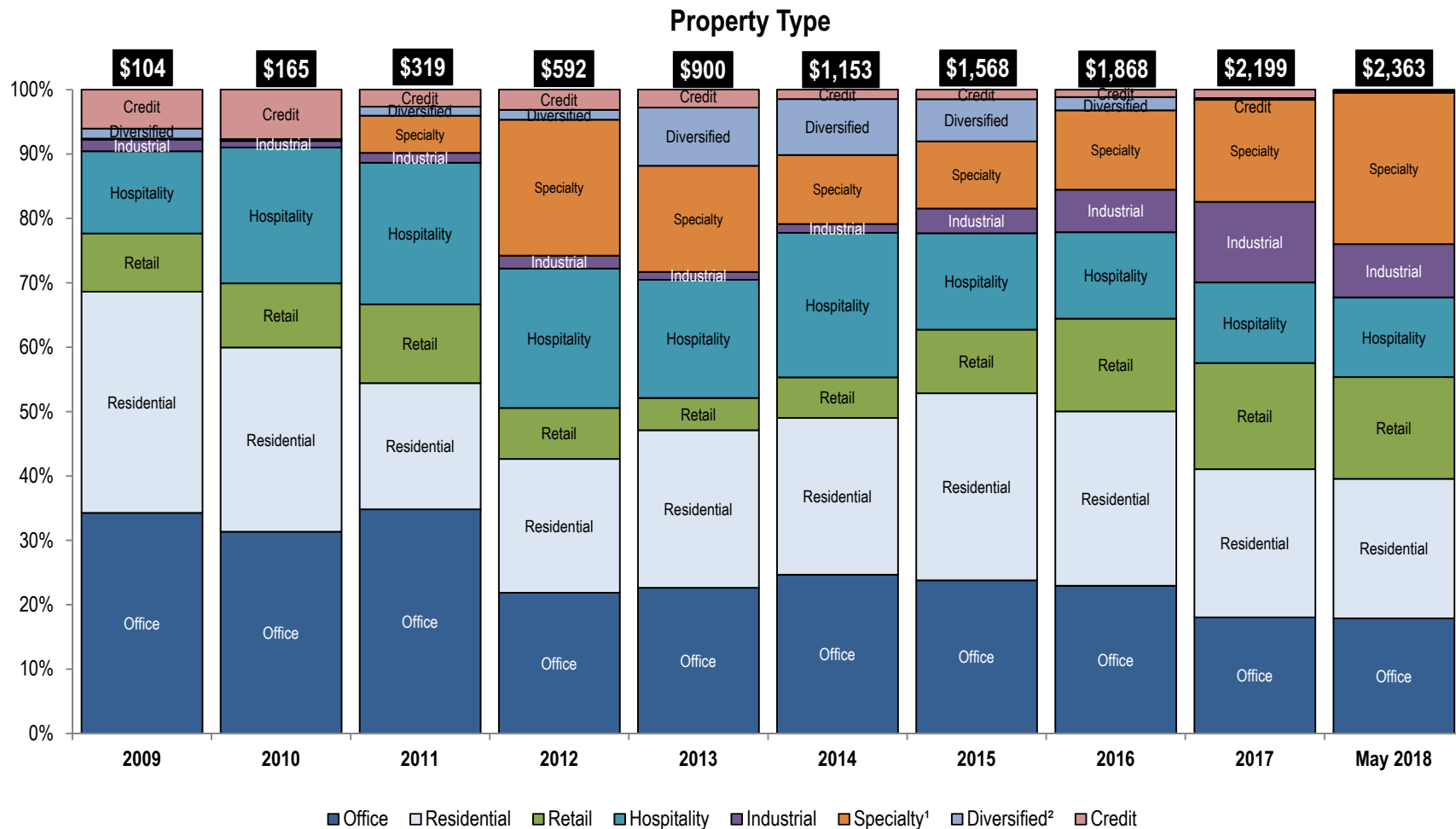
Notes: UTIMCO Private RE NAV

Real Estate | 14

# Property Type NAV Since 2009



as of May 31, 2018 (values in \$ millions)



Notes: UTIMCO Private RE NAV

(1) Specialty – Data Centers, Senior Living, Telecommunications, Parking, Private Airports, & Land

(2) Diversified – Mixed Use, Other, or otherwise undefined



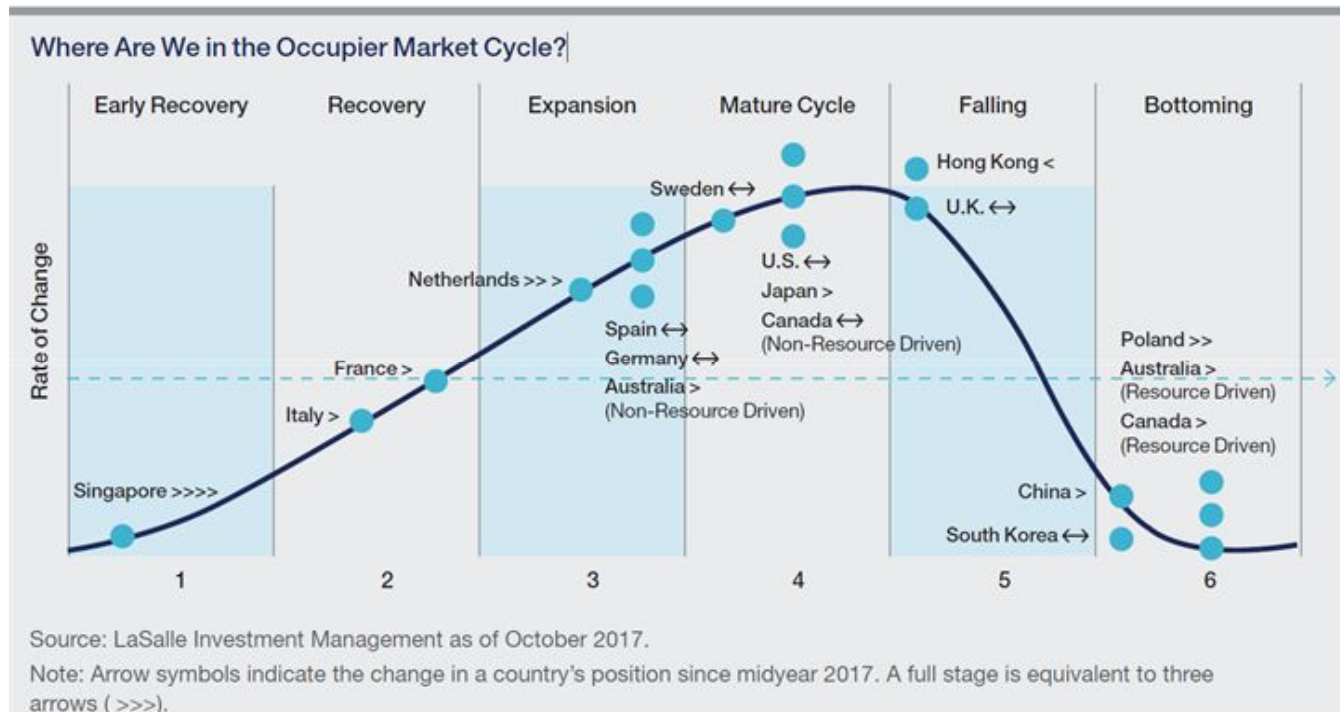
# Market Analysis

---

# Real Estate Market Cycle



- The Real Estate team believes we are transitioning, or have already, transitioned from the Expansion phase to the Mature stage of the cycle
- Property fundamentals remain strong but slowing rent growth, peaking valuations, and increases in supply are present
- Debt costs have increased only marginally as lenders have primarily borne the impact of rising reference rates



Source: LaSalle

# Market Conditions – Global Dashboard



- Few global indicators of real estate correction with historically low yields in Germany and high valuations of core real estate in UK showing danger indicators

**Global Real Estate Capital Market Dashboards**  
Largely Green Lights, with Some Cautionary Signals, Such as U.S. Transaction Volume

	Supply/Demand Imbalance	Debt/Equity Imbalance	Pricing Imbalance
U.S.	Yield curve recession indicator	Real estate transaction volume	Property vs. BAA bonds
	Leading indicators: recession	CMBS issuance levels	REIT price index vs. 6-month average
	Oversupply risk	CMBS spreads (AAA)	Public REIT vs. private values
Canada	Yield curve recession indicator	Real estate transaction volume	Property vs. BAA bonds
	Leading indicators: recession	Mortgage debt outstanding	REIT prices
	Oversupply risk	Cost of real estate debt	IPD capital growth
Australia	Oversupply risk	Cost of real estate debt	Property vs. gov't bonds
	Recession risk	Bank exposure to CRE loans	REITS vs. equities
	Corporate bond spreads	Banks equity price index	Real capital growth
Japan	Oversupply risk	Cost of real estate debt	Property vs. gov't bonds
	Recession risk	Bank exposure to CRE loans	REITS vs. equities
	Corporate bond spreads	Banks equity price index	IPD capital growth
Germany	Oversupply risk	LTVs	Property vs. gov't bonds
	Recession risk	Banking sector health check	REITS vs. equities
	Corporate bond spreads	Bank CDS spreads	Yield impact
France	Oversupply risk	LTVs	Property vs. gov't bonds
	Recession risk	Banking sector health check	REITS vs. equities
	Corporate bond spreads	Bank CDS spreads	IPD capital growth
U.K.	Oversupply risk	Retail funds capital flows	Property vs. gov't bonds
	Recession risk	Bank exposure to CRE loans	REITS vs. equities
	Corporate bond spreads	Bank CDS spreads	IPD capital growth

■ Positive ■ Caution ■ Danger

Each country has nine indicators; three in each group. The indicators are particular to each country, although some overlap and common themes are present.

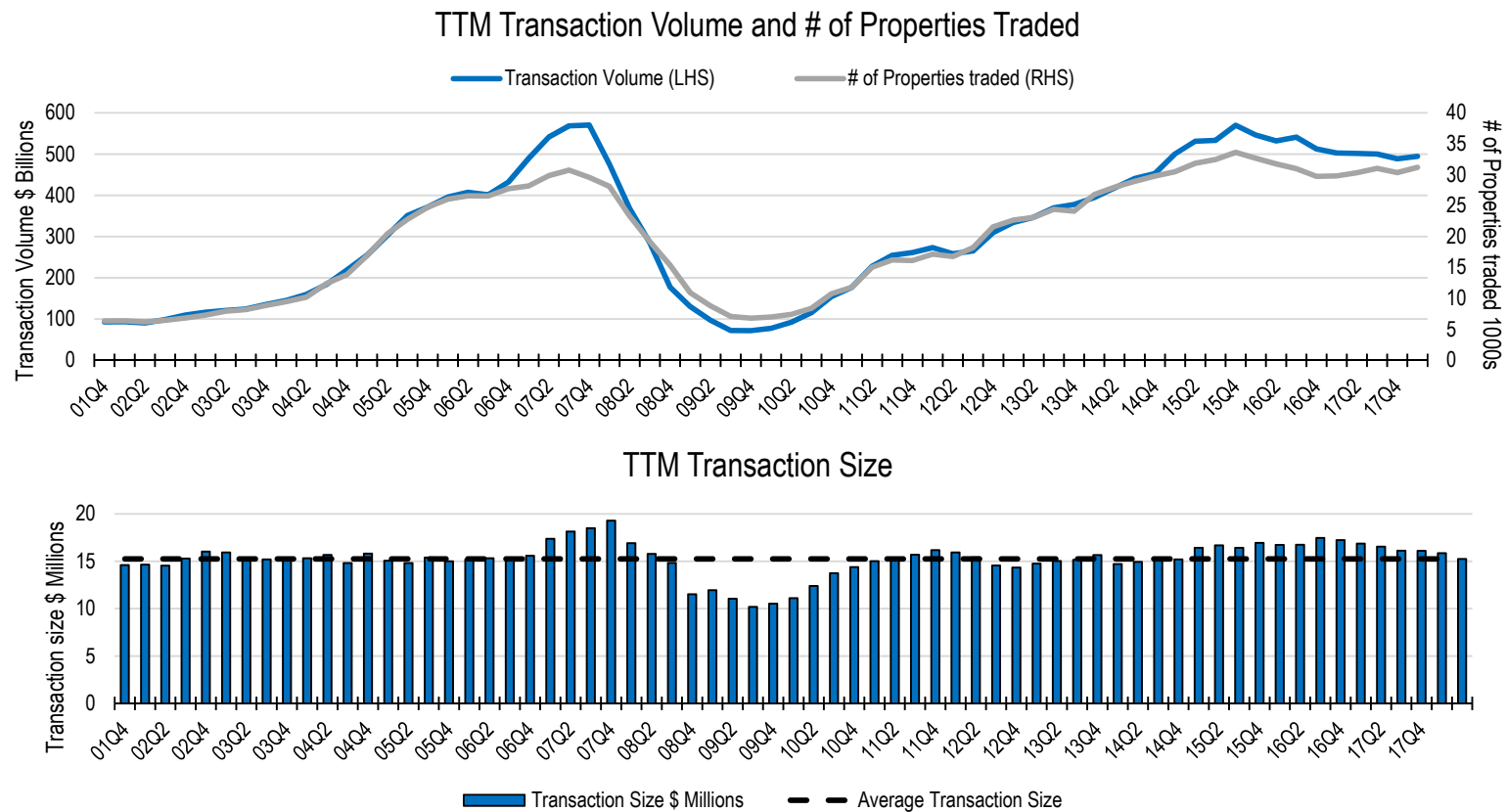
Source: LaSalle Investment Management as of October 2017.

Source: LaSalle

# U.S. Transaction Volume



- Transaction volume peaked in 2015, falling volumes can be indicative in widening of bid-ask spread
- Price per transaction close to long-term annual average



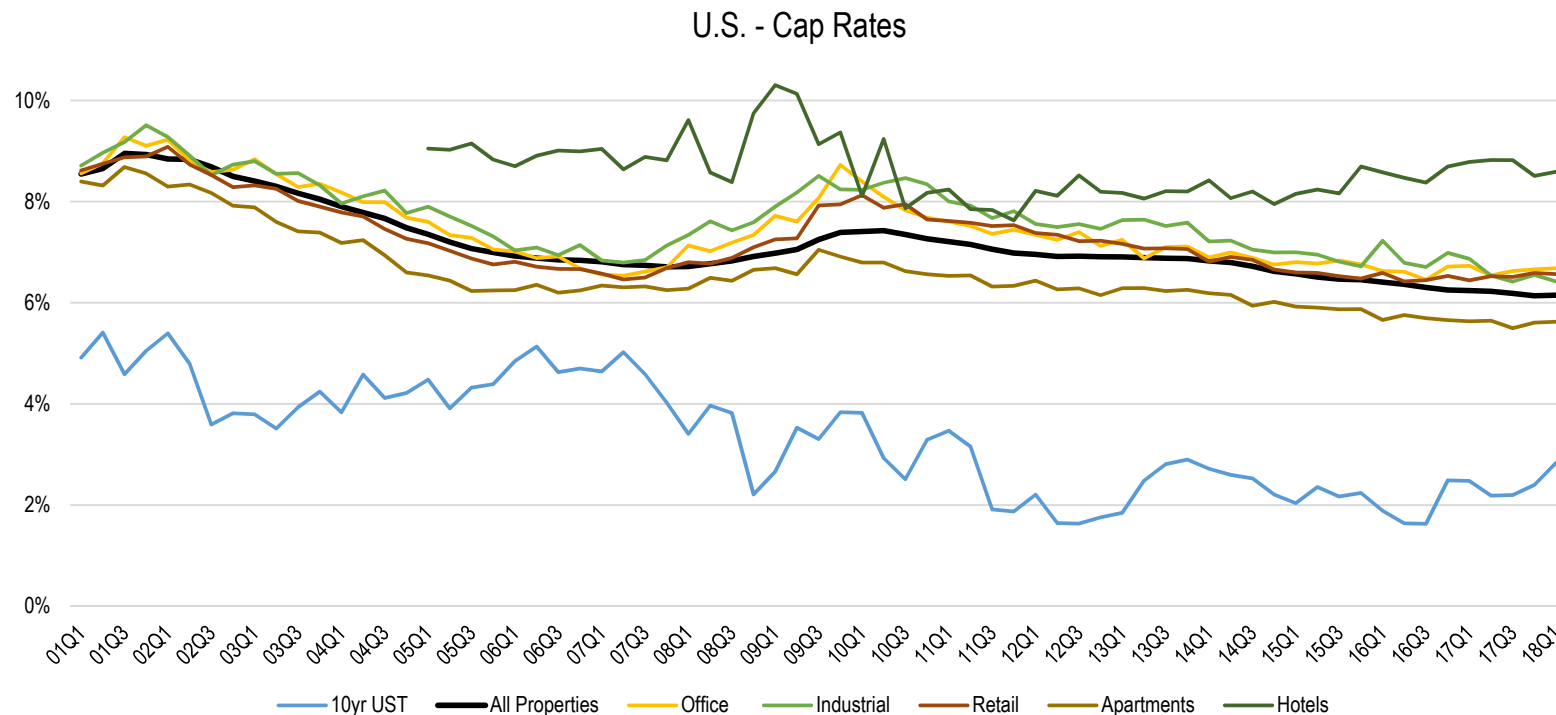
Source: Real Capital Analytics



# U.S. – Cap Rates



- Current cap rates for all properties (except Hotels) at lowest levels over past 17 years
- Current spread over 10 year US treasury is at or below long-term average for all property types with the widest spread for hotels
- Transactions are occurring at cap rates ~ 150 bps below levels seen post-GFC and ~300 bps below levels seen post the 2001 recession



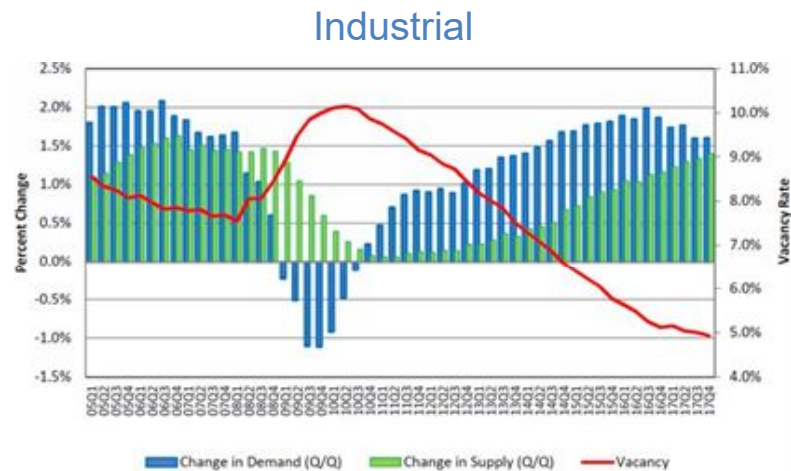
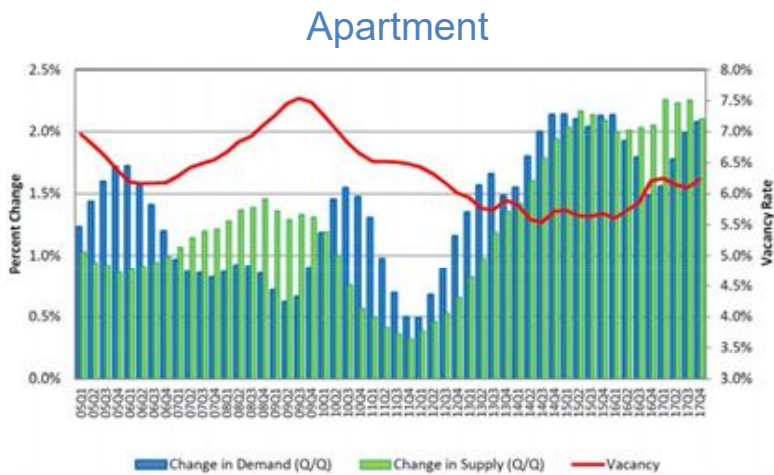
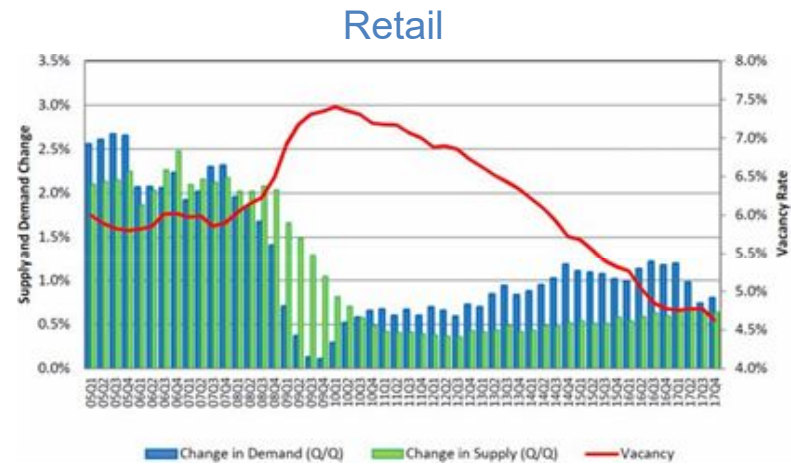
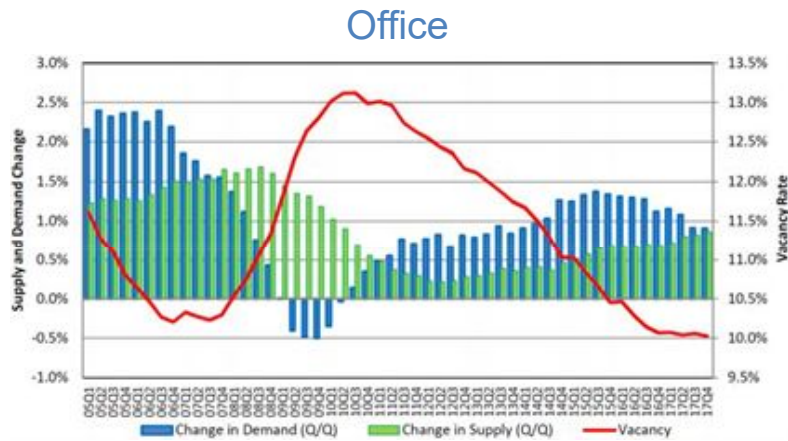
Source: Real Capital Analytics

Real Estate | 20

# U.S. – Supply / Demand



- Supply and demand close to equilibrium for all product types except Apartments where overbuilding is becoming a concern in select markets

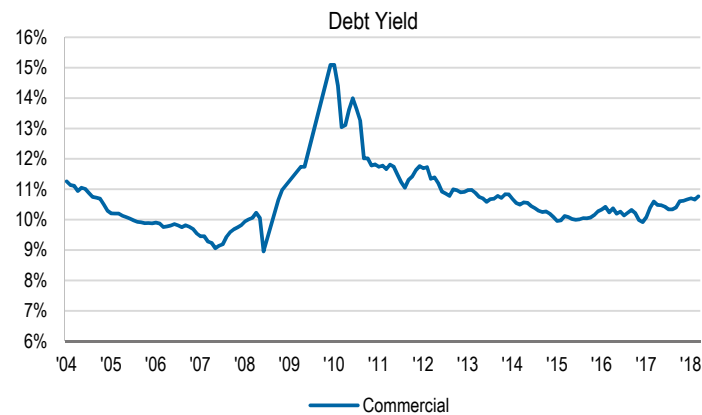
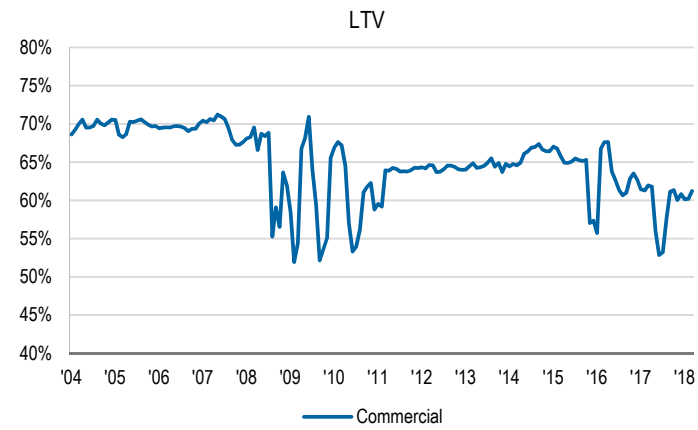
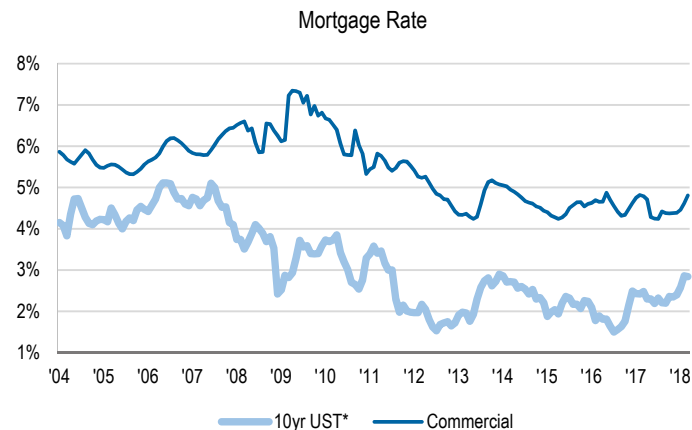


Source: PREA Compendium of Statistics

# U.S. – Debt Metrics



- Low mortgage rates driven by lower risk premium for real estate
- LTVs below pre-crisis levels and healthy debt coverage ratios indicative of conservative and functioning debt markets



Source: Real Capital Analytics

# U.S. Public Market Valuations



- REIT market prefers the niche sectors: All of the major property sectors except for industrial trade at discounts to net asset value
- Some niche sectors, by contrast, currently trade at premiums



Source: Green Street Advisors

Real Estate | 23

# Portfolio Positioning

---



- The Real Estate team expects **lower** go-forward returns during the **Mature** phase of the cycle and is increasingly focused on:
  - Value-add investments in **secular driven sectors** such as housing, seniors housing, and life sciences
  - Defense-oriented investments with **inflation-linked income** streams backed by conservative fixed rate debt with longer hold periods
  - Relative value opportunities in **select international markets** with lower valuations than the United States and higher income potential

# Current Top Priorities

---



- Analysis of real estate portfolio construction and risk diversification
- Increased focus on the co-investment program with a long-term allocation target of 25% of the portfolio
- Finalize real estate valuation dashboard tracking global developed real estate markets
- Finalize Premier List incorporating CEO and DCIO recommendations

**Agenda Item**  
UTIMCO Board of Directors Meeting  
July 26, 2018

**Agenda Item:** Report from Audit and Ethics Committee, including Discussion and Appropriate Action Related to Corporate Auditor

**Developed By:** Gonzalez, Moeller

**Presented By:** Handley

**Type of Item:** Action item related to Engaging Corporate Auditor; information item on other items

**Description:** The Audit and Ethics Committee (“Committee”) met on July 19, 2018. The Committee’s agenda included the following: (1) discussion and appropriate action related to minutes of the May 10, 2018 Meeting; (2) discussion and appropriate action related to engaging corporate external auditor; (3) update on compliance, reporting, and audit matters; (4) presentation of unaudited financial statements for the nine months ended May 31, 2018 for the Funds and the Corporation; and (5) discussion and appropriate action related to base salary for the Corporate Counsel and Chief Compliance Officer for the 2018-19 fiscal year.

**Discussion:** The Committee will report on its action related to the hiring of Deloitte and Touche LLP as the corporate auditor and request that the Board take appropriate action related to hiring Deloitte and Touch LLP as the corporate auditor. If approved by the Board, FY 2018 will be the 12th year that Deloitte serves as the Corporation’s independent auditor. Estimated fees for the FY 2018 audit services are \$43,500 plus out-of-pocket expenses. This is a \$1,500 increase over the FY 2017 fee.

The Committee will report on its action related to the Corporate Counsel and Chief Compliance Officer’s base salary for the 2018-2019 fiscal year.

The Committee reviewed the unaudited financial statements for the third quarter for the Funds and UTIMCO Corporation and the quarterly compliance reports. Ms. Moeller also provided a report on the Corporation’s capital budget vs actual FY18 as of May 31, 2018.

In addition to the routine update on compliance, reporting, and audit issues, Ms. Gonzalez reported on the UTIMCO Director Co-Investment Log. The Master Investment Management Services Agreement between UTIMCO and the Board of Regents of The University of Texas System requires UTIMCO to maintain a log of (1) all agreements or transactions between UTIMCO or a “UTIMCO entity” and a “Director entity” or an “Employee entity”, and (2) all investments in the private investments of a business entity in which a “Director” or “Employee” then owns a private investment, or is then co-investing, in the same business entity that must be reviewed annually by the UTIMCO Board of Directors and reported to the U.T. Board.

The Committee also reviewed the Contracts Report. In accordance with the Delegation of Authority Policy, UTIMCO reports any new contracts, leases or other commercial arrangements of \$100,000 or more to the UTIMCO Board at its next regularly scheduled meeting, and annually, all existing contracts, leases, or other commercial arrangements of \$100,000 or more.

**Agenda Item**  
UTIMCO Board of Directors Meeting  
July 26, 2018

**Recommendation:** Committee will request appropriate action related to the hiring of Deloitte & Touche LLP as the corporate auditor.

**Reference:** Deloitte & Touche LLP Engagement Letter  
Quarterly Compliance Reports  
Contracts Report



**RESOLUTION RELATED TO INDEPENDENT AUDITOR  
FOR THE CORPORATION**

RESOLVED, that the firm of Deloitte & Touche LLP be, and is hereby, engaged as the independent auditor of the Corporation for the year ended August 31, 2018.



Deloitte & Touche LLP  
500 West 2nd Street  
Suite 1600  
Austin, TX 78701  
USA  
Tel: +1 512 691 2300  
Fax: +1 512 708 1035  
www.deloitte.com

July 5, 2018

Ms. Joan Moeller  
Senior Managing Director – Accounting, Finance and Administration  
The University of Texas/Texas A&M Investment Management Company  
210 West 7<sup>th</sup> Street, Suite 1700  
Austin, TX 78701

Dear Ms. Moeller:

Deloitte & Touche LLP (“D&T” or “we” or “us”) is pleased to serve as independent auditors for The University of Texas/Texas A&M Investment Management Company (“UTIMCO”), (the “Company” or “you” or “your”). Mr. Robert Cowley will be responsible for the services that we perform for the Company hereunder.

In addition to the audit services we are engaged to provide under this engagement letter, we would also be pleased to assist the Company on issues as they arise throughout the year. Hence, we hope that you will call Mr. Cowley whenever you believe D&T can be of assistance.

The services to be performed by D&T pursuant to this engagement are subject to the terms and conditions set forth herein and in the accompanying appendices. Such terms and conditions shall be effective as of the date of the commencement of such services.

## **Audit of Financial Statements**

Our engagement is to perform an audit in accordance with auditing standards generally accepted in the United States of America (“generally accepted auditing standards”). The objective of an audit conducted in accordance with generally accepted auditing standards is to express an opinion on whether the Company’s financial statements for the year ending August 31, 2018, are presented fairly, in all material respects, in accordance with accounting principles generally accepted in the United States of America (“generally accepted accounting principles”).

Appendix A contains a description of the auditor’s responsibilities and the scope of an audit in accordance with generally accepted auditing standards.

## **D&T Reports**

We expect to issue a written report upon the completion of our audit. Our ability to express an opinion or to issue any report as a result of this engagement and the wording thereof will, of course, be dependent on the facts and circumstances at the date of our report. If, for any reason, we are unable to complete our audit or are unable to form or have not formed an opinion, we may decline to express an opinion or decline to issue any report as a result of this engagement. If we are unable to complete our audit, or if any report to be issued by D&T as a result of this engagement requires modification, the reasons for this will be discussed with the Audit and Ethics Committee of the UTIMCO Board of Directors (“Audit and Ethics Committee”) and the Company’s management.

## **Management’s Responsibilities**

Appendix B describes management’s responsibilities.

## Communications with the Audit and Ethics Committee

Appendix C describes various matters that we are required by generally accepted auditing standards to communicate with the Audit and Ethics Committee and management.

### Fees

We estimate that our fees for this engagement will be \$43,500, plus expenses. Based on the anticipated timing of the work, our fees will be billed approximately as follows:

Invoice Date	Amount
September, 2018	\$20,000
November, 2018	\$23,500

We anticipate sending invoices according to the above schedule, and payments are due 30 days from the date of the invoice. Engagement-related expenses, such as travel, lodging, transportation, meals, telephone, typing, technology- and administrative-related charges will be billed in addition to the fees and will be stated separately on the invoices.

Our continued service on this engagement is dependent upon payment of our invoices in accordance with these terms. Our estimated fees are based on certain assumptions, including (1) timely and accurate completion of the requested entity participation schedules and additional supporting information, (2) no inefficiencies during the audit process or changes in scope caused by events that are beyond our control, (3) the effectiveness of internal control over financial reporting throughout the period under audit, (4) a minimal level of audit adjustments (recorded or unrecorded), and (5) no changes to the timing or extent of our work plans. We will notify you promptly of any circumstances we encounter that could significantly affect our estimate and discuss with you any additional fees, as necessary.

### Inclusion of D&T Reports or References to D&T in Other Documents or Electronic Sites

If the Company intends to publish or otherwise reproduce in any document any report issued as a result of this engagement, or otherwise make reference to D&T in a document that contains other information in addition to the audited financial statements (e.g., in a periodic filing with a regulator, in a debt or equity offering circular, or in a private placement memorandum), thereby associating D&T with such document, the Company agrees that its management will provide D&T with a draft of the document to read and obtain our approval for the inclusion or incorporation by reference of any of our reports, or the reference to D&T, in such document before the document is printed and distributed. The inclusion or incorporation by reference of any of our reports in any such document would constitute the reissuance of such reports. The Company also agrees that its management will notify us and obtain our approval prior to including any of our reports on an electronic site.

Our engagement to perform the services described herein does not constitute our agreement to be associated with any such documents published or reproduced by or on behalf of the Company. Any request by the Company to reissue any report issued as a result of this engagement, to consent to any such report's inclusion or incorporation by reference in an offering or other document, or to agree to any such report's inclusion on an electronic site will be considered based on the facts and circumstances existing at the time of such request. The estimated fees outlined herein do not include any procedures that would need to be performed in connection with any such request. Should D&T agree to perform such procedures, fees for such procedures would be subject to the mutual agreement of the Company and D&T.

\* \* \* \* \*

The parties acknowledge and agree that D&T is being engaged under this engagement letter to provide only the services described herein. Should the Company or the Audit and Ethics Committee request, and should D&T agree to provide, services (including audit services) beyond those described herein, such services will constitute a separate engagement and will be governed by a separate engagement letter.

This engagement letter, including Appendices A through E attached hereto and made a part hereof, constitutes the entire agreement between the parties with respect to this engagement and supersedes any other prior or contemporaneous agreements or understandings between the parties, whether written or oral, relating to this engagement.

If the above terms are acceptable and the services described are in accordance with your understanding, please sign the copy of this engagement letter in the space provided and return it to us.

Yours truly,



Accepted and agreed to by  
The University of Texas/Texas A&M Investment Management Company:

By: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

cc: The Audit and Ethics Committee of The University of Texas/Texas A&M Investment Management Company

## APPENDIX A

### AUDITOR'S RESPONSIBILITIES AND SCOPE OF AN AUDIT IN ACCORDANCE WITH GENERALLY ACCEPTED AUDITING STANDARDS

This Appendix A is part of the engagement letter dated July 5, 2018, between Deloitte & Touche LLP and The University of Texas/Texas A&M Investment Management Company.

#### Auditor's Responsibilities

Our responsibilities under generally accepted auditing standards include forming and expressing an opinion about whether the financial statements that have been prepared by management with the oversight of the Audit and Ethics Committee are presented fairly, in all material respects, in accordance with generally accepted accounting principles. The audit of the financial statements does not relieve management or the Audit and Ethics Committee of their responsibilities.

#### Scope of an Audit

Generally accepted auditing standards require that we plan and perform the audit to obtain reasonable, rather than absolute, assurance about whether the financial statements as a whole are free from material misstatement, whether caused by fraud or error. However, because of the inherent limitations of an audit, together with the inherent limitations of internal control, an unavoidable risk exists that some material misstatements may not be detected, even though the audit is properly planned and performed in accordance with generally accepted auditing standards. We have no responsibility to plan and perform the audit to obtain reasonable assurance that misstatements, whether caused by fraud or error, that are not material to the financial statements as a whole are detected.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on our judgment, including the assessment of the risks of material misstatement of the financial statements, whether caused by fraud or error. In making those risk assessments, we consider internal control relevant to the Company's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

## APPENDIX B

### MANAGEMENT'S RESPONSIBILITIES

This Appendix B is part of the engagement letter dated July 5, 2018, between Deloitte & Touche LLP and The University of Texas/Texas A&M Investment Management Company.

#### Financial Statements

Management is responsible for the preparation, fair presentation, and overall accuracy of the financial statements in accordance with generally accepted accounting principles. In this regard, management has the responsibility for, among other things:

- Selecting and applying the accounting policies
- Designing, implementing, and maintaining effective internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error
- Identifying and ensuring that the Company complies with the laws and regulations applicable to its activities and informing us of all instances of identified or suspected noncompliance with such laws or regulations
- Providing us with (1) access to all information of which management is aware that is relevant to the preparation and fair presentation of the financial statements, such as records, documentation, and other matters, (2) additional information that we may request from management for the purpose of our audit, and (3) unrestricted access to personnel within the Company from whom we determine it necessary to obtain audit evidence.

#### Management's Representations

We will make specific inquiries of the Company's management about the representations embodied in the financial statements. In addition, we will request that management provide us with the written representations the Company is required to provide to its independent auditors under generally accepted auditing standards. The responses to those inquiries and the written representations of management are part of the evidential matter that D&T will rely on in forming its opinion on the Company's financial statements. Because of the importance of management's representations, the Company agrees to release and indemnify D&T, its subcontractors, and their respective personnel from all claims, liabilities, and expenses relating to our services under this engagement letter attributable to any misrepresentation by management.

#### Independence Matters

In connection with our engagement, D&T, management, and the Audit and Ethics Committee will assume certain roles and responsibilities in an effort to assist D&T in maintaining independence. D&T will communicate to its partners, principals, and employees that the Company is an attest client. Management of the Company will ensure that the Company, together with its subsidiaries and other entities that comprise the Company for purposes of the consolidated financial statements, has policies and procedures in place for the purpose of ensuring that neither the Company nor any such subsidiary or other entity will act to engage D&T or accept from D&T any service that under American Institute of Certified Public Accountants (AICPA) or other applicable rules would impair D&T's independence. All potential services are to be discussed with Mr. Cowley.

In connection with the foregoing paragraph, the Company agrees to furnish to D&T and keep D&T updated with respect to a corporate tree that identifies the legal names of the Company's affiliates, as defined in AICPA *Code of Professional Conduct* Interpretation No. 101-18 (e.g., parents, subsidiaries, investors, or investees) ("Company Affiliates"), together with the ownership relationship among such entities. Such information will be maintained in a database accessible by D&T in connection with their compliance with AICPA or other applicable independence rules.

Management will coordinate with D&T to ensure that D&T's independence is not impaired by hiring former or current D&T partners, principals, or professional employees in a key position, as defined in the AICPA *Code of Professional Conduct*. Management of the Company will ensure that the Company, together with its subsidiaries and other entities that comprise the Company for purposes of the consolidated financial statements, also has policies and procedures in place for purposes of ensuring that D&T's independence will not be impaired by hiring a former or current D&T partner, principal, or professional employee in a key position that would cause a violation of the AICPA *Code of Professional Conduct* or other applicable independence rules. Any employment opportunities with the Company for a former or current D&T partner, principal, or professional employee should be discussed with Mr. Cowley before entering into substantive employment conversations with the former or current D&T partner, principal, or professional employee.

For purposes of the preceding section entitled "Independence Matters", "D&T" shall mean Deloitte & Touche LLP and its subsidiaries; Deloitte Touche Tohmatsu Limited, its member firms, the affiliates of Deloitte & Touche LLP, Deloitte Touche Tohmatsu Limited and its member firms; and, in all cases, any successor or assignee.

## APPENDIX C

### COMMUNICATIONS WITH THE AUDIT AND ETHICS COMMITTEE

This Appendix C is part of the engagement letter dated July 5, 2018, between Deloitte & Touche LLP and The University of Texas/Texas A&M Investment Management Company.

We are responsible for communicating with the Audit and Ethics Committee significant matters related to the audit that are, in our professional judgment, relevant to the responsibilities of the Audit and Ethics Committee in overseeing the financial reporting process.

In connection with the foregoing, we will communicate to the Audit and Ethics Committee any fraud we identify or suspect that involves (1) management, (2) employees of the Company who have significant roles in internal control, or (3) other employees of the Company when the fraud results in a material misstatement of the financial statements. In addition, we will communicate with the Audit and Ethics Committee any other matters related to fraud that are, in our professional judgment, relevant to their responsibilities. We will communicate to management any fraud perpetrated by lower-level employees of which we become aware that does not result in a material misstatement of the financial statements; however, we will not communicate such matters to the Audit and Ethics Committee, unless otherwise directed by the Audit and Ethics Committee.

We will also communicate to the Audit and Ethics Committee matters involving the Company's noncompliance with laws and regulations that have come to our attention during the course of our audit, other than when such matters are clearly inconsequential.

We will also communicate in writing to management and the Audit and Ethics Committee any significant deficiencies or material weaknesses in internal control (as defined in generally accepted auditing standards) that we have identified during the audit, including those that were remediated during the audit.

Generally accepted auditing standards do not require us to design procedures for the purpose of identifying other matters to communicate with the Audit and Ethics Committee. However, we will communicate to the Audit and Ethics Committee matters required by AICPA AU-C 260, *The Auditor's Communication with Those Charged with Governance*.

#### **Texas State Auditor's Office**

D&T agrees that the Texas State Auditor's Office or any authorized regulatory representative of the State of Texas (the "State") shall at any time have access to and the rights to examine and audit any pertinent books, documents, working papers, and records of D&T relating to this engagement letter, and to excerpt and transcribe any pertinent books, documents, working papers, and records of D&T.

If photocopies of pertinent books, documents, working papers, and records of D&T are requested, D&T will send a letter to the Texas State Auditor's Office or regulatory representative of the State similar (but not identical) in form to that in the American Institute of Certified Public Accountants AU-C Section 9230, and such letter will be acknowledged by the Texas State Auditor's Office or regulatory representative of the State prior to the provision of any photocopies by D&T. Any photocopies of pertinent books, documents, working papers, and records of D&T will be identified as "confidential treatment requested by Deloitte & Touche LLP."

D&T understands that the Texas State Auditor's Office may opt to rely on the work of D&T to support the Texas State Auditor's Office's opinion on the Comprehensive Annual Financial Report for the State of Texas, and D&T agrees to cooperate with the Texas State Auditor's



Office in a joint effort to comply with American Institute of Certified Public Accountants standard AU-C 600, Special Considerations - Audits of Group Financial Statements (Including the Work of Component Auditors). D&T acknowledges that the Texas State Auditor's Office has informed it that it is serving in the capacity of the group engagement auditor. As a component auditor, information D&T agrees to provide to the Texas State Auditor's Office includes information necessary to facilitate determinations regarding D&T's understanding and compliance with ethical requirements and professional competence.

## APPENDIX D

### GENERAL BUSINESS TERMS

This Appendix D is part of the engagement letter to which these terms are attached (the engagement letter, including its appendices, the "engagement letter") dated July 5, 2018, between Deloitte & Touche LLP and The University of Texas/Texas A&M Investment Management Company.

1. Independent Contractor. D&T is an independent contractor and D&T is not, and will not be considered to be, an agent, partner, fiduciary, or representative of the Company or the Audit and Ethics Committee.
2. Survival. The agreements and undertakings of the Company contained in the engagement letter will survive the completion or termination of this engagement.
3. Assignment and Subcontracting. Except as provided below, no party may assign any of its rights or obligations (including, without limitation, interests or claims) relating to this engagement without the prior written consent of the other parties. The Company hereby consents to D&T subcontracting a portion of its services under this engagement to any affiliate or related entity, whether located within or outside of the United States. Professional services performed hereunder by any of D&T's affiliates or related entities shall be invoiced as professional fees, and any related expenses shall be invoiced as expenses, unless otherwise agreed.
4. Severability. If any term of the engagement letter is unenforceable, such term shall not affect the other terms, but such unenforceable term shall be deemed modified to the extent necessary to render it enforceable, preserving to the fullest extent permissible the intent of the parties set forth herein.
5. Force Majeure. No party shall be deemed to be in breach of the engagement letter as a result of any delays or non-performance directly or indirectly resulting from circumstances or causes beyond its reasonable control, including, without limitation, fire, epidemic or other casualty, act of God, strike or labor dispute, war or other violence, or any law, order or requirement of any governmental agency or authority.
6. Confidentiality. To the extent that, in connection with this engagement, D&T comes into possession of any confidential information of the Company, D&T shall not disclose such information to any third party without the Company's consent, using at least the same degree of care as it employs in maintaining in confidence its own confidential information of a similar nature, but in no event less than a reasonable degree of care. The Company hereby consents to D&T disclosing such information (1) as may be required by law or regulation, or to respond to governmental inquiries, or in accordance with applicable professional standards or rules, or in connection with litigation or arbitration pertaining hereto; (2) to the extent such information (i) is or becomes publicly available other than as the result of a disclosure in breach hereof, (ii) becomes available to D&T on a nonconfidential basis from a source that D&T believes is not prohibited from disclosing such information to D&T, (iii) is already known by D&T without any obligation of confidentiality with respect thereto, or (iv) is developed by D&T independently of any disclosures made to D&T hereunder; or (3) to contractors providing administrative, infrastructure, and other support services to D&T and subcontractors providing services in connection with this engagement, in each case, whether located within or outside of the United States, provided that such contractors and subcontractors have agreed to be bound by confidentiality obligations similar to those in this paragraph.
7. Dispute Resolution. Any controversy or claim between the parties arising out of or

relating to the engagement letter or this engagement (a "Dispute") shall be resolved by mediation or binding arbitration as set forth in the Dispute Resolution Provision attached hereto as Appendix E and made a part hereof.

8. Governing Law. This engagement letter, together with the appendices, and all of the rights and obligations of the parties hereto and all of the terms and conditions hereof shall be construed, interpreted and applied in accordance with and governed by and enforced under the laws of the State of Texas.

## APPENDIX E

### DISPUTE RESOLUTION PROVISION

This Appendix E is part of the engagement letter dated July 5, 2018, between Deloitte & Touche LLP and The University of Texas/Texas A&M Investment Management Company.

This Dispute Resolution Provision sets forth the dispute resolution process and procedures applicable to the resolution of Disputes and shall apply to the fullest extent of the law, whether in contract, statute, tort (such as *negligence*), or otherwise.

Mediation: All Disputes shall be first submitted to nonbinding confidential mediation by written notice to the parties, and shall be treated as compromise and settlement negotiations under the standards set forth in the Federal Rules of Evidence and all applicable state counterparts, together with any applicable statutes protecting the confidentiality of mediations or settlement discussions. If the parties cannot agree on a mediator, the International Institute for Conflict Prevention and Resolution ("CPR"), at the written request of a party, shall designate a mediator.

Arbitration Procedures: If a Dispute has not been resolved within 90 days after the effective date of the written notice beginning the mediation process (or such longer period, if the parties so agree in writing), the mediation shall terminate and the Dispute shall be settled by binding arbitration to be held in Austin, Texas. The arbitration shall be solely between the parties and shall be conducted in accordance with the CPR Rules for Non-Administered Arbitration that are in effect at the time of the commencement of the arbitration, except to the extent modified by this Dispute Resolution Provision (the "Rules").

The arbitration shall be conducted before a panel of three arbitrators. Each of the Company and Deloitte & Touche LLP shall designate one arbitrator in accordance with the "screened" appointment procedure provided in the Rules and the two party-designated arbitrators shall jointly select the third in accordance with the Rules. No arbitrator may serve on the panel unless he or she has agreed in writing to enforce the terms of the engagement letter (including its appendices) to which this Dispute Resolution Provision is attached and to abide by the terms of this Dispute Resolution Provision. Except with respect to the interpretation and enforcement of these arbitration procedures (which shall be governed by the Federal Arbitration Act), the arbitrators shall apply the laws of the State of Texas (without giving effect to its choice of law principles) in connection with the Dispute. The arbitrators shall have no power to award punitive, exemplary or other damages not based on a party's actual damages (and the parties expressly waive their right to receive such damages). The arbitrators may render a summary disposition relative to all or some of the issues, provided that the responding party has had an adequate opportunity to respond to any such application for such disposition. Discovery shall be conducted in accordance with the Rules.

All aspects of the arbitration shall be treated as confidential, as provided in the Rules. Before making any disclosure permitted by the Rules, a party shall give written notice to all other parties and afford such parties a reasonable opportunity to protect their interests. Further, judgment on the arbitrators' award may be entered in any court having jurisdiction.

Costs: Each party shall bear its own costs in both the mediation and the arbitration; however, the parties shall share the fees and expenses of both the mediators and the arbitrators equally.

**The University of Texas/Texas A&M Investment Management Company  
Institutional Compliance Program Report  
for the Quarter Ended May 31, 2018**

**Section I – Organizational Matters**

- One meeting of the Ethics and Compliance Committee was held during the quarter: April 20, 2018.
- During the quarter, Clifton L. Thomas, Jr. was appointed as a director on April 19, 2018, by the Board of Regents of The Texas A&M University System. Mr. Thomas replaces Phil Adams whose term expired.

**Section II - Risk Assessment, Monitoring Activities and Specialized Training (Performed by Responsible Party)**

**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 45 meetings/calls with potential managers. No serious due diligence was initiated on any mandates. Two new mandates were completed. Ongoing review of active external managers included 42 meetings/calls. Additional efforts included monthly performance tracking, reviews and analyses by the team.

**MCC - Fixed Income:** The MCC-Fixed Income group participated in five meetings/calls with potential managers. Ongoing review of active external managers included six meetings/calls. No serious due diligence was initiated on any mandates. No new mandate was completed.

**Less Correlated and Constrained:** The Less Correlated and Constrained group participated in 71 meetings/calls with potential managers. Serious due diligence was initiated on one mandate. One new mandate was completed. Ongoing review of active external managers was conducted in the form of 99 meetings/calls/site visits. Additional efforts included monthly performance tracking, reviews and analyses by the team and two annual meetings.

**Private Credit:** The Private Credit group participated in 19 meetings/calls with potential managers. No serious due diligence was initiated. No new mandate was completed. No addition to an existing mandate was completed. Ongoing review of active external managers included 22 meetings/calls.

**Private Equity:** The Private Equity group participated in 23 meetings/calls with potential managers. Serious due diligence was initiated on two new or existing mandates. No serious due diligence was initiated on existing mandates. Two new mandates were completed. There were no additions to existing

mandates. Ongoing review of active external managers included 27 meetings/calls. Additional efforts included participation in six annual meetings.

**Healthcare:** The Healthcare group participated in 10 meetings/calls with potential managers. Serious due diligence was initiated on two new mandates. No serious due diligence was initiated on existing mandates. Two new mandates were completed. There were no additions to existing mandates. Ongoing review of active external managers included three meetings/calls.

**Technology:** The Technology group participated in 21 meetings/calls with potential managers. Serious due diligence was initiated on four new mandates. Two new mandates were completed. No addition to an existing mandate was completed. Ongoing review of active external managers included 38 meetings/calls. Additional efforts included participation in six annual meetings.

**Natural Resources:** The Natural Resources group participated in 91 meetings/calls with potential managers. Serious due diligence was initiated on one new mandate. One new mandate was completed. There were additions to four existing mandates. Ongoing review of active external managers included 141 meetings/calls. Additional efforts included participation in 10 annual meetings.

**Emerging Markets:** The Emerging Markets group participated in 137 meetings/calls with potential managers. Serious due diligence was not initiated on any mandate. One new mandate was completed. There were no additions to existing mandates. Ongoing review of active external managers included 57 meetings/calls. Additional efforts included five annual meetings.

**Real Estate:** The Real Estate group participated in 80 meetings/calls with potential managers. Serious due diligence was initiated on two new mandates and two existing mandates. Two new mandates were completed. There were no additions to existing mandates. Ongoing review of active external managers included 74 meetings/calls. Additional efforts included participation in nine annual meetings.

**Specialized Training:** The Investment Team attended 31 industry-related conferences/functions and meetings.

**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:**

- Risk Team continued to enhance its understanding and reporting of macro risks and market risks. This currently includes tracking and reporting a bubble monitor, a bear market monitor, an environment monitor, and factor data. In particular, the Risk Team worked with the Tactical Asset Allocation (TAA) Team to improve the signals that drive the bear market monitor, to reduce the number of false positives and of false negatives, to make this monitor more a forecasting tool, and to make this monitor more actionable.
- Risk Team reviewed seven due diligence questionnaires.

- Risk Team worked on the proposed payout policy for the PUF that takes into account the future inflows from the University Lands, as well as the growing needs of future generations.
- Risk Team continued to work on the analytical framework that supports the development of the Strategic Asset Allocation.
- Risk Team completed the investment plan to accept the first \$250mm transfer from the ITF to the LTF.
- Risk Team continued to develop and enhance standard processes for quantifying risks of proposed investments (“Risk scorecard”). All investments presented to Investment Committee submitted a Risk scorecard that was reviewed by Risk Management for consistency and accuracy.
- Risk Team continued to work with Information Technology to generate a monthly CUSUM report in a timely manner. All managers flagged were reviewed by the investment teams, and the results of these reviews were shared with Risk Management.
- 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. Risk Team compared each month’s downside volatility with both prior month results and with market activity to determine consistency and identified reasons for all changes; performed analysis of managers’ portfolio-level risks and performance.
- Risk Team continued to monitor sources and uses of cash and the sources and uses of illiquid capital; prepared projections on portfolio downside volatility utilization, country exposure, liquidity, and asset allocations; updated projections on a weekly basis.
- All internal derivatives were reviewed and analyzed in detail prior to initiation.
- 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 each month downside volatility and VaR calculations.

**Organizational Update:** Kate Wagner, Director – Risk Management, resigned from UTIMCO in March.

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

**High-Risk Area #3:** Information Technology & Security

**Responsible Party:** Chief Information Security Officer (CISO) and 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:**

- Annual and new employee security training was completed for all team members.
- Random checks for confidential data storage continue; no findings to report.
- CISO continues to work with the software development team to limit access to source code and follow secure coding practices.

- Software compliance checks were completed. The review identified a lack of an accurate and complete software inventory. CISO continues to monitor for policy violations for unauthorized software, sharing of credentials, and use of network resources. The CISO has added this as a high risk, high priority item to track the status of completing an accurate software inventory by the IT team.
- Splunk monitoring must be rebuilt/reconfigured to remove retired systems and bring on new systems in the new office space. The CISO has added this as a high risk, high priority item for the IT team to complete.
- The IT team and CISO implemented new email encryption functionality under the Office 365 platform. This will replace the current Ironport Encryption technology in use today.
- CISO launched four phishing campaigns against UTIMCO users. The CISO also received several reports of the phishing emails by various UTIMCO users, no one fell victim.
- Open public wireless access to UTIMCO's guest wireless network was identified between 3/27/18 and 4/16/18. The network required no login or approval to connect to UTIMCO's Wi-Fi. Activity log reviews did not identify any rogue use or abuse during the period. Subsequent investigation revealed the CTO directed the infrastructure team to make material changes without following accepted change management procedures nor notifying the security team. CISO discovered the change on 4/5/18 and requested IT team re-secure the wireless network. The wireless network was reconfigured on 04/16/18 to be more secure but still not back to the original configuration. The wireless network still does not require authorization to join; therefore, anyone can input a valid email address and self-verify to gain access.
- CISO found inadequate hardware inventory and ip address assignment documentation. A thorough hardware inventory needs to be completed. Without an accurate hardware inventory, the firm has no way of identifying rogue devices on the network. CISO has requested an accurate and complete hardware inventory from IT.
- CISO identified the recruiting website software not being monitored for updates and had not been patched for an identified security vulnerability announced in October 2017. The CISO requested the IT team install the needed patch. As of 5/31/18, the patch had not been installed. The patch was installed after the end of the reporting period on 06/12/18.
- A network review identified several systems open to the internet that should have been blocked. The CISO requested remediation on 4/30/18. As of 5/31/18, the remediation had not been completed.
- Multiple firm-wide alerts were sent to employees covering topics such as viruses, malware, phishing scams, securely sending credit card and social security numbers and updates for mobile devices.
- Multiple firm-wide alerts for mobile device upgrades were sent to employees. Work continues with users to educate them on the importance of keeping devices patched and updated.
- Compliance checks for nightly shutdown/logout are performed. Violations noted and violators notified as necessary.
- Monitoring and blocking of unencrypted electronic transmissions of social security numbers and credit card numbers is ongoing. No violations noted.

**Organizational Update:** The CISO and Infrastructure Manager roles were separated per a recommendation made by the UT System Audit office in the UTIMCO SDLC audit report. The CISO now reports to Joan Moeller, Senior Managing Director.



**Specialized Training:** CISO attended teleconference UT Security meetings and on-site CISO Council and InfoSec meetings. CISO met with Dell computer, Microsoft, Sequel Data Systems, M&S Technologies, APC, 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 employees 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 employees 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. No conflicts of interests were noted, i.e. no pecuniary interests were identified.
- All Directors were required to submit compliance statements this quarter. All but two Directors submitted their compliance statements timely. One director submitted his compliance statements the day after the deadline. One Director requested an extension of time to file his compliance statements from the CEO but did not receive a reply and statements are yet to be filed.
- Four full time employees and one temporary employee subsequently converted to full time were hired during the quarter. All new hire compliance statements due during the quarter were received by the due date. All other employees were required to submit annual compliance statements during the quarter. Financial disclosure and ethics compliance statements for all but one employee were received timely. One employee failed to submit the required statements.

- Two annual ethics and compliance training sessions and one new hire ethics and compliance training session were held during the quarter. New hires and temporary workers 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. Review was completed timely for two new employees. Review was not required during the quarter for the new director appointed April 19, 2018.
- 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 operating under agency agreements are provided the restricted list to prevent the violation of UTIMCO Code of Ethics and Texas Education Code Section 66.08. One new security was added to the list. The restricted list was provided to all managers operating under an agency agreement on June 4, 2018. No new manager operating under an agency agreement was hired during the quarter.
- Daily, the Chief Compliance Officer designee reviewed security holdings of internal and external managers operating under agency agreements for compliance with the restricted list. No exceptions were noted.
- Of 74 employee securities transactions during the quarter, none required preclearance. No transactional disclosure forms were filed late.
- Two employees requested CEO approval 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 each quarter. Of the 11 expense reports tested during the quarter, six included third party paid expenses and all were preapproved as required. No expense report tested included a sponsored entertainment event.
- Effective September 1, 2017, employees must submit sponsored entertainment requests for approval to the CCO. During the quarter, 14 employees requested and received approval for sponsored entertainment events; one employee did not receive approval when required.
- One employee requested special approval to fly by private plane with an investment manager to attend the manager's quarterly board meeting. The employee is a member of the board of directors. Advance approval from both the CCO and CEO was obtained as required.
- Two employees accepted gift cards from a manager valued at \$150 each. Violation was discovered by the Executive Assistant to the Deputy CIO before the gift cards were used by the employees and she returned the gift cards to the manager.

**Specialized Training:** None

### **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.

**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:** *Opportunity for enhancement*

**Assurance Activities Conducted:** CCO continues to meet with CISO regarding information technology and security practices. Due to the separation of CISO role from the IT team, the Security and Technology teams are working together to separate duties, promptly address issues as they arise, and insure a smooth transition to the new organizational structure. The CISO has identified several areas of vulnerability and required improvement in UTIMCO's information resources. The Security and Technology teams are holding bi-weekly meetings to track and monitor the status of these needed improvements. The CCO will need to work more closely with the Chief Technology Officer on the Key "A" risk related to the IT team's management of computer software and hardware needs of UTIMCO employees. Additionally, it will be necessary to ensure that as a stand-alone team, CISO has access, resources, and support to effectively perform his role in maintaining the security of UTIMCO information resources.

**Significant Findings:** None

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

**Assessment of Control Structure:** *Well controlled*

**Assurance Activities Conducted:** CCO continues to review investment and fund compliance reports to determine that policy requirements have been maintained based on the activity performed by employees. 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 were held during the quarter.

#### **Section V – Action Plan Activities**

See updated Institutional Compliance Action Plan Fiscal Year 2018.

**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:**

<b>Type</b>	<b>FYTD Number</b>	<b>% of Total</b>
Employment Related	0	0.00%
Policy Issues	0	0.00%
Hang ups or wrong numbers	1	0.00%
<b>Total</b>	<b>1</b>	<b>00.00%</b>

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 Corporate Counsel and Chief Compliance Officer, the Compliance Specialist, the Manager – Human Resources, 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 2018**

#	ACTION ITEM	TARGET COMPLETION DATE	STATUS
<b><i>A. RISK ASSESSMENT</i></b>			
1.	Perform detailed review of Enterprise Risk Management Framework; update risk assessments, including mapping of controls in conjunction with updated investment and operations processes under new CEO, if any; prepare new/updated monitoring plans for high risk areas and update Fraud Program as needed	05/31/18	<i>ERM in progress; target completion date extended to 08/31/18</i>
<b><i>B. MONITORING ACTIVITIES / ASSURANCE</i></b>			
2.	Revise Responsible Party Monitoring Plan documentation for high risk areas A in conjunction with updated investment and operations processes under new CEO, if any	On-going	<i>No activity; monitoring plans will be revised upon completion of ERM</i>
3.	Continual enhancement of compliance monitoring and reporting	On-going	<i>Ongoing</i>
<b><i>C. COMPLIANCE TRAINING / AWARENESS</i></b>			
4.	Provide new employee and annual Code of Ethics training and information to improve employee awareness of compliance program	04/30/18	<i>Training sessions held 10/20/17; 12/04/17; 02/01/18; 02/06/18; 03/13/18; 04/03/18; 04/16/18</i>
5.	Identify and network with similarly situated compliance professionals	On-going	<i>Systemwide Compliance meeting 09/27/17; UT System Legal Conference 09/28-09/29/17; Association of Corporate Counsel (ACC) annual meeting 10/16-17/17; ACC Austin meeting 10/03/17; Council of Public Funds Compliance Officers 11/28/17; 02/27/18; UT System Risk Management Conference 03/26-28/18; NC State Initiative ERM round table and workshop 04/26-27/18</i>
<b><i>D. REPORTING</i></b>			
6.	Conduct quarterly meetings with the internal ethics and compliance committee	On-going	<i>Quarterly meeting held 11/01/17; 01/30/18; 04/20/18</i>

Updated 06/22/18

#	ACTION ITEM	TARGET COMPLETION DATE	STATUS
7.	Provide quarterly/annual reports to the Audit and Ethics Committee and System-wide compliance office	On-going	<i>Quarterly reporting to A&amp;E and Risk Committees: 11/16/17; 02/21/18; 05/10/18 Quarterly reporting to Systemwide Compliance: 02/05/18; 05/14/18</i>
<b><i>E. OTHER / GENERAL COMPLIANCE</i></b>			
8.	UT Systemwide Compliance Office Annual Attestation & Effectiveness Reporting	12/05/17	<i>Report submitted 12/04/17; additional comments and information submitted on 03/12/18 and 03/15/18</i>
9.	Finalize draft of compilation of all laws and regulations and to the extent necessary, modify compliance processes and reporting	12/31/17	<i>Ongoing</i>
10.	Update Business Continuity Plan due to move to new office space	05/31/18	<i>Completed with exception of IT disaster recovery plan</i>
11.	Supervise and manage work of Compliance Specialist	08/31/18	<i>Ongoing</i>
12.	UT Systemwide Compliance Office activities participation: annual compliance officers' forum and other activities	On-going	<i>Systemwide Compliance meeting 09/27/17; 03/28/18; UT System Legal Conference 09/28-09/29/17; Compliance meeting with Jason King, Associate Systemwide Compliance Officer and Ethics Officer, (now Interim Systemwide Compliance Officer) for the U.T. System 10/06/17; 05/14/18; Meeting with UT System CISO 10/30/17</i>
13.	Hotline reporting	On-going	<i>YTD 1 hang-up/wrong number</i>

Updated 06/22/18

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

**New Contracts, Leases, and Other Commercial Arrangements**

May 1, 2018 - July 10, 2018

<b>Agreement</b>	<b>Purpose</b>	<b>Contract Term</b>	<b>Annual Amount</b>
None to Report			

**Agenda Item**  
UTIMCO Board of Directors Meeting  
July 26, 2018

**Agenda Item:** Report from Risk Committee

**Developed By:** Team

**Presented By:** Bass

**Type of Item:** Information item

**Description:** The Risk Committee (“Committee”) met separately and jointly with the Policy Committee on July 19, 2018. The Committee’s agenda for its meeting included (1) discussion and appropriate action related to the minutes of the May 10, 2018 meeting; (2) discussion and appropriate action related to categorization of investment mandates; (3) review and discussion of compliance reporting; and (4) market and portfolio risk update. The joint meeting agenda included discussion and appropriate action related to proposed amendments to the Investment Policy Statements, Liquidity Policy, Derivative Investment Policy, Delegation of Authority Policy, and Mandate Categorization Procedure.

**Discussion** The Committee reviewed and took appropriate action related to nine mandate categorizations prepared by the Team for the period beginning May 3, 2018, and ending July 6, 2018. The Committee will report to the UTIMCO Board the results of its review of the Investment Mandate Categorizations.

The Committee reviewed the performance and risk reporting and the quarterly compliance reporting.

The Committee also had a joint meeting with the Policy Committee to discuss UTIMCO’s recommended amendments to the Investment Policy Statements of the Permanent University Fund, General Endowment Fund, Permanent Health Fund, Long Term Fund and Intermediate Term Fund. The Committee also discussed UTIMCO’s recommended amendments to the Liquidity Policy, Derivative Investment Policy, and the Delegation of Authority Policy as well as UTIMCO’s recommendation to delete and eliminate the Mandate Categorization Procedure. The discussion of the Investment Policies is covered in the Report from the Policy Committee in Tab 7.

**Recommendation:** None

**Reference:** None



**Agenda Item**  
UTIMCO Board of Directors Meeting  
July 26, 2018

**Agenda Item:** Report from Policy Committee, including (1) *Policy Reviews* Presentation; and (2) Discussion and Appropriate Action Related to the Investment Policy Statements, Liquidity Policy, Derivative Investment Policy, Delegation of Authority Policy and the Mandate Categorization Procedure

**Developed By:** Team

**Presented By:** Hicks, Harris, Hall, Yoeli

**Type of Item:** Action item; Action required by UTIMCO Board and by the UT System Board of Regents

**Description:** The Investment Management Services Agreement (IMSA) requires that UTIMCO review the current Investment Policies for each Fund at least annually. The review includes distribution (spending) guidelines, long-term investment return expectations and expected risk levels, Asset Class and Investment Type allocation targets and ranges for each eligible Asset Class and Investment Type, expected returns for each Asset Class, Investment Type, and Fund, designated performance benchmarks for each Asset Class and/or Investment Type and such other matters as the UT System Board of Regents or its staff designees may request. The Investment Policies listed below are enclosed for the approval of the UTIMCO Board with further approval of the UT System Board of Regents required.

**Discussion:** Mr. Harris, Mr. Hall and Dr. Yoeli will present the *Policy Reviews* presentation.

*Investment Policies*

The Investment Policy Statements of the Permanent University Fund (PUF), General Endowment Fund (GEF), Intermediate Term Fund (ITF), Permanent Health Fund (PHF), and Long Term Fund (LTF) are being amended to reflect the proposed changes for FYE 2019. In addition, the following Investment Policies are being submitted for approval of amendments:

- Liquidity Policy (effective August 10, 2018)
- Derivative Investment Policy (effective August 10, 2018)
- Delegation of Authority Policy (effective July 26, 2018)

The Mandate Categorization Procedure is being eliminated consistent with the revamp of the asset allocation framework to utilize more traditional nomenclature and due to increased regular communications to the Board.

The Investment Policy Statements of the Short Term Fund (STF) and the Separately Invested Funds (SIF) were reviewed by the Team and there are no recommended amendments. The STF Investment Policy Statement was last amended by the

**Agenda Item**  
UTIMCO Board of Directors Meeting  
July 26, 2018

Board of Regents in May 2016. The SIF Investment Policy Statement was last amended by the Board of Regents in August 2012.

The Investment Policy Statements for the PUF, GEF, ITF, PHF, and LTF have been amended to reflect changes to the asset allocation framework that replace the use of More Correlated and Constrained (MCC), Less Correlated and Constrained (LCC), and Private Investments Investment Types with a new asset allocation framework designed with Global Equity, Stable Value, and Real Return asset classes.

Exhibits A of the PUF, GEF, and ITF, and Exhibits B in the PHF and LTF Investment Policy Statements, have been amended to set forth the revised Asset Class targets and ranges for FYE 2019. In addition, the one year downside deviation has been adjusted to reflect the revised Asset Class targets for FYE 2019. Finally, the Expected Annual Return (Benchmark) target for FYE 2019 has been updated for the PUF, GEF, PHF, LTF and ITF.

*Liquidity Policy*

The Liquidity Policy is being amended to remove the trigger zone and require all investments that would cause illiquidity to exceed the stated illiquidity maximums to require Risk Committee approval.

*Derivative Investment Policy*

Pages 1-5, moved the definition of Derivative Investments to Exhibit A and standardized the use of the term throughout the document

Pages 1-3, the Deputy CIO has been added as an additional decision maker for (a) determining whether a financial instrument is a Derivative Investment if it is unclear; (b) deciding when a Derivative Investment should be presented to the Board; (c) making an exception for counterparty credit ratings below the policy-stated minimum; and (d) reporting to in instances of noncompliance with the policy

Page 1, External Managers: added language to require external managers selected to engage in Derivative Investments to have the legal and investment expertise to limit the downside effects of the proposed derivatives

Page 2, Counterparty Risks: added language to permit the Team to enter into Derivative Investments without an ISDA netting agreement in jurisdictions where ISDA is not available or the market standard for that jurisdiction

Page 7, Exhibit B, deleted language regarding 'naked' short positions as it has a different meaning in some jurisdictions outside the U.S. and clarified to prohibit entry into Derivative Investments that are unhedged and have the potential for unlimited loss

**Agenda Item**  
 UTIMCO Board of Directors Meeting  
 July 26, 2018

*Delegation of Authority Policy*

Page 3, *Contracts* is being changed to increase the reporting limits on new and existing contracts from \$100,000 to \$250,000.

Pages 3-4, *Allocation of Investment Funds to New Managers and Mandates, Changing Allocations or Investment Funds to Existing Managers, and Mandates*: limitations for both new relationships/new mandates to existing relationships and subsequent increases to existing relationships have been changed as follows:

	<i>New Fund Investments</i>		<i>Subsequent Fund Investments</i>	
	<i>Current (as a percent of Applicable Assets)</i>	<i>Proposed (as a percent of Applicable Assets)</i>	<i>Current (as a percent of Applicable Assets)</i>	<i>Proposed (as a percent of Applicable Assets)</i>
<i>MCC</i>	1.5%		1.0%	
<i>LCC</i>	1.0%		0.75%	
<i>Private Investments</i>	0.75%		0.50%	
<i>Fund Investments</i>		1.0%		1.0%
<i>Co-Investments**</i>	0.30%	0.66%	0.30%	0.66%

\*\*Managing Directors will now be authorized to commit to co-investments of \$30 Million or less with an existing manager without CEO approval, but with internal Co-Investment Committee approval and required reporting to internal Investment Committee.

Page 5, *Terms Applicable to All Internal and External Managers*: changed to allow a Director to require a complete review prior to execution of an investment if the Total Assets managed by the internal or external manager exceed 3.0% of Applicable Assets in any one of the Global Equity, Stable Value, or Real Return portfolios (4.0% for managers limited to Fixed Income mandates) or 6.0% of Applicable Assets in the aggregate for all Public and Private Investments

Page 5, *Manager Monitoring and Termination*: the requirement to report manager mandates to the Risk Committee has increased from 3% or more exposure relative to the total Funds to 6% and requires a presentation and recommendation regarding an appropriate course of action with respect to these mandates

Page 6, *Investment in Derivative Investments*: changed to permit the Deputy CIO, the Managing Director – Risk Management, and the Managing Director – Global Asset Allocation to enter into the types of Derivative Investments allowed by the Derivative Investment Policy; provided that the Managing Director – Risk

**Agenda Item**  
UTIMCO Board of Directors Meeting  
July 26, 2018

Management, and the Managing Director – Global Asset Allocation may not enter into any Derivative Investment he or she has recommended.

Minor editorial changes have also been made.

**Recommendation:** The Committee will request the UTIMCO Board to take appropriate action related to the proposed amendments to the Investment Policy Statements for the PUF, GEF, ITF, PHF, and LTF for the fiscal year beginning September 1, 2018. The Committee will also request the UTIMCO Board to take appropriate action related to the proposed amendments to the Liquidity Policy and Derivative Investment Policy, effective August 10, 2018, and the Delegation of Authority Policy, effective July 26, 2018. The Committee will also recommend appropriate action related to the elimination of the Mandate Categorization Procedure.

**Reference:** *Policy Reviews* presentation  
Investment Policy Statements for the PUF, GEF, PHF, and LTF effective September 1, 2018  
Investment Policy Statement for the ITF effective September 1, 2018  
Liquidity Policy, effective August 10, 2018  
Derivative Investment Policy, effective August 10, 2018  
Delegation of Authority Policy, effective July 26, 2018  
Mandate Categorization Procedure

## RESOLUTION RELATED TO INVESTMENT POLICIES

RESOLVED, that amendments to the Investment Policy Statements of the Permanent University Fund, General Endowment Fund, Permanent Health Fund, Long Term Fund and Intermediate Term Fund, and amendments to the Liquidity Policy and Derivative Investment Policy, as presented be, and are hereby approved, subject to approval by the Board of Regents of The University of Texas System; and

FURTHER RESOLVED, that amendments to the Delegation of Authority Policy as presented be, and are hereby approved; and

FURTHER RESOLVED that the Mandate Categorization Procedure is no longer applicable and deleted in its entirety.



# The University of Texas/Texas A&M Investment Management Company

---

## Policy Reviews

Rich Hall & Uzi Yoeli - July 2018

# Overview

---



- Investment Policy: Proposed Strategic Asset Allocation
  
- Other Policies
  - Liquidity Policy
  - Derivative Investment Policy
  - Delegation of Authority Policy
  - Mandate Categorization Policy



# Investment Policy: Proposed Strategic Asset Allocation

---



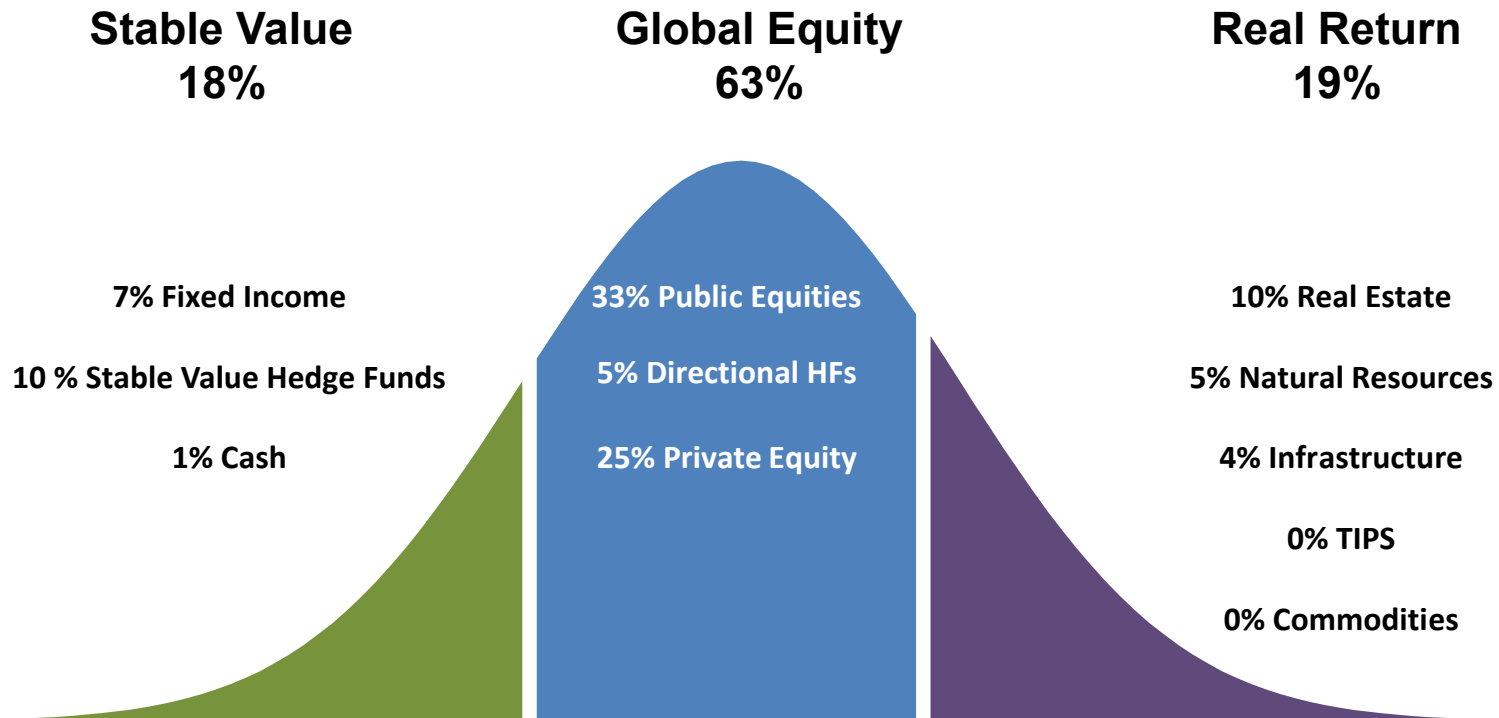
# Objectives

---



- Formalize Investment Policy transition to regime based approach
- Set long-term SAA targets based on equilibrium return expectations
- Approve FY19 target asset allocation

# Proposed Strategic Asset Allocation



Economic Conditions		
<ul style="list-style-type: none"> <li>•GDP surprises are negative</li> <li>•Inflation surprisingly low with weak demand</li> <li>•Negative earnings surprises</li> <li>•Out of line valuations</li> <li>•Flight to quality</li> </ul>	<ul style="list-style-type: none"> <li>•Positive GDP surprises</li> <li>•Inflation surprises not dramatic</li> <li>•Positive earnings surprises</li> <li>•Reasonable valuations</li> <li>•Political stability</li> </ul>	<ul style="list-style-type: none"> <li>•Real GDP growth too low</li> <li>•Inflation surprises on the high side</li> <li>•Real earnings too low</li> <li>•Commodity-oriented demand exceeds supply by an above normal margin</li> </ul>

\* Percentages may not add up to 100% due to rounding

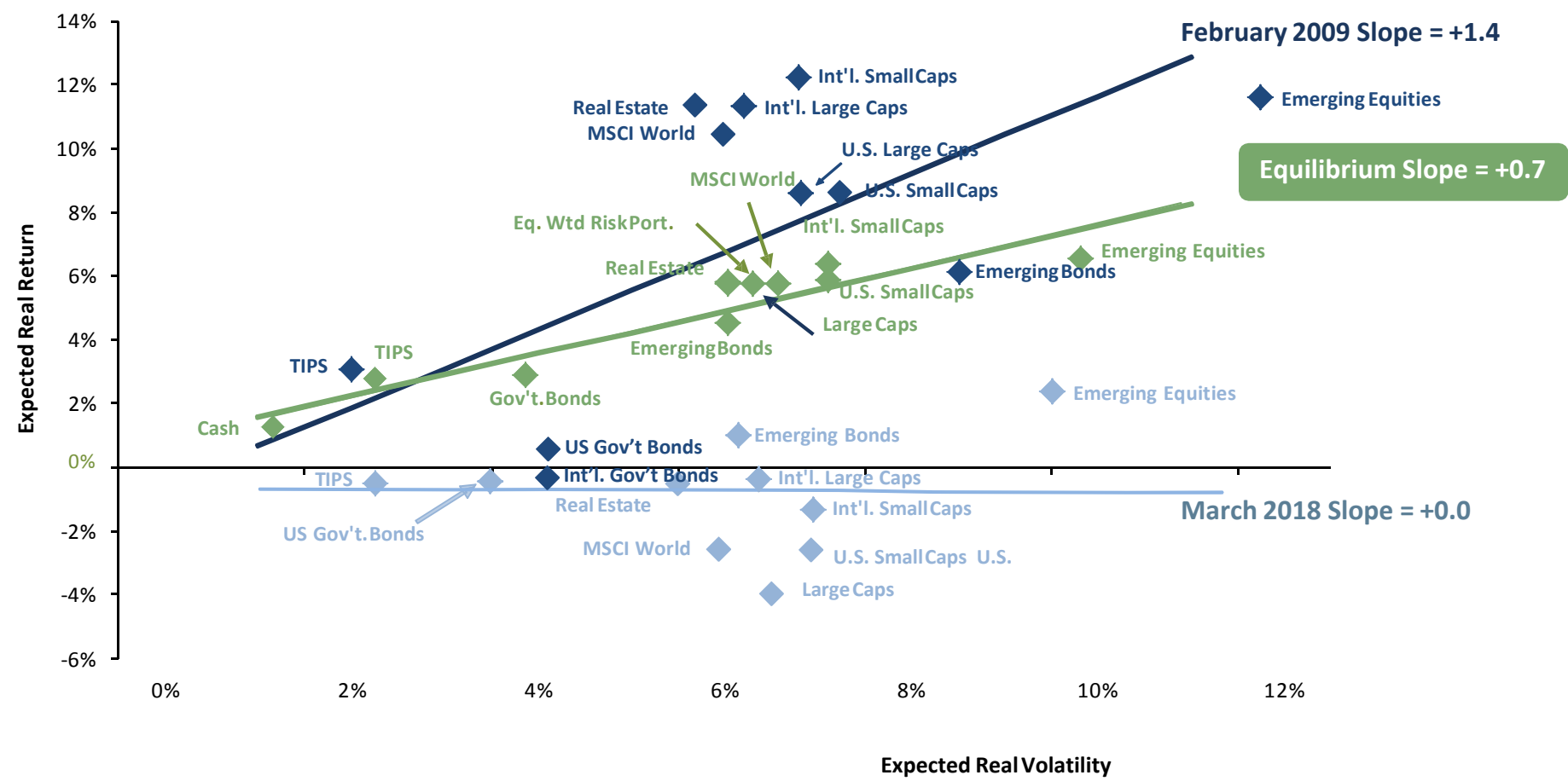
# Projected Cyclical Nominal Returns



June 2018

	Cyclical	Long-term	50 Years Cambridge
<b>Private Equity</b>	6.4%	8.6%	9.6%
<b>Emerging Markets</b>	6.4%	8.0%	8.4%
<b>EAFE</b>	4.5%	6.4%	7.3%
<b>Hedge Funds</b>	2.8%	3.7%	7.2%
<b>US Equity</b>	3.2%	6.3%	7.7%
<b>US Bonds</b>	2.4%	3.1%	4.8%
<b>Cash</b>	2.0%	2.0%	3.0%
<b>Non-US Bonds</b>	0.6%	2.4%	4.3%

# Asset Class Volatility/Return Trade-Off

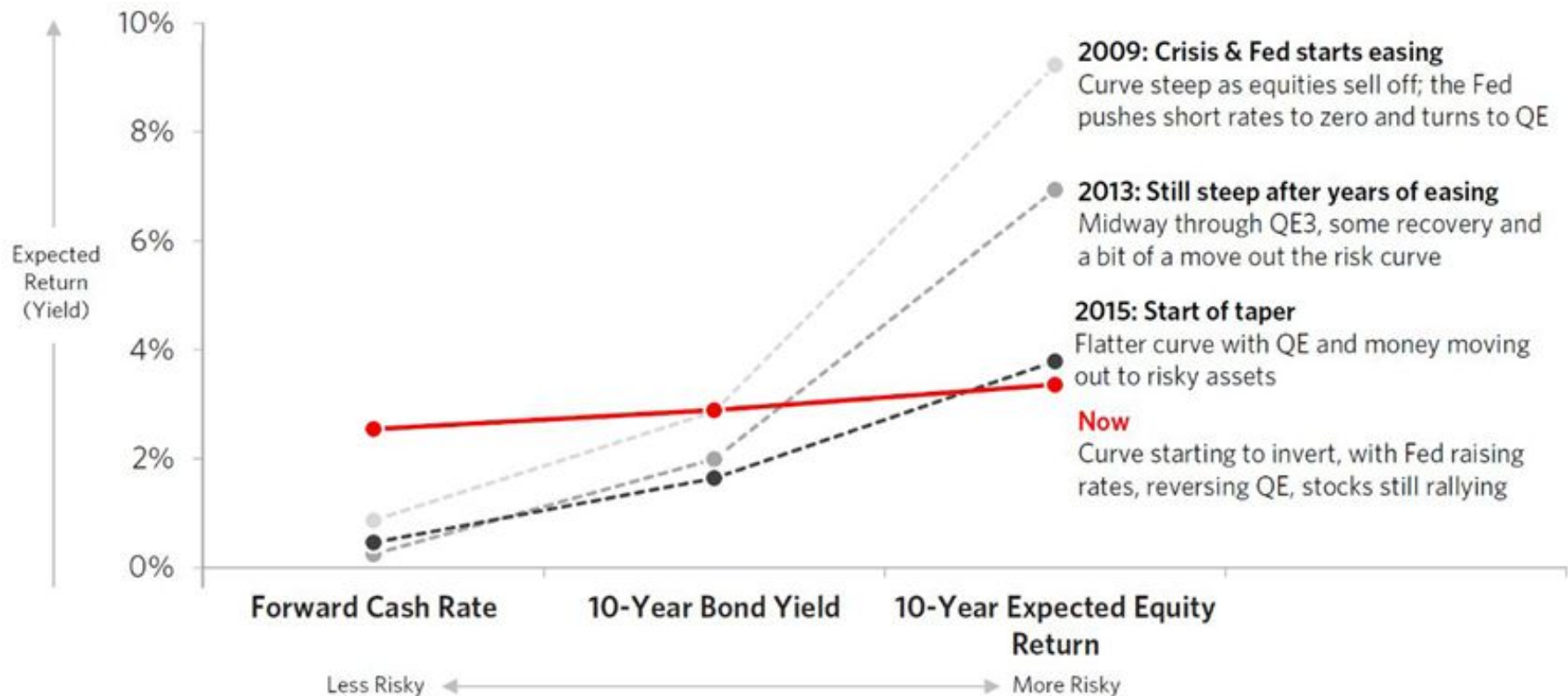


Source:GMO

The return and volatility numbers pictured above for the equilibrium slope (green) represent a theoretical world wherein major asset classes are all priced at their fair value, or what we sometimes call "equilibrium". It does not represent a specific moment in time. The slopes for February 2009 and March 2018 are based on GMO's 7-Year Asset Class Forecasts and expected real volatilities for major asset classes at that point in time.

The expectations provided above are based upon the reasonable beliefs of the Asset Allocation team and are not a guarantee. Expectations speak only as of the date they are made, and GMO assumes no duty to and does not undertake to update such expectations. Expectations are subject to numerous assumptions, risks, and uncertainties, which change over time. Actual results may differ materially from those anticipated in the expectations above.

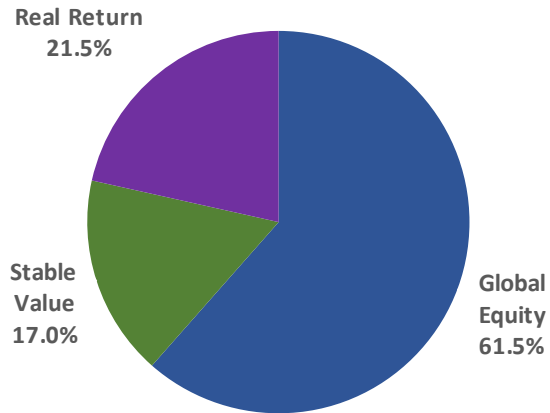
# The Risk Curve Has Gone from Steep in the Crisis to Flat Today



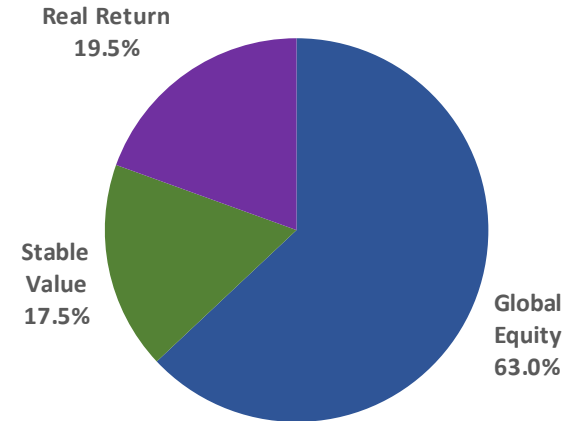
# Regime Based SAA Comparison



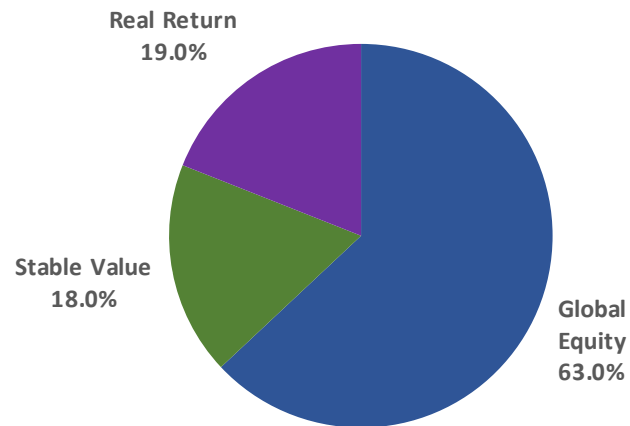
## Current Policy



## FY19 Target



## Long-term Target



# Proposed SAA: PUF + GEF



		Current Policy Target	FY19 Target	Long-term Target	Current % of Fund	Over / (Under) Weight	Notes
GLOBAL EQUITY	Public Equity	29.0%	29.0%	33.0%	29.9%	0.9%	Long-term increase, specify US, DM, Global, reduce EM
	Directional Hedge Funds	15.0%	12.0%	5.0%	14.0%	2.0%	Short-term retain defensive positioning, long-term reallocate
	Private Equity	17.5%	22.0%	25.0%	20.7%	-1.3%	3.4% transfer in Private Credit and Energy Services, LT increase
	<b>Total Global Equity</b>	<b>61.5%</b>	<b>63.0%</b>	<b>63.0%</b>	<b>64.6%</b>	<b>1.6%</b>	Increase Global Equity by 1.5%
STABLE VALUE	Investment Grade FI & Credit	11.0%	9.5%	7.0%	7.2%	-2.3%	Current includes 3.5% private credit to be transferred to Private Equity
	Cash		1.0%	1.0%	0.3%	-0.7%	Addition of cash position at 1%
	Stable Value Hedge Funds	6.0%	7.0%	10.0%	4.5%	-2.5%	Increase SVHF over time to long-term target
	<b>Total Stable Value</b>	<b>17.0%</b>	<b>17.5%</b>	<b>18.0%</b>	<b>12.0%</b>	<b>-5.5%</b>	Rebalance stable value between fixed income & SVHF
REAL RETURN	Inflation Linked Bonds		0.0%	0.0%	0.0%	0.0%	New allowable asset class
	Commodities	2.5%	1.5%	0.0%	5.1%	3.6%	Commodities and gold
	Natural Resources	12.0%	8.0%	5.0%	9.0%	1.0%	Energy upstream, metals & mining, agriculture
	Infrastructure		2.0%	4.0%	1.7%	-0.3%	Transfer infrastructure and midstream from natural resources
	Public Real Estate	0.0%	0.0%	0.0%	0.1%	0.1%	
	Private Real Estate	7.0%	8.0%	10.0%	7.4%	-0.6%	Long-term increase
	<b>Total Real Return</b>	<b>21.5%</b>	<b>19.5%</b>	<b>19.0%</b>	<b>23.3%</b>	<b>3.8%</b>	Increase RE, rebalance natural resources and gold
	<b>Total PUF + GEF</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>		

# PUF + GEF SAA – Risk Metrics



## Historical Metrics (10 Years Ending December 2017)

	Return	Vol	Max Drawdown <sup>1</sup>	Sharpe Ratio
Proposed SAA	4.9%	8.5%	-29.3%	0.54
Current SAA	4.5%	8.3%	-28.3%	0.50

## Projected Metrics

		Returns	Risk			Risk Return		Liquidity	
		Expected Return <sup>2</sup>	Theoretical Vol <sup>3</sup>	Observed Vol <sup>3</sup>	Max Drawdown	Theoretical Sharpe	Observed Sharpe	Illiquids	Illiquids + HFs
Equilibrium	Proposed SAA	7.5%	15.8%	11.0%	-29.3%	0.35	0.49	44%	59%
	Current SAA	7.3%	15.7%	10.5%	-28.3%	0.34	0.51	40%	61%
Cyclical	Proposed SAA	5.6%	15.8%	11.0%	-29.3%	0.23	0.33	44%	59%
	Current SAA	5.6%	15.7%	10.5%	-28.3%	0.23	0.35	40%	61%

<sup>1</sup> Drawdown period: June 2008 – February 2009 (equities down 53% in same time period)

<sup>2</sup> Expected nominal returns include 200bps of inflation and 100bps of alpha

<sup>3</sup> Observed volatility represents volatility experienced by investors and is depressed relative to theoretical volatility due to the effects of private investments (lagged reporting, smoothed effects due to quarterly marks, etc.). Theoretical volatility attempts to incorporate the volatility of the underlying constituents, making it more representative of true volatility.



# Proposed FY19 SAA – Key Changes



- Global Equity – Increasing target from 61.5% to 63% with risk band +/- 7%
  - Reducing Directional HFs over time
  - Increasing Public Equity to more fully capture beta and alpha potential
  - Increasing Private Equity to add alpha potential
  - Sub portfolio risk bands generally +/- 5%
- Stable Value – Increasing target from 17% to 18% with risk band +/- 6%
  - Shifting weighting from Global Fixed Income to Stable Value Hedge Funds
  - Changing implementation of IGFI from Unhedged FX Exposure to Hedged
  - Adding 1% cash allocation
  - Sub portfolio risk bands generally +/- 5%
- Real Return – Decreasing target from 21.5% to 19% with risk band +/- 6%
  - Reduction of commodity exposures over time
  - Increase in Infrastructure
  - Increase in Real Estate
  - Sub portfolio risk bands generally +/- 5%
- Illiquid investments (Private Equity + Private Credit + Private NR + Private RE) – increase from 40% to 44%
- Alternatives (All Private + DHF + SVHF) – decrease from 61% to 59%
- Benchmarks – most changes in the private areas, intended to put them on an apples-to-apples basis with industry standard benchmarks from a familiar / well-known provider.

# Proposed Benchmark Changes



	Current Benchmark	Proposed Benchmark
<b>GLOBAL EQUITY</b>	U.S. Public Equity	MSCI US with net Dividends
	Non-U.S. Developed Public Equity	MSCI EAFE and Canada with Net Dividends
	Global Developed Public Equity	MSCI World Index with Net Dividends
	Total Developed Public Equity	
	Emerging Markets Public Equity	MSCI EM Index with Net Dividends
	<b>Public Equity</b>	MSCI US, EAFE + CA, World, EM
	<b>Directional Hedge Funds</b>	HFRI Fund of Funds Composite
	Private Equity	Custom Cambridge Fund of Funds
	PE Emerging Markets	Custom Cambridge Fund of Funds
	Private Credit (New Policy)	CA Buyouts
PE Venture Capital	CA EM PE and VC	
	CA Credit Opportunities	
	CA Venture Capital	
<b>Private Equity</b>	Cambridge PE, VC, EM and Credit BMs	
<b>Total Global Equity</b>		
<b>STABLE VALUE</b>	<b>Investment Grade Fixed Income</b>	Barclays Global Aggregate Index
	Credit Related Fixed Income	Barclays Capital Global High Yield Index
	Private Credit (Old Policy)	Custom Cambridge Fund of Funds
	<b>Investment Grade FI &amp; Credit</b>	BGI Global Agg Hedged, BGI Global HY
	<b>Cash</b>	3 month T-Bills
	<b>Stable Value Hedge Funds</b>	HFRI Composite FoF Composite
	<b>Total Stable Value</b>	
<b>REAL RETURN</b>	<b>Inflation Linked Bonds</b>	BBG Barclays Global Inflation Linked TR Index
	Gold	Gold Spot Price (XAU)
	Public Natural Resources	50% BCOM TRI, 50% MSCI World NR Index
	<b>Commodities</b>	Bloomberg Commodity TRI
		Gold Spot, 50% BCOM, 50% MSCI World NR
		Gold Spot, Bloomberg Commodity TRI
	<b>Natural Resources</b>	Cambridge Natural Resources
	<b>Infrastructure</b>	Cambridge Infrastructure
	<b>Public Real Estate</b>	FTSE EPRA / NAREIT Developed Index Net TRI USD
		FTSE EPRA / NAREIT Developed Index Net TRI USD
<b>Private Real Estate</b>	Cambridge Real Estate	
<b>Total Real Return</b>		

# Proposed SAA: ITF



		Current Policy Target	FY19 Target	Long-term Target	Current % of Fund	Over / (Under) Weight
<b>GLOBAL EQUITY</b>	Public Equity	22.5%	22.8%	22.5%	21.7%	-1.1%
	Directional Hedge Funds	33.0%	31.6%	33.0%	31.6%	0.0%
	<b>Total Global Equity</b>	<b>55.5%</b>	<b>54.4%</b>	<b>55.5%</b>	<b>53.3%</b>	<b>(1.1%)</b>
<b>STABLE VALUE</b>	Investment Grade Fixed Income	30.0%	28.7%	28.0%	28.7%	0.0%
	Cash	0.0%	3.0%	2.0%	3.0%	0.0%
	Stable Value Hedge Funds	12.0%	10.2%	12.0%	10.2%	0.0%
	<b>Total Stable Value</b>	<b>42.0%</b>	<b>41.9%</b>	<b>42.0%</b>	<b>41.9%</b>	<b>0.0%</b>
<b>REAL RETURN</b>	Global Inflation Linked Bonds	0.0%	-	0.0%	0.0%	0.0%
	Total Commodities	2.5%	3.6%	2.5%	4.7%	1.1%
	Public Real Estate	0.0%	0.1%	0.0%	0.1%	0.0%
	<b>TOTAL REAL RETURN</b>	<b>2.5%</b>	<b>3.7%</b>	<b>2.5%</b>	<b>4.8%</b>	<b>1.1%</b>
	<b>Total ITF (net)</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>		

# ITF SAA – Risk Metrics



## Historical Metrics (10 Years Ending December 2017)

	Realized Return	Realized Vol	Max Drawdown <sup>2</sup>	Sharpe Ratio
Proposed SAA <sup>1</sup>	2.9%	6.4%	23.0%	0.41
Current SAA	2.6%	7.3%	24.3%	0.32

## Projected Metrics

	Returns	Risk			Risk Return		Liquidity	
	Expected Return <sup>3</sup>	Theoretical Vol <sup>4</sup>	Observed Vol <sup>4</sup>	Max Drawdown	Theoretical Sharpe	Observed Sharpe	Illiquids	Illiquids + HFs
Equilibrium	5.3%	6.8%	7.1%	23.0%	0.49	0.47	0%	45%
Cyclical	4.2%	6.8%	7.1%	23.0%	0.32	0.31	0%	45%

<sup>1</sup> Changing implementation of IGFI from Unhedged FX Exposure to Hedged

<sup>2</sup> Drawdown period: January 2008 – February 2009 (equities down 54% in same time period)

<sup>3</sup> Expected nominal returns include 200bps of inflation and 100bps of alpha

<sup>4</sup> Observed volatility represents volatility experienced by investors and is depressed relative to theoretical volatility due to the effects of private investments (lagged reporting, smoothed effects due to quarterly marks, etc.). Theoretical volatility attempts to incorporate the volatility of the underlying constituents, making it more representative of true volatility.



## Other Policies

---

# Liquidity Policy

---



- Changes to Liquidity Policy Trigger Zones
- Current:
  - Three liquidity trigger zones (i) >30%, (ii) 25-30%, (iii) <25%
  - Required Risk Committee approval for additional illiquid investments at the 25-30% trigger zone
  - No additional illiquid investments after the < 25% trigger zone
- Proposed:
  - Maintain definitions and process for calculating total illiquid investments
  - Eliminate multiple “trigger zone” framework
  - Establish single 70% illiquid threshold
  - Require consultation with UT Office of Business Affairs and Risk Committee approval for additional illiquid investments after 70% threshold reached

# Derivative Investment Policy

---



- Clarification of Counterparty Risk Mitigation
  
- Current Policy:
  - All OTC derivatives must be subject to ISDA Netting Agreements
  
- Proposed Policy:
  - Clarify policy to allow trading derivatives in markets where ISDA Netting Agreements do not exist or are not the market standard
  - Examples of such derivatives include:
    - Bona Fide Spot Foreign Exchange Transactions
    - Participation Notes (“P-notes”)
    - Low exercise purchase options (LEPOs)

# Delegation of Authority Policy



- Expand Derivative Approval Authority
  - Current: Only CEO/CIO can approve derivative investments
  - Proposed: CEO/CIO, Deputy CIO, Managing Director of Risk, and Managing Director of Asset Allocation an approved derivative investments
    - MDs will not be authorized to enter into Derivative Investments for their own portfolios and will require approval from either CEO/CIO, Deputy CIO or counterpart MD
- Co-Investment Approvals
  - Current: Investment Committee reviews and CEO approves all co-investments
  - Proposed: Allow portfolio Managing Directors to approve co-investments alongside Premier List managers up to \$30 million with approval of Co-Investment Committee
- Manager Concentration Limits
  - Current: single manager limit is 3% of total assets (4% for fixed income managers)
  - Proposed: single manager limit of 3% within each of Global Equity, Real Return, or Stable Value areas, and up to 6% in aggregate
- Contract Reporting Requirements
  - Current: New contracts > \$100k reported to Board quarterly, all contracts > \$100k reported to Board annually
  - Proposed: New contracts > \$250k reported to Board quarterly, all contracts > \$250k reported annually



# Mandate Categorization Procedure

---



- Current Procedure:
  - Categorization by investment type: MCC, LCC or Private Investment
  - Categorization by asset class: Investment Grade Fixed Income, Credit Related Fixed Income, Natural Resources, Real Estate, Developed Country Equity, Emerging Market Equity
  - Requires CEO and CCO review and quarterly presentation to Risk Committee
  
- Proposed:
  - Eliminate Mandate Categorization Procedure
  - Regime based asset allocation framework allows for straightforward identification of asset class for each investment
  - Multiple forms of communicating classification to Board prior to investing, including:
    - Monthly transparency report with three month forward investment pipeline
    - Monthly Certificate of Compliance with Board that includes descriptions of proposed investments



# Appendix

---

# Projected Long-term Nominal Returns



Long-term Capital Market Assumptions													
	Provider	Stable Value				Global Equity					Real Return		
		US Bonds	Non-US Bonds	EM Debt	High Yield	US Equities	Non-US Equities	EM Equities	Hedge Funds	Private Equity	Commodities	Real Estate	
External Provider Forecasts	Blackrock (LT)	3.10	2.30	4.20	4.80	5.90	6.50	5.80	3.60	6.80	3.20	4.10	
	Cambridge (LT)	4.80	4.30	5.90	6.20	7.70	7.30	8.40	7.20	9.60	5.30	7.20	
	BW (LT)	2.20	2.30	5.60	4.60	-	-	-	-	7.40	5.90	6.10	
	Goldman	2.80	2.40	5.40	5.40	6.50	6.10	10.70	4.60	9.40	4.10	7.85	
	JPM	3.25	2.50	5.50	5.25	5.50	6.25	8.00	4.25	7.25	3.75	6.00	
	Low	2.20	2.30	4.20	4.60	5.50	6.10	5.80	3.60	6.80	3.20	4.10	
	Average	3.23	2.76	5.32	5.25	6.40	6.54	8.23	4.91	8.09	4.45	6.25	
	Median	3.10	2.40	5.50	5.25	6.20	6.38	8.20	4.43	7.40	4.10	6.10	
	High	4.80	4.30	5.90	6.20	7.70	7.30	10.70	7.20	9.60	5.90	7.85	
	Median Volatility Estimate	3.80	3.40	12.60	8.60	15.70	17.25	21.50	7.60	23.60	19.00	14.90	
Median Sharpe Ratio	0.29	0.12	0.28	0.38	0.27	0.25	0.29	0.32	0.23	0.11	0.28		
UTIMCO Forecasts	UTIMCO (Beta Only)	3.10	2.40	5.30	5.30	6.40	6.40	7.25	1.50	12.00	9.00	7.50	
	Alpha	1.00	1.00	1.00	1.00	1.75	1.75	2.25	4.25	4.00	6.00	3.75	
	UTIMCO Total	4.10	3.40	6.30	6.30	8.15	8.15	9.50	5.75	16.00	15.00	11.25	
	UTIMCO Beta v. Median	0.00	0.00	(0.20)	0.05	0.20	0.03	(0.95)	(2.93)	4.60	4.90	1.40	
	UTIMCO Total v. Median	1.00	1.00	0.80	1.05	1.95	1.78	1.30	1.33	8.60	10.90	5.15	
	UTIMCO Volatility Estimate	5.72	7.41	16.16	13.12	16.97	20.26	25.14	6.55	24.36	32.91	22.05	
	UTIMCO Sharpe Ratio	0.19	0.05	0.20	0.25	0.26	0.22	0.21	(0.08)	0.41	0.21	0.25	
Blended Forecasts (75% External and 25% UTIMCO)												UTIMCO Proposed SAA	
	Blended Return	3.10	2.40	5.45	5.26	6.25	6.38	7.96	3.69	8.55	5.33	6.45	7.45
	Blended Risk	4.28	4.40	13.49	9.73	16.02	18.00	22.41	7.34	23.79	22.48	16.69	15.79
	Blended Sharpe Ratio	0.26	0.09	0.26	0.34	0.27	0.24	0.27	0.23	0.28	0.15	0.27	0.49

# Projected Cyclical Nominal Returns



Cyclical Capital Market Assumptions													
	Provider	Stable Value				Global Equity					Real Return		
		US Bonds	Non-US Bonds	EM Debt	High Yield	US Equities	Non-US Equities	EM Equities	Hedge Funds	Private Equity	Commodities	Real Estate	
External Provider Forecasts	Blackrock (ST)	1.80	2.10	4.00	2.80	3.60	6.20	6.90	3.20	5.10	3.20	5.20	
	Cambridge (ST)	3.00	-	-	4.50	1.50	6.50	6.50	3.00	5.50	4.50	-	
	BW (ST)	2.30	0.50	5.10	-	2.10	3.00	7.80	-	-	-	-	
	GMO	2.50	0.10	3.40	2.70	-2.70	1.80	3.80	-	-	-	3.10	
	PIMCO	2.80	2.10	4.00	3.90	3.90	4.70	7.90	4.80	6.50	2.10	4.90	
	AQR	1.10	-0.20	-	1.10	4.00	4.50	4.70	-	-	3.00	-	
	BCA	2.40	-	-	-	2.60	4.80	6.50	-	-	-	-	
	Low	1.10	-0.20	3.40	1.10	-2.70	1.80	3.80	3.00	5.10	2.10	3.10	
	Average	2.27	0.92	4.13	3.00	2.14	4.50	6.30	3.67	5.70	3.20	4.40	
	Median	2.40	0.50	4.00	2.80	2.60	4.70	6.50	3.20	5.50	3.10	4.90	
	High	3.00	2.10	5.10	4.50	4.00	6.50	7.90	4.80	6.50	4.50	5.20	
	Median Volatility Estimate	3.80	3.40	12.60	8.60	15.70	17.25	21.50	7.60	23.60	19.00	14.90	
	Median Sharpe Ratio	0.11	(0.44)	0.16	0.09	0.04	0.16	0.21	0.16	0.15	0.06	0.19	
UTIMCO Forecasts	UTIMCO (Beta Only)	2.25	0.90	4.00	2.80	5.00	5.00	6.00	1.75	9.00	16.00	5.00	
	Alpha	1.00	1.00	1.00	1.00	1.75	1.75	2.25	4.25	2.50	6.00	3.00	
	UTIMCO Total	3.25	1.90	5.00	3.80	6.75	6.75	8.25	6.00	11.50	22.00	8.00	
	UTIMCO Beta v. Median	(0.15)	0.40	0.00	0.00	2.40	0.30	(0.50)	(1.45)	3.50	12.90	0.10	
	UTIMCO Total v. Median	0.85	1.40	1.00	1.00	4.15	2.05	1.75	2.80	6.00	18.90	3.10	
	UTIMCO Volatility Estimate	5.72	7.41	16.16	13.12	16.97	20.26	25.14	6.55	24.36	32.91	22.05	
	UTIMCO Sharpe Ratio	0.04	(0.15)	0.12	0.06	0.18	0.15	0.16	(0.04)	0.29	0.43	0.14	
Blended Forecasts (75% External and 25% UTIMCO)												UTIMCO Proposed SAA	
	Blended Return	2.36	0.60	4.00	2.80	3.20	4.78	6.38	2.84	6.38	6.33	4.93	5.65
	Blended Risk	4.28	4.40	13.49	9.73	16.02	18.00	22.41	7.34	23.79	22.48	16.69	15.76
	Blended Sharpe Ratio	0.08	(0.32)	0.15	0.08	0.07	0.15	0.20	0.11	0.18	0.19	0.18	0.23

# Correlation Matrix



	Stable Value				Global Equity					Real Return	
	US Bonds	Non-US Bonds	EM Debt	High Yield	US Equities	Non-US Equities	EM Equities	Hedge Funds	Private Equity	Commodities	Real Estate
US Bonds	1.00	0.71	0.37	0.15	0.05	0.02	0.09	0.07	0.01	0.09	0.09
Non-US Bonds	0.71	1.00	0.55	0.19	0.12	0.16	0.10	0.13	0.15	0.10	0.13
EM Debt	0.37	0.55	1.00	0.47	0.47	0.44	0.47	0.44	0.48	0.49	0.47
High Yield	0.15	0.19	0.47	1.00	0.67	0.56	0.44	0.51	0.60	0.45	0.51
US Equities	0.05	0.12	0.47	0.67	1.00	0.75	0.44	0.65	0.65	0.46	0.44
Non-US Equities	0.02	0.16	0.44	0.56	0.75	1.00	0.47	0.67	0.84	0.49	0.54
EM Equities	0.09	0.10	0.47	0.44	0.44	0.47	1.00	0.62	0.69	0.54	0.49
Hedge Funds	0.07	0.13	0.44	0.51	0.65	0.67	0.62	1.00	0.67	0.47	0.47
Private Equity	0.01	0.15	0.48	0.60	0.65	0.84	0.69	0.67	1.00	0.72	0.78
Commodities	0.09	0.10	0.49	0.45	0.46	0.49	0.54	0.47	0.72	1.00	0.51
Real Estate	0.09	0.13	0.47	0.51	0.44	0.54	0.49	0.47	0.78	0.51	1.00

# UTIMCO vs. Peer SAA<sup>1</sup>



University	Environments		
	Global Equity	Stable Value	Real Return
Harvard	59%	26%	15%
Yale	59%	24%	17%
Princeton	59%	22%	19%
Stanford	60%	22%	18%
Upenn	60%	28%	13%
Michigan	59%	24%	17%
Northwestern	63%	21%	16%
USC	62%	23%	15%
WUSTL	70%	22%	8%
California	64%	23%	13%
<b>Peer Average</b>	<b>62%</b>	<b>23%</b>	<b>15%</b>
<i>Median</i>	60%	23%	16%
<i>Min</i>	59%	21%	8%
<i>Max</i>	70%	28%	19%
<b>Proposed UTIMCO</b>	<b>63%</b>	<b>18%</b>	<b>19%</b>

University	Asset Classes		
	Public Equity	FI	Alternatives
Harvard	21%	4%	75%
Yale	20%	8%	73%
Princeton	26%	5%	69%
Stanford	28%	7%	65%
Upenn	31%	8%	61%
Michigan	26%	9%	65%
Northwestern	30%	8%	62%
USC	40%	11%	49%
WUSTL	45%	6%	49%
California	43%	10%	48%
<b>Peer Average</b>	<b>31%</b>	<b>8%</b>	<b>62%</b>
<i>Median</i>	29%	8%	64%
<i>Min</i>	20%	4%	48%
<i>Max</i>	45%	11%	75%
<b>Proposed UTIMCO</b>	<b>33%</b>	<b>8%</b>	<b>59%</b>

Detailed Breakout University	Global Equity					Stable Value		Real Return			Total
	US Equity	Dev. Ex US	EM	Directional HF <sup>2</sup>	Private Equity <sup>3</sup>	FI / Cash	SV HF <sup>2</sup>	RE	NR	TIPS	
Harvard	7%	7%	7%	12%	26%	2%	24%	9%	4%	2%	100%
Yale	4%	7%	9%	8%	31%	8%	17%	10%	7%	0%	100%
Princeton	10%	6%	10%	8%	25%	5%	17%	19%		0%	100%
Stanford	7%	21%		7%	25%	7%	15%	8%	10%	0%	100%
Upenn	8%	13%	10%	10%	20%	8%	19%	6%	6%	0%	100%
Michigan		26%		7%	26%	9%	15%	9%	8%	0%	100%
Northwestern	13%	17%		6%	27%	8%	13%	16%		0%	100%
USC		40%		6%	16%	11%	12%	6%	9%	0%	100%
WUSTL		34%	11%	8%	17%	6%	16%	8%		0%	100%
California	21%	14%	8%	8%	14%	8%	15%	8%	3%	3%	100%
<b>Peer Average<sup>5</sup></b>	<b>10%</b>	<b>9%</b>	<b>9%</b>	<b>8%</b>	<b>23%</b>	<b>7%</b>	<b>16%</b>	<b>8%</b>	<b>7%</b>	<b>0%</b>	<b>98%</b>
<b>Proposed UTIMCO</b>	<b>15%</b>	<b>10%</b>	<b>8%</b>	<b>5%</b>	<b>25%</b>	<b>8%</b>	<b>10%</b>	<b>10%</b>	<b>9%</b>	<b>0%</b>	<b>100%</b>

<sup>1</sup> Uses actual portfolio weights if policy portfolio not available

<sup>2</sup> Assumes a UTIMCO-like split between hedge funds for all Universities (33% Directional; 67% SV)

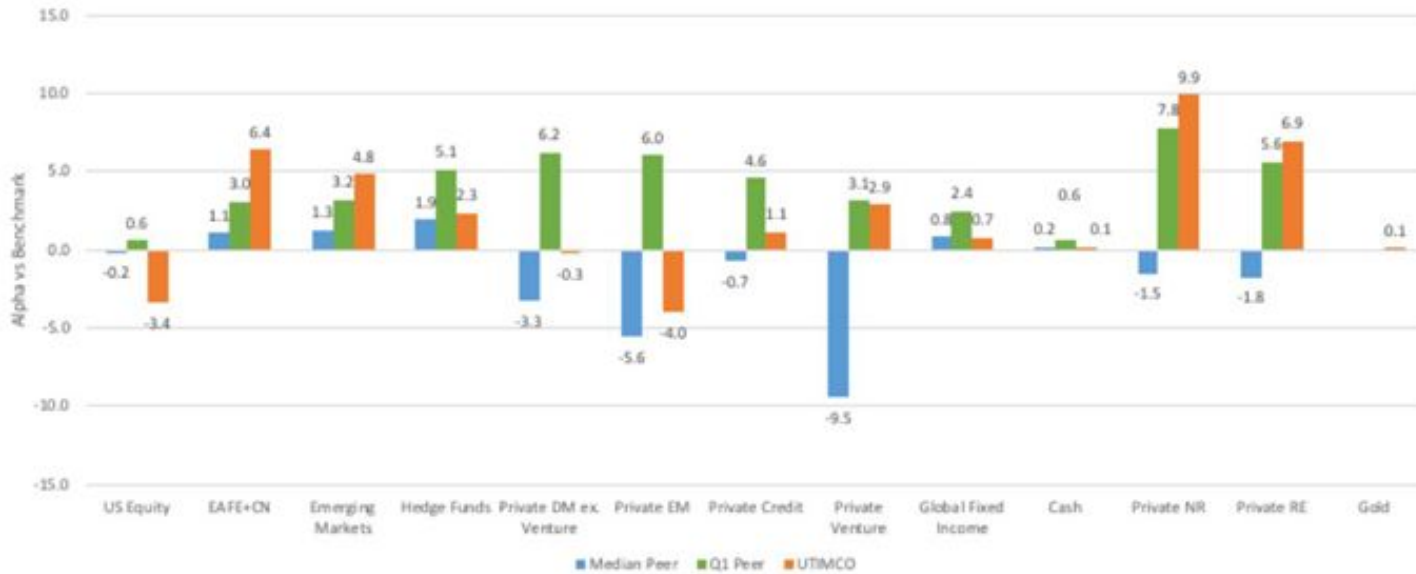
<sup>3</sup> Includes Venture and Credit

<sup>4</sup> Does not sum to zero due to lack of detailed breakout of assets shaded blue

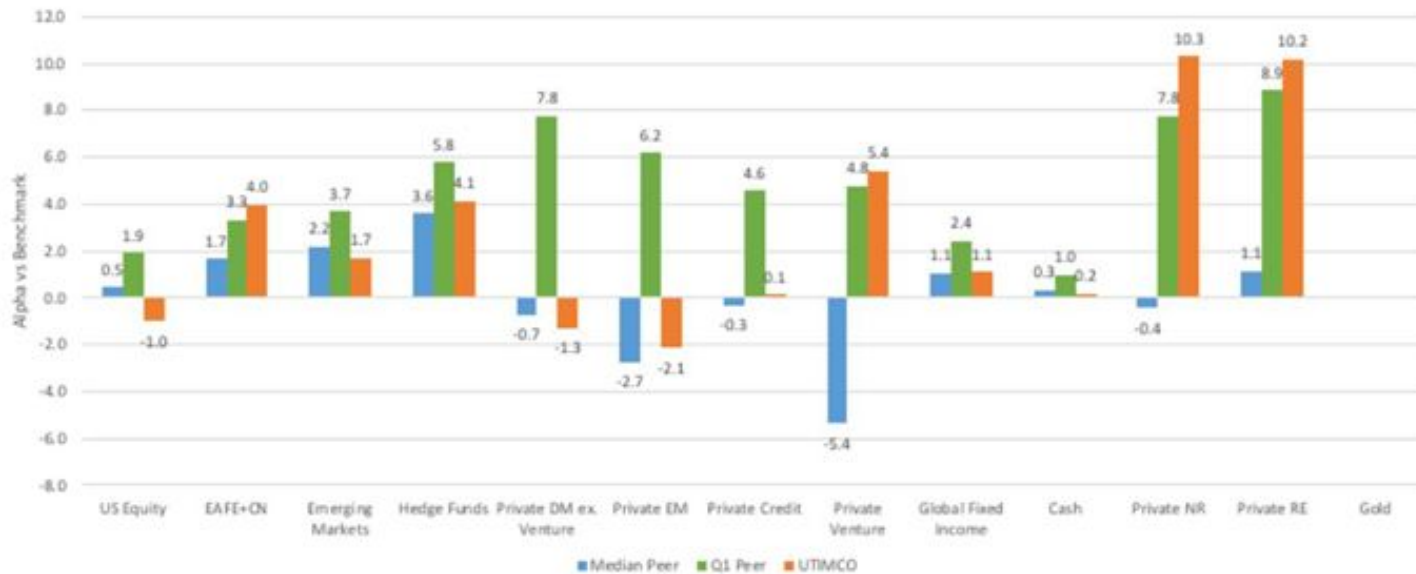
# Peer Universe Alpha Generation



Five  
Year  
Horizon  
Returns



Ten  
Year  
Horizon  
Returns



# Proposed SAA: PUF + GEF Detail



	CURRENT NAV / WEIGHTING		CURRENT POLICY			FY19 Target			LONG TERM TARGET				
	Current NAV (\$ million)	% of Fund	Minimum	Target	Maximum	FY19 Target	% of Fund	Over / (Under)	Minimum	Target	Maximum	Proposed Benchmark	
<b>GLOBAL EQUITY</b>	U.S. Public Equity	2,282	7.1%									MSCI US with net Dividends	
	Non-U.S. Developed Public Equity	1,397	4.4%									MSCI EAFE and Canada with Net Dividends	
	Global Developed Public Equity	2,276	7.1%									MSCI World Index with Net Dividends	
	Total Developed Public Equity	5,954	18.6%	11.7%	19.0%	27.8%	19.0%	18.6%	(0.4%)	18.0%	25.0%	32.0%	
	Emerging Markets Public Equity	3,655	11.3%	5.0%	10.0%	15.0%	10.0%	11.4%	1.4%	3.0%	8.0%	13.0%	MSCI EM Index with Net Dividends
	<b>Public Equity</b>	<b>9,609</b>	<b>29.9%</b>	<b>17.9%</b>	<b>29.0%</b>	<b>42.4%</b>	<b>29.0%</b>	<b>30.0%</b>	<b>1.0%</b>	<b>26.0%</b>	<b>33.0%</b>	<b>40.0%</b>	MSCI US, EAFE+CA, World, EM
	<b>Directional Hedge Funds</b>	<b>4,473</b>	<b>14.0%</b>	<b>9.3%</b>	<b>15.0%</b>	<b>22.0%</b>	<b>12.0%</b>	<b>14.0%</b>	<b>2.0%</b>	<b>0.0%</b>	<b>5.0%</b>	<b>10.0%</b>	HFRI Fund of Funds Composite
	Private Equity	2,058	6.4%	7.5%	12.5%	18.3%		7.4%					CA Buyouts
	PE Emerging Markets	1,673	5.2%	0.0%	5.0%	10.0%		5.2%					CA EM PE and VC
	Private Credit ( <i>New Policy</i> )							2.4%					CA Credit Opportunities
	PE Venture Capital	1,815	5.7%					5.7%					CA Venture Capital
<b>Private Equity</b>	<b>5,546</b>	<b>17.3%</b>	<b>10.8%</b>	<b>17.5%</b>	<b>25.6%</b>	<b>22.0%</b>	<b>20.7%</b>	<b>(1.3%)</b>	<b>18.0%</b>	<b>25.0%</b>	<b>30.0%</b>	Cambridge PE, VC and Private Credit BMs	
<b>Total Global Equity</b>	<b>19,628</b>	<b>61.2%</b>	<b>38.0%</b>	<b>61.5%</b>	<b>90.0%</b>	<b>63.0%</b>	<b>64.7%</b>	<b>1.7%</b>	<b>56.0%</b>	<b>63.0%</b>	<b>70.0%</b>		
<b>STABLE VALUE</b>	Internal IGF1	619	1.9%										
	Global IGF1	1,658	5.2%										
	<b>Investment Grade Fixed Income</b>	<b>2,277</b>	<b>7.1%</b>	<b>1.3%</b>	<b>7.5%</b>	<b>24.3%</b>	<b>9.5%</b>	<b>7.1%</b>	<b>(2.4%)</b>	<b>2.0%</b>	<b>7.0%</b>	<b>12.0%</b>	Barclays Global Aggregate Index - Hedged
	Credit-Related Fixed Income	32	0.1%	0.0%	0.0%	5.0%	-	0.1%	0.1%	0.0%	0.0%	5.0%	Barclays Capital Global High Yield Index
	Private Credit ( <i>Old Policy</i> )	773	2.4%	0.0%	3.5%	11.3%							Transferred to Private Equity
	<b>Investment Grade FI &amp; Credit</b>	<b>3,082</b>	<b>9.6%</b>	<b>1.9%</b>	<b>11.0%</b>	<b>35.6%</b>	<b>9.5%</b>	<b>7.2%</b>	<b>(2.3%)</b>	<b>2.0%</b>	<b>7.0%</b>	<b>12.0%</b>	
	Cash	100	0.3%										
	Other	(16)	0.0%										
	<b>Cash</b>	<b>84</b>	<b>0.3%</b>				<b>1.0%</b>	<b>0.3%</b>	<b>(0.7%)</b>	<b>-5.0%</b>	<b>1.0%</b>	<b>6.0%</b>	3 month T-Bills
	<b>Stable Value Hedge Funds</b>	<b>1,447</b>	<b>4.5%</b>	<b>1.0%</b>	<b>6.0%</b>	<b>19.4%</b>	<b>7.0%</b>	<b>4.5%</b>	<b>(2.5%)</b>	<b>3.0%</b>	<b>10.0%</b>	<b>15.0%</b>	HFRI Fund of Funds Conservative
	<b>Total Stable Value</b>	<b>4,613</b>	<b>14.4%</b>	<b>3.0%</b>	<b>17.0%</b>	<b>55.0%</b>	<b>17.5%</b>	<b>12.0%</b>	<b>(5.5%)</b>	<b>12.0%</b>	<b>18.0%</b>	<b>24.0%</b>	
<b>REAL RETURN</b>	Inflation Linked Bonds												
	<b>Inflation Linked Bonds</b>								0.0%	0.0%	5.0%	BBG Barclays Global Inflation Linked TR Index	
	Gold	761	2.4%	0.0%	2.5%	3.0%	1.5%	2.4%	0.9%	0.0%	0.0%	5.0%	Gold Spot Price (XAU)
	Commodities	864	2.7%	0.0%	0.0%	7.5%	-	2.7%	2.7%	0.0%	0.0%	6.0%	Bloomberg Commodity TRI
	<b>Commodities</b>	<b>1,625</b>	<b>5.1%</b>	<b>0.0%</b>	<b>2.5%</b>	<b>5.0%</b>	<b>1.5%</b>	<b>5.1%</b>	<b>3.6%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>6.0%</b>	Gold Spot, Bloomberg Commodity TRI
	Energy Upstream	1,702	5.3%					5.3%					Cambridge Natural Resources
	Agriculture	478	1.5%					1.5%					Cambridge Natural Resources
	Metals & Mining	703	2.2%					2.2%					Cambridge Natural Resources
	Energy Service	318	1.0%										Transferred into Private Equity
	Energy Midstream	80	0.3%										Transferred to Infrastructure
	Infrastructure (old)	473	1.5%										Transferred to Infrastructure
	<b>Natural Resources</b>	<b>3,753</b>	<b>11.8%</b>	<b>1.4%</b>	<b>12.0%</b>	<b>21.5%</b>	<b>8.0%</b>	<b>9.0%</b>	<b>1.0%</b>	<b>0.0%</b>	<b>5.0%</b>	<b>10.0%</b>	Cambridge Natural Resources
	Infrastructure (Infra + Midstream)												Cambridge Infrastructure
	<b>Infrastructure</b>						<b>2.0%</b>	<b>1.7%</b>	<b>(0.3%)</b>	<b>0.0%</b>	<b>4.0%</b>	<b>9.0%</b>	Cambridge Infrastructure
	<b>Public Real Estate</b>	<b>22</b>	<b>0.1%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>5.0%</b>	-	<b>0.1%</b>	<b>0.1%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>5.0%</b>	FTSE EPRA / NAREIT Developed Net TRI USD
	Private Real Estate - US/Canada	1,239	3.9%					3.9%					
	Private Real Estate - Europe	456	1.4%					1.4%					
Private Real Estate - Asia	41	0.1%					0.1%						
Private Real Estate - Lat Am	108	0.3%					0.3%						
Private Real Estate - Global	519	1.6%					1.6%						
<b>Private Real Estate</b>	<b>2,363</b>	<b>7.4%</b>	<b>0.8%</b>	<b>7.0%</b>	<b>12.5%</b>	<b>8.0%</b>	<b>7.3%</b>	<b>(0.7%)</b>	<b>5.0%</b>	<b>10.0%</b>	<b>15.0%</b>	Cambridge Real Estate	
<b>Total Real Return</b>	<b>7,762</b>	<b>24.4%</b>	<b>2.5%</b>	<b>21.5%</b>	<b>38.5%</b>	<b>19.5%</b>	<b>23.2%</b>	<b>3.7%</b>	<b>13.0%</b>	<b>19.0%</b>	<b>25.0%</b>		
<b>Total PUF + GEF</b>	<b>32,003</b>	<b>100%</b>	<b>100%</b>			<b>100.0%</b>	<b>100%</b>		<b>100%</b>				



# Proposed SAA – Key Changes



## Summary Level Changes:

- Global Equity – Increasing target from 61.5% to 63%
- Stable Value – Increasing target from 17% to 18%
- Real Return – Decreasing target from 21.5% to 19%
- Illiquid investments (Private Equity + Private Credit + Private NR + Private RE) – increase from 40% to 44%
- Alternatives (All Private + DHF + SVHF) – decrease from 61% to 59%
- Benchmarks – most changes in the private areas, intended to put them on an apples-to-apples basis with industry standard benchmarks from a familiar / well-known provider.

## Global Equity Changes:

- Rebalancing by reducing Directional HFs over time, increasing Public Equity and Private Equity to more completely capture equity beta and alpha potential.
- Directional HFs likely to help us in the near-term if we see a cycle turn, longer-term we have Stable Value portfolio and RR portfolio to provide diversification.
- Transition over several years
- Developed Equity – increasing from 19% to 25%.
  - Changing implementation from single Global Developed to one that splits out US, EAFE+Canada and maintains a smaller Global Developed mandate
- Emerging Market - decreasing from 10% to 8%
- Directional HFs - decreasing from 14% to 5%, gradually
- Private Equity - increasing from 17.5% to 25%

# Proposed SAA – Key Changes



## Stable Value Changes:

- Modest Increase from 17% to 18%
- Fixed income - decreasing from 7.5% to 7%
- Stable Value Hedge Funds - increase from 4.5% to 10%
- Cash – added at 1%

## Real Return Changes:

- Decreased target from 21.5% to 19%
- Gold – gradually decreasing from 2.5% to 0% in the PUF + GEF
- Total Natural Resources declines from 14.5% to 7%
  - Addition of Commodities at 0% to allow for cyclical / tactical positions at favorable times in the cycle
  - Private NR – reduction from 12% to 5%
  - NR Energy Services moved to Private Equity
  - Energy Upstream from 5.3% - planned reduction to reflect significant exposure to this beta and volatility linked to oil & gas royalty income
- Real Estate increases from 7.5% to 12%
  - Public RE – addition at 0% to capture beta of core real estate
  - Private RE – increasing from 7% to 10%
- Benchmark change from Cambridge Fund of Funds to appropriate BMs for these areas: CA Natural Resources, CA Infrastructure, Cambridge Real Estate

# Proposed SAA: ITF Detail

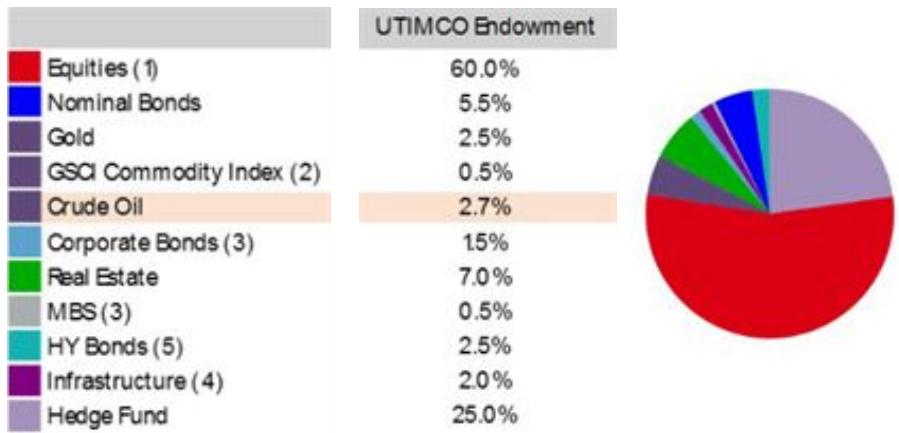


	CURRENT NAV / WEIGHTING		CURRENT POLICY			FY19 TARGET			LONG TERM TARGET			
	Current NAV (\$ million)	% of Fund	Minimum	Target	Maximum	FY19 Target	% of Fund	Over / (Under)	Minimum	Target	Maximum	
<b>GLOBAL EQUITY</b>	U.S. Public Equity	574	5.7%			5.7%	5.7%	-	2.0%	7.0%	12.0%	
	Non-U.S. Developed Public Equity	342	3.4%			3.4%	3.4%	-	0.0%	3.0%	8.0%	
	Global Developed Public Equity	558	5.5%			6.6%	6.6%	-	0.0%	5.0%	10.0%	
	Total Developed Public Equity	1,474	14.6%	6.1%	15.0%	21.6%	15.7%	15.7%	-	10.0%	15.0%	20.0%
	Emerging Markets Public Equity	726	7.1%	2.5%	7.5%	12.5%	7.1%	7.1%	-	2.5%	7.5%	12.5%
	<b>Public Equity</b>	<b>2,200</b>	<b>21.7%</b>	<b>9.1%</b>	<b>22.5%</b>	<b>32.4%</b>	<b>22.8%</b>	<b>22.8%</b>	<b>-</b>	<b>17.5%</b>	<b>22.5%</b>	<b>27.5%</b>
	<b>Directional Hedge Funds</b>	<b>3,194</b>	<b>31.6%</b>	<b>13.4%</b>	<b>33.0%</b>	<b>47.6%</b>	<b>31.6%</b>	<b>31.6%</b>	<b>-</b>	<b>25.0%</b>	<b>33.0%</b>	<b>38.0%</b>
<b>Total Global Equity</b>	<b>5,394</b>	<b>53.3%</b>	<b>22.5%</b>	<b>55.5%</b>	<b>80.0%</b>	<b>54.4%</b>	<b>54.4%</b>	<b>-</b>	<b>48.0%</b>	<b>55.5%</b>	<b>62.0%</b>	
<b>STABLE</b>	Internal IGFI	787	7.8%				7.8%					
	Global IGFI	2,110	20.9%				20.9%					
	<b>Investment Grade Fixed Income</b>	<b>2,897</b>	<b>28.7%</b>	<b>14.3%</b>	<b>30.0%</b>	<b>44.3%</b>	<b>28.7%</b>	<b>28.7%</b>	<b>-</b>	<b>23.0%</b>	<b>28.0%</b>	<b>33.0%</b>
	Cash	335	3.3%				3.3%	1.3%	0.0%	2.0%	7.0%	
<b>VALUE</b>	Other	(29)	-0.3%				(0.3%)	(0.3%)	0.0%	0.0%	5.0%	
	<b>Cash</b>	<b>306</b>	<b>3.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>3.0%</b>	<b>3.0%</b>	<b>-</b>	<b>0.0%</b>	<b>2.0%</b>	<b>7.0%</b>
	<b>Stable Value Hedge Funds</b>	<b>1,033</b>	<b>10.2%</b>	<b>5.7%</b>	<b>12.0%</b>	<b>17.7%</b>	<b>10.2%</b>	<b>10.2%</b>	<b>-</b>	<b>7.0%</b>	<b>12.0%</b>	<b>17.0%</b>
<b>Total Stable Value</b>	<b>4,236</b>	<b>41.9%</b>	<b>20.0%</b>	<b>42.0%</b>	<b>62.0%</b>	<b>41.9%</b>	<b>41.9%</b>	<b>0.0%</b>	<b>30.0%</b>	<b>42.0%</b>	<b>57.0%</b>	
<b>REAL RETURN</b>	<b>Inflation Linked Bonds</b>	<b>-</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>5.0%</b>	
	Gold	241	2.4%	0.0%	2.5%	10.0%	2.4%	2.4%	-	0.0%	2.5%	7.5%
	Commodities	125	1.2%	0.0%	0.0%	0.0%	1.2%	1.2%	-	0.0%	0.0%	5.0%
	Public Natural Resources	108	1.1%	0.0%	0.0%	0.0%						
	<b>Total Commodities</b>	<b>474</b>	<b>4.7%</b>	<b>0.0%</b>	<b>2.5%</b>	<b>10.0%</b>	<b>3.6%</b>	<b>3.6%</b>	<b>-</b>	<b>0.0%</b>	<b>2.5%</b>	<b>7.5%</b>
	<b>Public Real Estate</b>	<b>10</b>	<b>0.1%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>5.0%</b>	<b>0.1%</b>	<b>0.1%</b>	<b>-</b>	<b>0.0%</b>	<b>0.0%</b>	<b>5.0%</b>
<b>Total Real Return</b>	<b>484</b>	<b>4.8%</b>	<b>0.0%</b>	<b>2.5%</b>	<b>20.0%</b>	<b>3.7%</b>	<b>4.8%</b>	<b>-</b>	<b>0.0%</b>	<b>2.5%</b>	<b>7.5%</b>	
<b>Total ITF (net)</b>	<b>10,114</b>	<b>100.0%</b>	<b>100.0%</b>			<b>100.0%</b>	<b>100.0%</b>		<b>100.0%</b>			

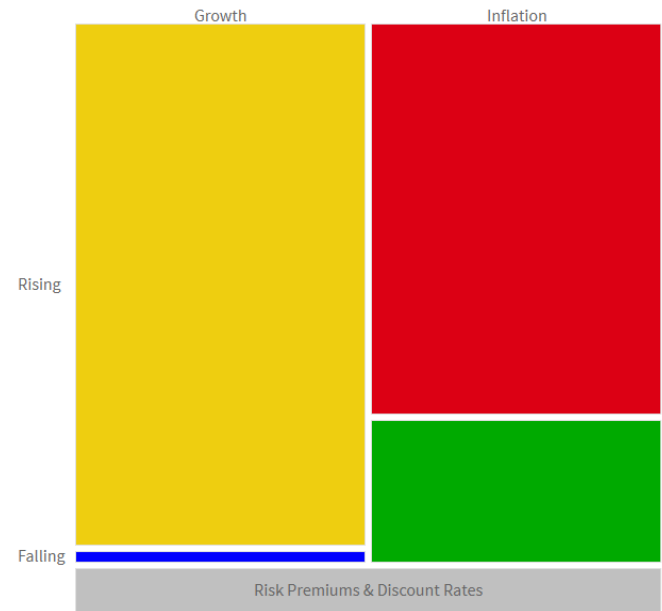
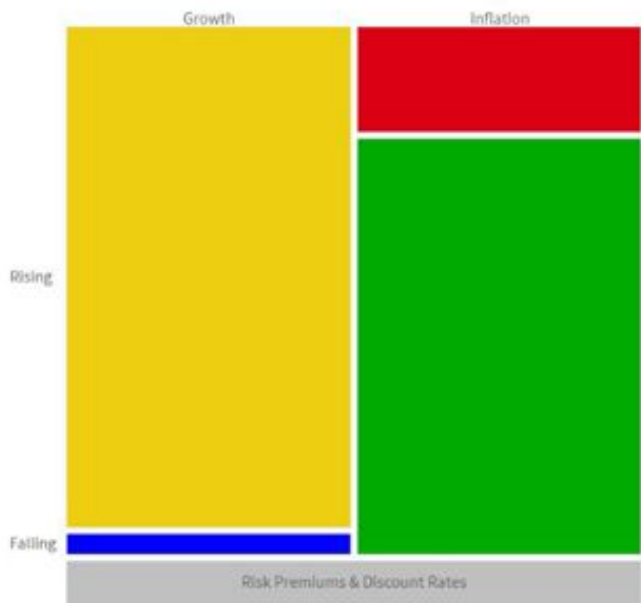
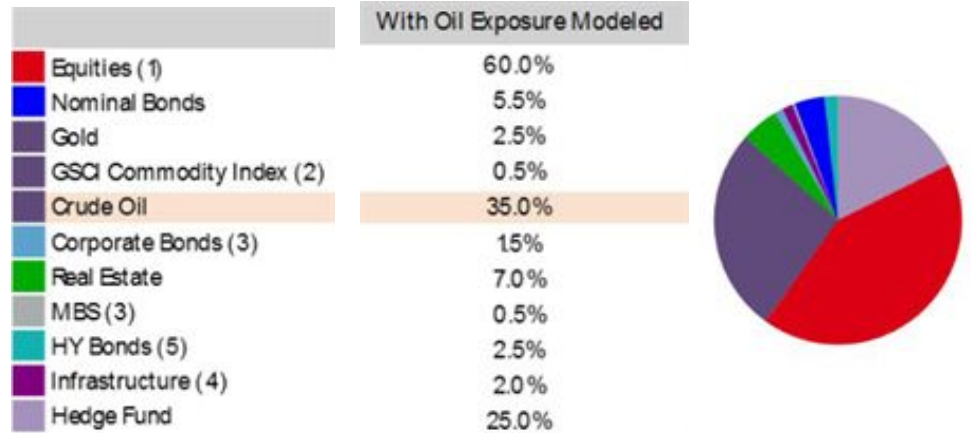
# Special Report – BW Slides



## Without Oil Exposure



## With Oil Exposure



# THE UNIVERSITY OF TEXAS SYSTEM PERMANENT UNIVERSITY FUND INVESTMENT POLICY STATEMENT

## Purpose

The Permanent University Fund (the “PUF”) is a public endowment contributing to the support of eligible institutions of The University of Texas System and The Texas A&M University System as provided in Article VII, Section 18 of the *Texas Constitution*.

## PUF Organization

The PUF was established in the *Texas Constitution* of 1876 through the appropriation of land grants previously given to The University of Texas at Austin plus one million acres. The land grants to the PUF were completed in 1883 with the contribution of an additional one million acres of land. Today, the PUF contains 2,109,190 acres of land (the “PUF Lands”) located in 19 counties primarily in West Texas.

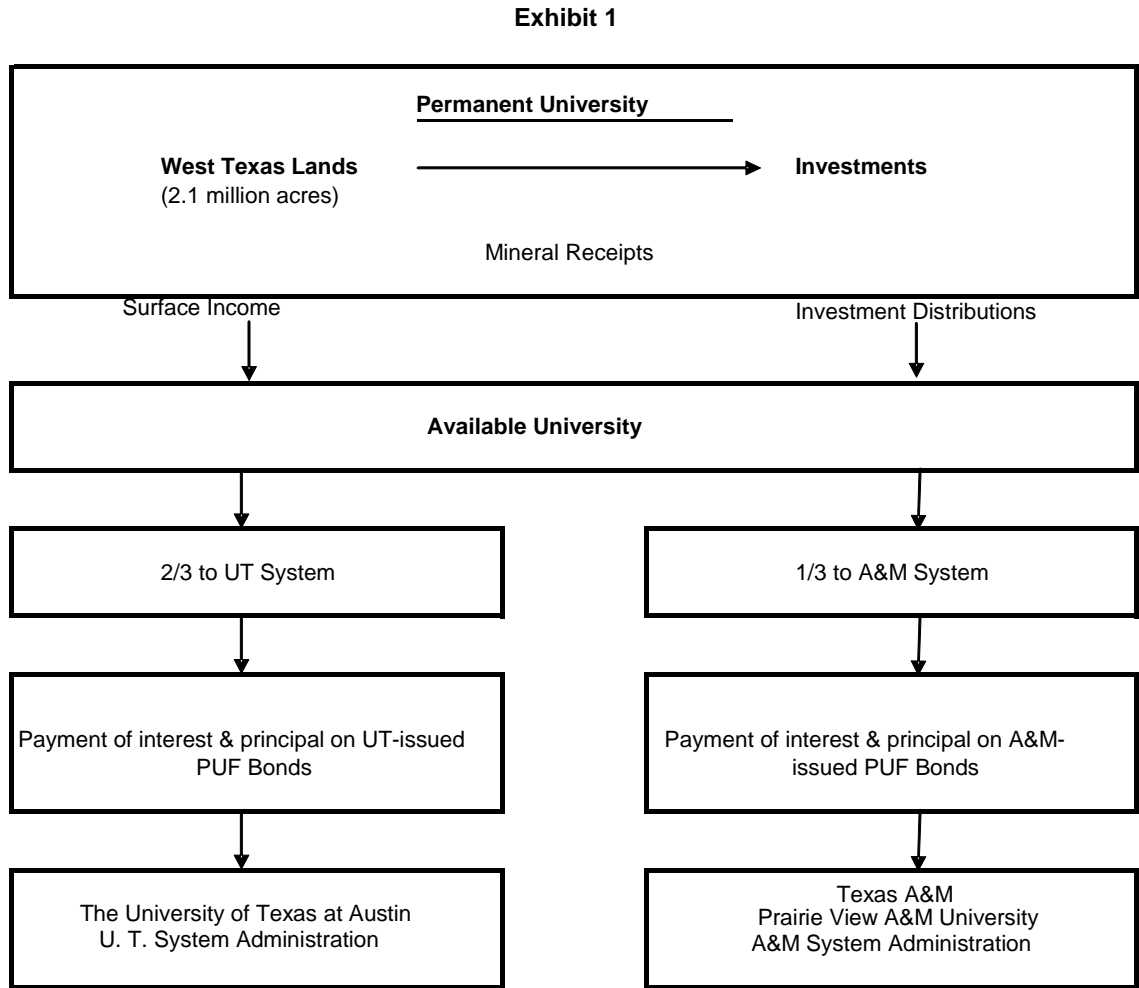
The 2.1 million acres comprising the PUF Lands produce two streams of income: a) mineral income, primarily in the form of oil and gas royalties and b) surface income, primarily from surface leases and easements. Under the Texas Constitution, mineral income, as a non-renewable source of income, remains a non-distributable part of PUF corpus, and is invested pursuant to this Policy Statement. Surface income, as a renewable source of income, is distributed to the Available University Fund (the “AUF”), as received. The Constitution also requires that all surface income and investment distributions paid to the AUF be expended for certain authorized purposes.

The expenditure of the AUF is subject to a prescribed order of priority:

First, following a 2/3rds and 1/3rd allocation of AUF receipts to the U. T. System and the A&M System, respectively, AUF receipts are expended for debt service on PUF bonds. Article VII of the *Texas Constitution* authorizes the U. T. System Board of Regents (the “Board of Regents”) and the Texas A&M University System Board of Regents (the “TAMUS Board”) to issue bonds payable from their respective interests in AUF receipts to finance permanent improvements and to refinance outstanding PUF obligations. The Constitution limits the amount of bonds and notes secured by each System’s interest in divisible PUF income to 20% and 10% of the book value of PUF investment securities, respectively. Bond resolutions adopted by both Boards also prohibit the issuance of additional PUF parity obligations unless the interest of the related System in AUF receipts during the preceding fiscal year covers projected debt service on all PUF Bonds of that System by at least 1.5 times.

Second, AUF receipts are expended to fund a) excellence programs specifically at U. T. Austin, Texas A&M University and Prairie View A&M University and b) the administration of the university Systems.

The payment of surface income and investment distributions from the PUF to the AUF and the associated expenditures is depicted below in Exhibit 1:



### PUF Management

Article VII, Section 11b of the *Texas Constitution* assigns fiduciary responsibility for managing and investing the PUF to the Board of Regents. Article VII, Section 11b authorizes the Board of Regents, subject to procedures and restrictions it establishes, to invest the PUF in any kind of investments 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.

Ultimate fiduciary responsibility for the PUF rests with the Board of Regents. Section 66.08 of the *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/Texas A&M Investment Management Company (“UTIMCO”), the PUF shall be managed by UTIMCO, which shall a) recommend investment policy for the PUF, b) recommend specific Asset Class ~~and Investment Type~~ allocation targets, ranges and performance benchmarks consistent with PUF objectives, and c) monitor PUF performance against PUF objectives. UTIMCO shall invest the PUF’s assets in conformity with this Policy Statement. All changes to this Policy Statement or the exhibits to this Policy Statement, including changes to Asset Class ~~and Investment Type~~ allocation targets, ranges, and performance benchmarks, are subject to approval by the Board of Regents.

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

### **PUF 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 PUF assets shall comply with applicable law and be structured so as to provide essential safekeeping and trading efficiency.

### **PUF Investment Objectives**

The PUF and the General Endowment Fund (the “GEF”) are managed similarly for efficient investment purposes. The primary investment objective of the PUF shall be to maximize investment returns within the risk parameters specified in this Policy Statement without regard to the distribution rate. Investment returns are expressed net of all investment-related expenses. Additional expenses include U.T. System administrative fees charged to the fund.

Investments must be ~~within the Asset Class and Investment Type ranges,~~ prudently diversified, and within the approved Policy Downside Volatility Bounds, as defined in Exhibit A, and measured at least monthly by UTIMCO’s risk model. Liquidity of the

PUF will be governed by the Liquidity Policy, overseen by the Risk Committee of the UTIMCO Board.

PUF return, Asset Class ~~and Investment Type~~ allocations, and downside volatility targets are subject to adjustment from time to time by the Board of Regents.

### **Asset Class ~~and Investment Type~~ Allocation and Policy**

Asset Class ~~and Investment Type~~ allocation is the primary determinant of the volatility of investment return and, subject to the Asset Class ~~and Investment Type~~ allocation ranges specified in Exhibit A, is the responsibility of UTIMCO. UTIMCO is responsible for measuring actual Asset Class ~~and Investment Type~~ allocation at least monthly (incorporating the impact of derivative positions covered under the Derivative Investment Policy), and for reporting the actual portfolio Asset Class ~~and Investment Type~~ allocation to the UTIMCO Board and the Board of Regents at least quarterly. While specific Asset Class ~~and Investment Type~~ allocation positions may be changed within the ranges specified in Exhibit A based on the economic and investment outlook from time to time, the range limits cannot be intentionally breached without prior approval of the Board of Regents.

In the event that actual portfolio positions in Asset Classes ~~es or Investment Type~~ or the Portfolio Projected Downside Volatility move outside the ranges indicated in Exhibit A due to market forces that shift relative valuations, UTIMCO staff will immediately report this situation to the UTIMCO Board Chairman and take steps to rebalance portfolio positions back within the policy ranges in an orderly manner as soon as practicable. Extenuating circumstances that could cause immediate rebalancing to be irrational and detrimental to the interest of the PUF asset values could warrant requesting approval of the UTIMCO Board Chairman to waive immediate remedial action.

PUF assets shall be allocated among the following broad Asset Classes ~~and Investment Types~~ based upon their individual return/risk characteristics and relationships to other Asset Classes ~~and Investment Types~~:

#### Asset Classes:

~~Investment Grade Fixed Income — Investment Grade Fixed Income represents ownership of fixed income instruments across all maturities, including real and nominal, US and non-US, that are rated investment grade, including cash as defined in the Liquidity Policy.~~

~~Credit-Related Fixed Income — Credit-Related Fixed Income represents ownership of fixed income instruments, including real and nominal across all maturities, US and non-US, that are rated below investment grade.~~

~~Natural Resources — Natural Resources represents ownership directly or in securities, the value of which are directly or indirectly tied to natural resources including, but not limited to, energy, metals and minerals, agriculture, livestock and timber.~~



~~Real Estate – Real Estate represents primarily equity ownership in real property including public and private securities.~~

~~Developed Country Equity – Developed Country Equity represents ownership in companies domiciled in developed countries as defined by the composition of the MSCI World Index.~~

~~Emerging Markets Equity – Emerging Markets Equity represents ownership in companies domiciled in emerging economies as defined by the composition of the MSCI Emerging Markets Index. In addition, such definition will also include those companies domiciled in economies that have yet to reach MSCI Emerging Markets Index qualification status (either through financial or qualitative measures).~~

Investment Types:

~~— More Correlated & Constrained Investments (“MCC”) – Mandates that exhibit higher levels of beta exposure to the underlying assets being traded, tend to be in a single Asset Class, have lower levels of short exposure and leverage, have more underlying security transparency, are more likely to be in publicly traded securities and are less likely to entail lock-ups.~~

~~— Less Correlated & Constrained Investments (“LCC”) – Mandates that exhibit lower levels of beta exposure to the underlying assets being traded, may be across Asset Classes, may have higher levels of short exposure and leverage, may not have underlying security transparency, are more likely to be in publicly traded securities and may entail lock-ups.~~

~~— Private Investments (“PI”) – Mandates that invest primarily in non-public securities and typically entail capital commitments, calls and distributions.~~

Global Equity:

~~U.S. Public Equity – U.S. Public Equity invests primarily in the equity securities of companies domiciled in the U.S. These securities are traded in public markets (on an exchange, over the counter, pursuant to SEC Rule 144a, or issued in an underwritten initial public offering (“IPO”)) or are restricted but expected to become public or otherwise freely marketable within three years after the initial investment. U.S. Public Equity includes common stocks, preferred stocks, exchange traded funds, and derivatives based on common stocks or equity indices (including convertibles, warrants, rights, options, and futures).~~

~~Non-U.S. Developed Public Equity – Non-U.S. Developed Public Equity invests primarily in the equity securities of companies that are domiciled in the developed countries (other than the U.S.) that are part of the MSCI World Index. These securities are traded in public markets (on an exchange, over the counter, or issued in an underwritten initial public offering (“IPO”)) or are restricted but expected to become public or otherwise freely marketable within three years after~~

the initial investment. Non-U.S. Developed Public Equity includes common stocks, depositary receipts, preferred stocks, exchange traded funds, and derivatives based on common stocks or equity indices (including convertibles, warrants, rights, options, and futures).

Global Developed Public Equity – Global Developed Public Equity invests primarily in the equity securities of companies that are domiciled in the developed countries that are part of the MSCI World Index; however, the asset allocation between U.S. and non-U.S. may be variable over time. Global Developed Public Equity includes common stocks, depositary receipts, preferred stocks, exchange traded funds, and derivatives based on common stocks or equity indices (including convertibles, warrants, rights, options, and futures).

Emerging Markets Public Equity – Emerging Markets Public Equity invests primarily in the equity securities of companies that are domiciled in (i) the emerging countries that are part of the MSCI Emerging Markets Index or (ii) countries that have yet to reach MSCI Emerging Markets Index qualification status. These securities are traded in public markets (on an exchange, over the counter, or issued in an underwritten initial public offering (“IPO”)) or are restricted but expected to become public or otherwise freely marketable within three years after the initial investment. Emerging Markets Public Equity includes common stocks, depositary receipts, preferred stocks, exchange traded funds, and derivatives based on common stocks or equity indices (including convertibles, warrants, rights, options, and futures).

Directional Hedge Funds – Directional Hedge Funds invest long and short in equities, fixed income, commodities, currencies and other global market instruments including derivatives. Directional Hedge Funds exhibit some market sensitivity as defined by beta to public equities. Strategies may include but are not limited to long/short equity, multi-strategy, event-driven, distressed and stressed credit and global macro.

Private Equity – Private Equity investments are made directly, through private limited partnerships, joint ventures or other special purpose vehicles and result in controlling or minority ownership interests in private or publicly-traded companies. These investments are acquired by purchasing publicly-traded or privately-issued common and preferred stocks, convertible securities, warrants, rights, options or debt obligations of private or publicly-traded companies. Private Equity investments often have transfer restrictions and are not as liquid as publicly-traded securities. Private Equity investments are often classified by strategy including: buyouts, venture capital and private credit.

### **Stable Value:**

Investment Grade Fixed Income – Investment Grade Fixed Income represents ownership of fixed income instruments across all maturities, U.S. and non-U.S., that are rated investment grade. These include debt issued by the Sovereign

Governments, various government enterprises and agencies, and corporations. The principal securities include bonds, notes, bills and mortgage and asset-backed securities. In addition, derivative applications that serve as a fixed income substitute may be classified as Investment Grade Fixed Income.

Credit-Related Fixed Income – Credit-Related Fixed Income represents ownership of fixed income instruments across all maturities, including real and nominal, U.S. and non-U.S., that are rated below investment grade.

Stable Value Hedge Funds – Stable Value Hedge Funds invest long and short in equities, fixed income, commodities, currencies and other global market instruments including derivatives. Stable Value Hedge Fund investments exhibit little to no market sensitivity, as defined by beta to U.S. Public Equity, and have an absolute return orientation. Strategies may include but are not limited to market-neutral equity, multi-strategy, re-insurance, risk premia, trend following, senior secured lending and global macro.

Cash – Cash consists of internal and external pooled investment funds, cash in foreign currencies, and other overnight funds that have not been allocated to a specific asset class.

### **Real Return:**

Inflation Linked Bonds – Inflation Linked Bonds include fixed income investments issued by both U.S. and Non-U.S. Governments where the principal value of the bond has been indexed to some rate of inflation, as well as derivatives referencing Inflation Linked Bonds or directly linked to inflation rates, including but not limited to inflation swaps. Inflation Linked Bonds are intended to provide some degree of inflation protection .

Commodities – Commodities investments represent ownership of bulk physical goods such as metals, grains, foods and energy products. These investments can be made through actual physical ownership of the goods, or through financial ownership of the underlying goods achieved through the purchase of derivatives based on commodities or commodities indices.

Natural Resources – Natural Resources investments are made directly, through private limited partnerships, joint ventures or other special purpose vehicles and result in a controlling or minority ownership interest in a company involved in the production of natural resources including, but not limited to: energy, precious metals, metals, minerals, agriculture, livestock, and timber. Some Natural Resource investments may have transfer restrictions and may not be as liquid as publicly-traded securities.

Infrastructure – Infrastructure investments are made directly, through private limited partnerships, joint ventures or other special purpose vehicles and result in ownership of companies or assets that provide an essential service that

contributes to the economic or social productivity of an organization, community, or society at large with real assets in the water, transportation, energy, communication or social sectors. Investments generally have structure features that include a monopolistic or oligopolistic market position with high barriers to entry; a low elasticity of demand due to their essential functions; stable, predictable, and long-term revenue contracts; or inflation protection through inflation adjustment mechanisms in underlying contracts. Some Infrastructure investments may have transfer restrictions and may not be as liquid as publicly-traded securities.

Public Real Estate – Public Real Estate invests principally in companies that are part of the FTSE/EPRA NAREIT Developed Index and that own or manage equity or debt interests in portfolios of real estate or real assets. These securities are traded in public markets (on an exchange, over the counter, or issued in an underwritten initial public offering) or are restricted but expected to become public or otherwise freely marketable within three years after the initial investment. Public Real Estate includes common stocks, depositary receipts, preferred stocks, exchange traded funds, and derivatives based on common stocks or equity indices (including convertibles, warrants, rights, options, and futures).

Private Real Estate – Private Real Estate investments are made directly, through private limited partnerships, joint ventures or other special purpose vehicles and result in a controlling or minority ownership interest in a real asset or a real estate focused company. Private Real Estate investments are acquired by purchasing physical real assets, physical real estate or publicly-traded or privately-issued securities including, but not limited to: common or preferred stock, secured or subordinated debt, mortgage-related investments, master limited partnerships (“MLPs”) and real estate investment trusts (“REITs”). Some Private Real Estate investments may have transfer restrictions and may not be as liquid as publicly-traded securities. Private Real Estate investments are often classified by strategy including: core, core-plus, value-added, opportunistic and special situations.

All mandates will be categorized at inception and on an ongoing basis by Asset Class ~~and Investment Type according to the Mandate Categorization Procedures as approved by the UTIMCO Board and then in effect.~~

## Performance Measurement

The investment performance of the PUF will be measured by the PUF’s custodian, an unaffiliated organization, with recognized expertise in this field and reporting responsibility to the UTIMCO Board, and compared against the stated Policy Benchmarks of the PUF, as indicated in Exhibit A (incorporating the impact of internal derivative positions) and reported to the UTIMCO Board and the Board of Regents at least quarterly. The Policy Portfolio benchmark will be maintained by UTIMCO and will be comprised of a blend of Asset Class ~~and Investment Type~~-indices weighted to reflect PUF’s Asset Class ~~and Investment Type~~-allocation policy targets as defined in

Exhibit A. Monthly performance data and net asset values will be available on the UTIMCO website within a reasonable time after each month end.

### **Investment Guidelines**

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

Investment guidelines include the following:

#### General

- 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 PUF assets in such investments.
- No securities may be purchased or held which would jeopardize the PUF's tax-exempt 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 in the Delegation of Authority Policy, the Derivative Investment Policy or by the UTIMCO Board.
- The PUF's investments in warrants shall not exceed more than 5% of the PUF's net assets or 2% with respect to warrants not listed on the New York or American Stock Exchanges.
- The PUF may utilize derivatives only in accordance with the Derivative Investment Policy. The aggregate prorated annual premium of Derivative Investments utilized to reduce long exposure to an Asset Class or hedge against risk shall not exceed 75 basis points of PUF value.

#### ~~MCC~~ Investment Grade and Credit-Related Fixed Income

Not more than 5% of the market value of fixed income securities may be invested in corporate and municipal bonds of a single issuer.

#### ~~MCC~~ Public Real Estate, Natural Resources, Developed Country Equity, and Emerging Markets Public Equity

- Not more than 25% of the market value of equity securities may be invested in any one industry or industries (as defined by the standard industry classification code and supplemented by other reliable data sources) at cost.
- Not more than 5% of the market value of equity securities may be invested in the securities of one corporation at cost.

#### MCC Public Equity Stable Value

- Not more than 7.5% of the market value of equity and fixed income securities taken together may be invested in one corporation at cost.

#### **PUF Distributions**

The PUF shall balance the needs and interests of present beneficiaries with those of the future. PUF spending policy objectives shall be to:

- provide a predictable, stable stream of distributions over time;
- ensure that the inflation adjusted value of distributions is maintained over the long term; and
- ensure that the inflation adjusted value of PUF assets after distributions is maintained over rolling 10-year periods.

The goal is for the PUF's average spending rate over time not to exceed the PUF's average annual investment return after inflation and expenses in order to preserve the purchasing power of PUF distributions and underlying assets.

Annually, the Board of Regents will approve a distribution amount to the AUF pursuant to Regents' Rule 80303, Section 2.2.

Following approval of the distribution amount, distributions from the PUF to the AUF will be made at the discretion of UTIMCO management in consultation with the U. T. System Office of Finance and The Texas A&M University System Office of Treasury Services.

#### **PUF Accounting**

The fiscal year of the PUF shall begin on September 1st and end on August 31st. Market value of the PUF 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. The



PUF's financial statements shall be audited each year by an independent accounting firm selected by the Board of Regents.

### **Valuation of Assets**

As of the close of business on the last business day of each month, UTIMCO shall determine the fair market value of all PUF net assets. Valuation of PUF assets shall be based on the books and records of the custodian for the valuation date. The final determination of PUF net assets for a month end close shall normally be completed within seven business days but determination may be longer under certain circumstances. Valuation of alternative assets shall be determined in accordance with the UTIMCO Valuation Criteria for Alternative Assets as approved by the UTIMCO Board and then in effect.

The fair market value of the PUF's net assets shall include all related receivables and payables of the PUF on the valuation. Such valuation shall be final and conclusive.

### **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 non-compliant activity within this Policy.

### **Securities Lending**

The PUF may participate in a securities lending contract with a bank or nonbank security lending agent for purposes of realizing additional income. Loans of securities by the PUF shall be collateralized by cash, letters of credit or securities issued or guaranteed by the U.S. Government or its agencies. The collateral will equal at least 100% of the current market value of the loaned securities. The contract shall state acceptable collateral for securities loaned, duties of the borrower, delivery of loaned securities and collateral, acceptable investment of collateral and indemnification provisions. The contract may include other provisions as appropriate.

The securities lending program will be evaluated from time to time as deemed necessary by the UTIMCO Board. Monthly reports issued by the lending agent shall be reviewed by UTIMCO staff to insure compliance with contract provisions.

### **Investor Responsibility**

As a shareholder, the PUF has the right to a voice in corporate affairs consistent with those of any shareholder. These include the right and obligation to vote proxies in a

manner consistent with the unique role and mission of higher education as well as for the economic benefit of the PUF. Notwithstanding the above, the UTIMCO Board shall discharge its fiduciary duties with respect to the PUF solely in the interest of the U. T. System and the A&M System, in compliance with the Proxy Voting Policy then in effect, and shall not invest the PUF 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 this Policy Statement as it deems necessary or advisable.

**Effective Date**

The effective date of this Policy shall be ~~December 1, 2017~~September 1, 2018.



EXHIBIT A

ASSET CLASS AND INVESTMENT TYPE TARGETS, RANGES, AND PERFORMANCE OBJECTIVES  
EFFECTIVE DECEMBER 1, 2017

POLICY PORTFOLIO	FYE 2018		
	Min	Target	Max
<b>Asset Classes</b>			
Investment Grade Fixed Income	3.0%	9.5%	25.0%
Credit-Related Fixed Income	0.0%	7.5%	30.0%
Real Estate	0.0%	7.0%	12.5%
Natural Resources	2.5%	14.5%	20.0%
Developed Country Equity	30.0%	44.5%	65.0%
Emerging Markets Equity	8.0%	17.0%	25.0%
<b>Investment Types</b>			
More Correlated & Constrained	30.0%	39.0%	60.0%
Less Correlated & Constrained	15.0%	21.0%	37.5%
Private Investments	20.0%	40.0%	50.0%

~~The total Asset Class & Investment Type exposure, including the amount of derivatives exposure not collateralized by Cash, may not exceed 105% of the Asset Class & Investment Type exposures excluding the amount of derivatives exposure not collateralized by Cash.~~

POLICY BENCHMARK	FYE 2018
Barclays Capital Global Aggregate Index	7.5%
FTSE EPRA/NAREIT Developed Index Net TRI USD	0.0%
Gold Spot price (XAU)	2.5%
MSCI World Index with net dividends	19.0%
MSCI Emerging Markets with net dividends	10.0%
Hedge Fund Research Indices Fund of Funds Composite Index	21.0%
Custom Cambridge Fund of Funds Benchmark	40.0%

POLICY/TARGET RETURN/RISKS	FYE 2018
Expected 10-Year Annual Real Return (Benchmark)	3.93%
One Year Downside Volatility	11.23%
<b>Risk Bounds</b>	
Lower: 1 Year Downside Volatility	75.00%
Upper: 1 Year Downside Volatility	115.00%

**EXHIBIT A**  
**ASSET CLASS TARGETS, RANGES, AND PERFORMANCE OBJECTIVES**  
**EFFECTIVE SEPTEMBER 1, 2018**

Asset Class	FYE 2019			Benchmark
	Min	Target	Max	
<b>Global Equity:</b>				
U.S. Public Equity	2.0%	7.0%	12.0%	MSCI U.S. with Net Dividends
Non-U.S. Developed Public Equity	0.0%	4.0%	10.0%	MSCI EAFE and Canada with Net Dividends
Global Developed Public Equity	3.0%	8.0%	13.0%	MSCI World Index with Net Dividends
<i>Total Developed Public Equity</i>	12.0%	19.0%	26.0%	
Emerging Markets Public Equity	5.0%	10.0%	15.0%	MSCI Emerging Markets Index with Net Dividends
<i>Total Public Equity</i>	22.0%	29.0%	36.0%	
Directional Hedge Funds	7.0%	12.0%	17.0%	HFRI Fund of Funds Composite
Private Equity	18.0%	22.0%	27.0%	Blended Cambridge Buyouts, Emerging Markets Private Equity and Venture Capital, Credit Opportunities, and Venture Capital
<b>Total Global Equity</b>	<b>56.0%</b>	<b>63.0%</b>	<b>70.0%</b>	
<b>Stable Value:</b>				
Investment Grade Fixed Income	2.0%	9.5%	12.0%	Bloomberg Barclays Global Aggregate Index - Hedged
Credit-Related Fixed Income	0.0%	0.0%	5.0%	Bloomberg Barclays Capital Global High Yield Index
<i>Total Fixed Income</i>	2.0%	9.5%	12.0%	
Cash	(5.0%)	1.0%	6.0%	3 month T-Bills
Stable Value Hedge Funds	2.0%	7.0%	12.0%	HFRI Fund of Funds Conservative
<b>Total Stable Value</b>	<b>11.5%</b>	<b>17.5%</b>	<b>23.5%</b>	
<b>Real Return:</b>				
Inflation Linked Bonds	0.0%	0.0%	5.0%	Bloomberg Barclays Global Inflation Linked TR Index
Gold	0.0%	1.5%	5.0%	Gold Spot Price (XAU)
Commodities	0.0%	0.0%	6.0%	Bloomberg Commodity TRI
<i>Total Commodities</i>	0.0%	1.5%	6.0%	
Natural Resources	0.0%	8.0%	12.0%	Cambridge Natural Resources
Infrastructure	0.0%	2.0%	9.0%	Cambridge Infrastructure
Public Real Estate	0.0%	0.0%	5.0%	FT SE EPRA/NAREIT Developed Index Net TRIUSD
Private Real Estate	3.0%	8.0%	13.0%	Cambridge Real Estate
<b>Total Real Return</b>	<b>13.5%</b>	<b>19.5%</b>	<b>25.5%</b>	
<b>Total All Asset Classes</b>		<b>100.0%</b>		

The total Asset Class exposure, including the amount of derivatives exposure not collateralized by Cash, may not exceed 105% of the Asset Class exposure excluding the amount of derivatives exposure not collateralized by Cash.



POLICY/TARGET RETURN/RISKS	FYE 2019
Expected 10-Year Annual Real Return	4.30%
One Year Downside Volatility	10.83%
Risk Bounds	
Lower: 1 Year Downside Volatility	75.00%
Upper: 1 Year Downside Volatility	115.00%

EXHIBIT A - Endowments  
(continued)

ASSET CLASS AND INVESTMENT TYPE TARGETS, RANGES AND PERFORMANCE OBJECTIVES  
EFFECTIVE DATE DECEMBER 1, 2017

POLICY BENCHMARKS BY ASSET CLASS AND INVESTMENT TYPE: FYE 2018

FYE 2018		More Correlated & Constrained	Less Correlated & Constrained	Private Investments	Total
Fixed Income	Investment Grade	Barclays Capital Global Aggregate Index (7.5%)	2.0%	0.0%	9.5%
	Credit-Related	(0.0%)	4.0%	3.5%	7.5%
Real Assets	Real Estate	FTSE EPRA/NAREIT Developed Index Net TRI USD (0.0%)	0.0%	7.0%	7.0%
	Natural Resources	Gold Spot price (XAU) (2.5%)	0.0%	12.0%	14.5%
Equity	Developed Country	MSCI World Index with Net Dividends (19.0%)	13.0%	12.5%	44.5%
	Emerging Markets	MSCI EM Index with Net Dividends (10.0%)	2.0%	5.0%	17.0%
<b>Total</b>		<b>39.0%</b>	<b>21.0%</b>	<b>40.0%</b>	<b>100.0%</b>

 Hedge Fund Research Indices Fund of Funds Composite Index  
 Custom Cambridge Fund of Funds Benchmark

Investment Policy/Benchmarks are indicated in Black/Bold  
Reportable Targets are indicated in Gray

**THE UNIVERSITY OF TEXAS SYSTEM  
GENERAL ENDOWMENT FUND  
INVESTMENT POLICY STATEMENT**

**Purpose**

The General Endowment Fund (the "GEF"), established by the Board of Regents of The University of Texas System (the "Board of Regents") March 1, 2001, is a pooled fund for the collective investment of certain long-term funds under the control and management of the Board of Regents. The GEF provides for greater diversification of investments than would be possible if each account were managed separately.

**GEF Organization**

The GEF functions like a mutual fund in which each eligible fund purchases and redeems GEF units as provided herein. The ownership of GEF 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.

**GEF 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 GEF.

Ultimate fiduciary responsibility for the GEF 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/Texas A&M Investment Management Company (“UTIMCO”), the GEF shall be managed by UTIMCO, which shall a) recommend investment policy for the GEF, b) recommend specific Asset Class ~~and Investment Type~~ allocation targets, ranges, and performance benchmarks consistent with GEF objectives, and c) monitor GEF performance against GEF objectives. UTIMCO shall invest the GEF assets in conformity with this Policy Statement. All changes to this Policy Statement or the exhibits to this Policy Statement, including changes to Asset Class ~~and Investment Type~~ allocation targets, ranges and performance benchmarks, are subject to approval by the Board of Regents.

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

### **GEF 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 GEF assets shall comply with applicable law and be structured so as to provide essential safekeeping and trading efficiency.

### **Funds Eligible to Purchase GEF Units**

No fund shall be eligible to purchase units of the GEF unless it is under the sole control, with full discretion as to investments, of the Board of Regents.

Any fund 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 GEF.

Currently, the Long Term Fund (the “LTF”) and the Permanent Health Fund (the “PHF”) purchase units in the GEF.

### **GEF Investment Objectives**

The GEF and the PUF are managed similarly for efficient investment purposes. The primary investment objective of the GEF shall be to maximize investment returns within the risk parameters specified in this Policy Statement without regard to the distribution rate. Investment returns are expressed net of all investment-related expenses.

Investments must be ~~within the Asset Class and Investment Type ranges,~~ prudently diversified, and within the approved Policy Downside Volatility Bounds, as defined in Exhibit A, and measured at least monthly by UTIMCO’s risk model. Liquidity of the

GEF will be governed by the Liquidity Policy, overseen by the Risk Committee of the UTIMCO Board.

GEF return, Asset Class ~~and Investment Type~~ allocations, and downside volatility targets are subject to adjustment from time to time by the Board of Regents.

### **Asset Class ~~and Investment Type~~ Allocation and Policy**

Asset Class ~~and Investment Type~~ allocation is the primary determinant of the volatility of investment return and, subject to the Asset Class ~~and Investment Type~~ allocation ranges specified in Exhibit A, is the responsibility of UTIMCO. UTIMCO is responsible for measuring actual Asset Class ~~and Investment Type~~ allocation at least monthly (incorporating the impact of derivative positions covered under the Derivative Investment Policy), and for reporting the actual portfolio Asset Class ~~and Investment Type~~ allocation to the UTIMCO Board and the Board of Regents at least quarterly. While specific Asset Class ~~and Investment Type~~ allocation positions may be changed within the ranges specified in Exhibit A based on the economic and investment outlook from time to time, the range limits cannot be intentionally breached without prior approval of the Board of Regents.

In the event that actual portfolio positions in Asset Classes ~~or Investment Types~~ or the Portfolio Projected Downside Volatility move outside the ranges indicated in Exhibit A due to market forces that shift relative valuations, UTIMCO staff will immediately report this situation to the UTIMCO Board Chairman and take steps to rebalance portfolio positions back within the policy ranges in an orderly manner as soon as practicable. Extenuating circumstances that could cause immediate rebalancing to be irrational and detrimental to the interest of the GEF asset values could warrant requesting approval of the UTIMCO Board Chairman to waive immediate remedial action.

GEF assets shall be allocated among the following broad Asset Classes ~~and Investment Types~~ based upon their individual return/risk characteristics and relationships to other Asset Classes ~~and Investment Types~~:

#### ~~Asset Classes:~~

~~Investment Grade Fixed Income — Investment Grade Fixed Income represents ownership of fixed income instruments across all maturities, including real and nominal, US and non-US, that are rated investment grade, including cash as defined in the Liquidity Policy.~~

~~Credit-Related Fixed Income — Credit-Related Fixed Income represents ownership of fixed income instruments across all maturities, including real and nominal, US and non-US, that are rated below investment grade.~~

~~Natural Resources — Natural Resources represents ownership directly or in securities, the value of which are directly or indirectly tied to natural resources including, but not limited to, energy, metals and minerals, agriculture, livestock, and timber.~~

~~Real Estate – Real Estate represents primarily equity ownership in real property including public and private securities.~~

~~Developed Country Equity – Developed Country Equity represents ownership in companies domiciled in developed countries as defined by the composition of the MSCI World Index.~~

~~Emerging Markets Equity – Emerging Markets Equity represents ownership in companies domiciled in emerging economies as defined by the composition of the MSCI Emerging Markets Index. In addition, such definition will also include those companies domiciled in economies that have yet to reach MSCI Emerging Markets Index qualification status (either through financial or qualitative measures).~~

Investment Types:

~~More Correlated & Constrained Investments (“MCC”) – Mandates that exhibit higher levels of beta exposure to the underlying assets being traded, tend to be in a single Asset Class, have lower levels of short exposure and leverage, have more underlying security transparency, are more likely to be in publicly traded securities, and are less likely to entail lock-ups.~~

~~Less Correlated & Constrained Investments (“LCC”) – Mandates that exhibit lower levels of beta exposure to the underlying assets being traded, may be across Asset Classes, may have higher levels of short exposure and leverage, may not have underlying security transparency, are more likely to be in publicly traded securities, and may entail lock-ups.~~

~~Private Investments (“PI”) – Mandates that invest primarily in non-public securities and typically entail capital commitments, calls and distributions.~~

Global Equity:

U.S. Public Equity – U.S. Public Equity invests primarily in the equity securities of companies domiciled in the U.S. These securities are traded in public markets (on an exchange, over the counter, pursuant to SEC Rule 144a, or issued in an underwritten initial public offering (“IPO”)) or are restricted but expected to become public or otherwise freely marketable within three years after the initial investment. U.S. Public Equity includes common stocks, preferred stocks, exchange traded funds, and derivatives based on common stocks or equity indices (including convertibles, warrants, rights, options, and futures).

Non-U.S. Developed Public Equity – Non-U.S. Developed Public Equity invests primarily in the equity securities of companies that are domiciled in the developed countries (other than the U.S.) that are part of the MSCI World Index. These securities are traded in public markets (on an exchange, over the counter, or issued in an underwritten initial public offering (“IPO”)) or are restricted but expected to become public or otherwise freely marketable within three years after



the initial investment. Non-U.S. Developed Public Equity includes common stocks, depositary receipts, preferred stocks, exchange traded funds, and derivatives based on common stocks or equity indices (including convertibles, warrants, rights, options, and futures).

Global Developed Public Equity – Global Developed Public Equity invests primarily in the equity securities of companies that are domiciled in the developed countries that are part of the MSCI World Index; however, the asset allocation between U.S. and non-U.S. may be variable over time. Global Developed Public Equity includes common stocks, depositary receipts, preferred stocks, exchange traded funds, and derivatives based on common stocks or equity indices (including convertibles, warrants, rights, options, and futures).

Emerging Markets Public Equity – Emerging Markets Public Equity invests primarily in the equity securities of companies that are domiciled in (i) the emerging countries that are part of the MSCI Emerging Markets Index or (ii) countries that have yet to reach MSCI Emerging Markets Index qualification status. These securities are traded in public markets (on an exchange, over the counter, or issued in an underwritten initial public offering (“IPO”)) or are restricted but expected to become public or otherwise freely marketable within three years after the initial investment. Emerging Markets Public Equity includes common stocks, depositary receipts, preferred stocks, exchange traded funds, and derivatives based on common stocks or equity indices (including convertibles, warrants, rights, options, and futures).

Directional Hedge Funds – Directional Hedge Funds invest long and short in equities, fixed income, commodities, currencies and other global market instruments including derivatives. Directional Hedge Funds exhibit some market sensitivity as defined by beta to public equities. Strategies may include but are not limited to long/short equity, multi-strategy, event-driven, distressed and stressed credit and global macro.

Private Equity – Private Equity investments are made directly, through private limited partnerships, joint ventures or other special purpose vehicles and result in controlling or minority ownership interests in private or publicly-traded companies. These investments are acquired by purchasing publicly-traded or privately-issued common and preferred stocks, convertible securities, warrants, rights, options or debt obligations of private or publicly-traded companies. Private Equity investments often have transfer restrictions and are not as liquid as publicly-traded securities. Private Equity investments are often classified by strategy including: buyouts, venture capital and private credit.

**Stable Value:**

Investment Grade Fixed Income – Investment Grade Fixed Income represents ownership of fixed income instruments across all maturities, U.S. and non-U.S., that are rated investment grade. These include debt issued by the Sovereign



Governments, various government enterprises and agencies, and corporations. The principal securities include bonds, notes, bills and mortgage and asset-backed securities. In addition, derivative applications that serve as a fixed income substitute may be classified as Investment Grade Fixed Income.

Credit-Related Fixed Income – Credit-Related Fixed Income represents ownership of fixed income instruments across all maturities, including real and nominal, U.S. and non-U.S., that are rated below investment grade.

Stable Value Hedge Funds – Stable Value Hedge Funds invest long and short in equities, fixed income, commodities, currencies and other global market instruments including derivatives. Stable Value Hedge Fund investments exhibit little to no market sensitivity, as defined by beta to U.S. Public Equity, and have an absolute return orientation. Strategies may include but are not limited to market-neutral equity, multi-strategy, re-insurance, risk premia, trend following, senior secured lending and global macro.

Cash – Cash consists of internal and external pooled investment funds, cash in foreign currencies, and other overnight funds that have not been allocated to a specific asset class.

### **Real Return:**

Inflation Linked Bonds – Inflation Linked Bonds include fixed income investments issued by both U.S. and Non-U.S. Governments where the principal value of the bond has been indexed to some rate of inflation, as well as derivatives referencing Inflation Linked Bonds or directly linked to inflation rates, including but not limited to inflation swaps. Inflation Linked Bonds are intended to provide some degree of inflation protection.

Commodities – Commodities investments represent ownership of bulk physical goods such as metals, grains, foods and energy products. These investments can be made through actual physical ownership of the goods, or through financial ownership of the underlying goods achieved through the purchase of derivatives based on commodities or commodities indices.

Natural Resources – Natural Resources investments are made directly, through private limited partnerships, joint ventures or other special purpose vehicles and result in a controlling or minority ownership interest in a company involved in the production of natural resources including, but not limited to: energy, precious metals, metals, minerals, agriculture, livestock, and timber. Some Natural Resource investments may have transfer restrictions and may not be as liquid as publicly-traded securities.

Infrastructure – Infrastructure investments are made directly, through private limited partnerships, joint ventures or other special purpose vehicles and result in ownership of companies or assets that provide an essential service that

contributes to the economic or social productivity of an organization, community, or society at large with real assets in the water, transportation, energy, communication or social sectors. Investments generally have structure features that include a monopolistic or oligopolistic market position with high barriers to entry; a low elasticity of demand due to their essential functions; stable, predictable, and long-term revenue contracts; or inflation protection through inflation adjustment mechanisms in underlying contracts. Some Infrastructure investments may have transfer restrictions and may not be as liquid as publicly-traded securities.

Public Real Estate – Public Real Estate invests principally in companies that are part of the FTSE/EPRA NAREIT Developed Index and that own or manage equity or debt interests in portfolios of real estate or real assets. These securities are traded in public markets (on an exchange, over the counter, or issued in an underwritten initial public offering) or are restricted but expected to become public or otherwise freely marketable within three years after the initial investment. Public Real Estate includes common stocks, depositary receipts, preferred stocks, exchange traded funds, and derivatives based on common stocks or equity indices (including convertibles, warrants, rights, options, and futures).

Private Real Estate – Private Real Estate investments are made directly, through private limited partnerships, joint ventures or other special purpose vehicles and result in a controlling or minority ownership interest in a real asset or a real estate focused company. Private Real Estate investments are acquired by purchasing physical real assets, physical real estate or publicly-traded or privately-issued securities including, but not limited to: common or preferred stock, secured or subordinated debt, mortgage-related investments, master limited partnerships (“MLPs”) and real estate investment trusts (“REITs”). Some Private Real Estate investments may have transfer restrictions and may not be as liquid as publicly-traded securities. Private Real Estate investments are often classified by strategy including: core, core-plus, value-added, opportunistic and special situations.

~~All mandates will be categorized at inception and on an ongoing basis by Asset Class, and Investment Type according to the Mandate Categorization Procedures as approved by the UTIMCO Board and then in effect.~~

## **Performance Measurement**

The investment performance of the GEF will be measured by the GEF's custodian, an unaffiliated organization, with recognized expertise in this field and reporting responsibility to the UTIMCO Board, and compared against the stated Policy Benchmarks of the GEF, as indicated in Exhibit A (incorporating the impact of internal derivative positions) and reported to the UTIMCO Board and the Board of Regents at least quarterly. The Policy Portfolio benchmark will be maintained by UTIMCO and will be comprised of a blend of Asset Class ~~and Investment Type~~ indices weighted to reflect GEF's Asset Class ~~and Investment Type~~ allocation policy targets as defined in

Exhibit A. Monthly performance data and net asset values will be available on the UTIMCO website within a reasonable time after each month end.

## **Investment Guidelines**

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

Investment guidelines include the following:

### General

- 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 GEF assets in such investments.
- No securities may be purchased or held which would jeopardize the GEF's tax-exempt 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 in the Delegation of Authority Policy, the Derivative Investment Policy or by the UTIMCO Board.
- The GEF's investments in warrants shall not exceed more than 5% of the GEF's net assets or 2% with respect to warrants not listed on the New York or American Stock Exchanges.
- The GEF may utilize derivatives only in accordance with the Derivative Investment Policy. The aggregate prorated annual premium of Derivative Investments utilized to reduce long exposure to an Asset Class or hedge against risk shall not exceed 75 basis points of GEF value.

### MCC Investment Grade and Credit-Related Fixed Income

Not more than 5% of the market value of fixed income securities may be invested in corporate and municipal bonds of a single issuer.

MCC—Public Real Estate, Natural Resources, Developed Country Equity, and Emerging Markets Public Equity

- Not more than 25% of the market value of equity securities may be invested in any one industry or industries (as defined by the standard industry classification code and supplemented by other reliable data sources) at cost.
- Not more than 5% of the market value of equity securities may be invested in the securities of one corporation at cost.

MCC Stable Value

- Not more than 7.5% of the market value of equity and fixed income securities taken together may be invested in one corporation at cost.

**GEF Accounting**

The fiscal year of the GEF shall begin on September 1st and end on August 31st. Market value of the GEF 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. The GEF’s financial statements shall be audited each year by an independent accounting firm selected by the Board of Regents.

**Valuation of Assets**

As of the close of business on the last business day of each month, UTIMCO shall determine the fair market value of all GEF net assets and the net asset value per unit of the GEF. Valuation of GEF assets shall be based on the books and records of the custodian for the valuation date. The final determination of GEF net assets for a month end close shall normally be completed within seven business days but determination may be longer under certain circumstances. Valuation of alternative assets shall be determined in accordance with the UTIMCO Valuation Criteria for Alternative Assets as approved by the UTIMCO Board and then in effect.

The fair market value of the GEF’s net assets shall include all related receivables and payables of the GEF 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.

**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 & UTIMCO [44/09/201708/10/2018](#)

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 non-compliant activity within this Policy.

### **Purchase of GEF Units**

Purchase of GEF units may be made on any quarterly purchase date (September 1, December 1, March 1, and June 1 of each fiscal year or the first business day subsequent thereto) upon payment of cash to the GEF or contribution of assets approved by UTIMCO's Chief Investment Officer, at the net asset value per unit of the GEF as of the most recent quarterly valuation date. Each fund whose monies are invested in the GEF shall own an undivided interest in the GEF in the proportion that the number of units invested therein bears to the total number of all units comprising the GEF.

### **Redemption of GEF Units**

Redemption of GEF units shall be paid in cash as soon as practicable after the quarterly valuation date of the GEF. Withdrawals from the GEF shall be at the market value price per unit determined at the time of the withdrawal.

### **Securities Lending**

The GEF may participate in a securities lending contract with a bank or nonbank security lending agent for purposes of realizing additional income. Loans of securities by the GEF shall be collateralized by cash, letters of credit, or securities issued or guaranteed by the U.S. Government or its agencies. The collateral will equal at least 100% of the current market value of the loaned securities. The contract shall state acceptable collateral for securities loaned, duties of the borrower, delivery of loaned securities and collateral, acceptable investment of collateral and indemnification provisions. The contract may include other provisions as appropriate.

The securities lending program will be evaluated from time to time as deemed necessary by the UTIMCO Board. Monthly reports issued by the lending agent shall be reviewed by UTIMCO staff to insure compliance with contract provisions.

### **Investor Responsibility**

As a shareholder, the GEF has the right to a voice in corporate affairs consistent with those of any shareholder. These include the right and obligation to vote proxies in a manner consistent with the unique role and mission of higher education as well as for the economic benefit of the GEF. Notwithstanding the above, the UTIMCO Board shall discharge its fiduciary duties with respect to the GEF solely in the interest of GEF unit holders, in compliance with the Proxy Voting Policy then in effect, and shall not

invest the GEF 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 this Policy Statement as it deems necessary or advisable.

**Effective Date**

The effective date of this Policy shall be ~~December 1, 2017~~September 1, 2018.

**EXHIBIT A**  
**ASSET CLASS AND INVESTMENT TYPE TARGETS, RANGES, AND PERFORMANCE OBJECTIVES**  
**EFFECTIVE DECEMBER 1, 2017**

POLICY PORTFOLIO	FYE 2018		
	Min	Target	Max
<b>Asset Classes</b>			
Investment Grade Fixed Income	3.0%	9.5%	25.0%
Credit-Related Fixed Income	0.0%	7.5%	30.0%
Real Estate	0.0%	7.0%	12.5%
Natural Resources	2.5%	14.5%	20.0%
Developed Country Equity	30.0%	44.5%	65.0%
Emerging Markets Equity	8.0%	17.0%	25.0%
<b>Investment Types</b>			
More Correlated & Constrained	30.0%	39.0%	60.0%
Less Correlated & Constrained	15.0%	21.0%	37.5%
Private Investments	20.0%	40.0%	50.0%

~~The total Asset Class & Investment Type exposure, including the amount of derivatives exposure not collateralized by Cash, may not exceed 105% of the Asset Class & Investment Type exposures excluding the amount of derivatives exposure not collateralized by Cash.~~

POLICY BENCHMARK	FYE 2018
Barclays Capital Global Aggregate Index	7.5%
FTSE EPRA/NAREIT Developed Index Net TRI USD	0.0%
Gold Spot price (XAU)	2.5%
MSCI World Index with net dividends	19.0%
MSCI Emerging Markets with net dividends	10.0%
Hedge Fund Research Indices Fund of Funds Composite Index	21.0%
Custom Cambridge Fund of Funds Benchmark	40.0%

POLICY/TARGET RETURN/RISKS	FYE 2018
Expected 10-Year Annual Real Return (Benchmark)	3.93%
One Year Downside Volatility	11.23%
<b>Risk Bounds</b>	
Lower: 1 Year Downside Volatility	75.00%
Upper: 1 Year Downside Volatility	115.00%

General Endowment Fund Investment Policy Statement (continued)

**EXHIBIT A**  
**ASSET CLASS TARGETS, RANGES, AND PERFORMANCE OBJECTIVES**  
**EFFECTIVE SEPTEMBER 1, 2018**

Asset Class	FYE 2019			Benchmark
	Min	Target	Max	
<b>Global Equity:</b>				
U.S. Public Equity	2.0%	7.0%	12.0%	MSCI U.S. with Net Dividends
Non-U.S. Developed Public Equity	0.0%	4.0%	10.0%	MSCI EAFE and Canada with Net Dividends
Global Developed Public Equity	3.0%	8.0%	13.0%	MSCI World Index with Net Dividends
<i>Total Developed Public Equity</i>	12.0%	19.0%	26.0%	
Emerging Markets Public Equity	5.0%	10.0%	15.0%	MSCI Emerging Markets Index with Net Dividends
<i>Total Public Equity</i>	22.0%	29.0%	36.0%	
Directional Hedge Funds	7.0%	12.0%	17.0%	HFRI Fund of Funds Composite
Private Equity	18.0%	22.0%	27.0%	Blended Cambridge Buyouts, Emerging Markets Private Equity and Venture Capital, Credit Opportunities, and Venture Capital
<b>Total Global Equity</b>	<b>56.0%</b>	<b>63.0%</b>	<b>70.0%</b>	
<b>Stable Value:</b>				
Investment Grade Fixed Income	2.0%	9.5%	12.0%	Bloomberg Barclays Global Aggregate Index - Hedged
Credit-Related Fixed Income	0.0%	0.0%	5.0%	Bloomberg Barclays Capital Global High Yield Index
<i>Total Fixed Income</i>	2.0%	9.5%	12.0%	
Cash	(5.0%)	1.0%	6.0%	3 month T-Bills
Stable Value Hedge Funds	2.0%	7.0%	12.0%	HFRI Fund of Funds Conservative
<b>Total Stable Value</b>	<b>11.5%</b>	<b>17.5%</b>	<b>23.5%</b>	
<b>Real Return:</b>				
Inflation Linked Bonds	0.0%	0.0%	5.0%	Bloomberg Barclays Global Inflation Linked TR Index
Gold	0.0%	1.5%	5.0%	Gold Spot Price (XAU)
Commodities	0.0%	0.0%	6.0%	Bloomberg Commodity TRI
<i>Total Commodities</i>	0.0%	1.5%	6.0%	
Natural Resources	0.0%	8.0%	12.0%	Cambridge Natural Resources
Infrastructure	0.0%	2.0%	9.0%	Cambridge Infrastructure
Public Real Estate	0.0%	0.0%	5.0%	FTSE EPRA/NAREIT Developed Index Net TRIUSD
Private Real Estate	3.0%	8.0%	13.0%	Cambridge Real Estate
<b>Total Real Return</b>	<b>13.5%</b>	<b>19.5%</b>	<b>25.5%</b>	
<b>Total All Asset Classes</b>		<b>100.0%</b>		

The total Asset Class exposure, including the amount of derivatives exposure not collateralized by Cash, may not exceed 105% of the Asset Class exposure excluding the amount of derivatives exposure not collateralized by Cash.



POLICY/TARGET RETURN/RISKS	FYE 2019
Expected 10-Year Annual Real Return	4.30%
One Year Downside Volatility	10.83%
Risk Bounds	
Lower: 1 Year Downside Volatility	75.00%
Upper: 1 Year Downside Volatility	115.00%



**EXHIBIT A - Endowments  
(continued)  
ASSET CLASS AND INVESTMENT TYPE TARGETS, RANGES AND PERFORMANCE OBJECTIVES  
EFFECTIVE DATE DECEMBER 1, 2017**

**POLICY BENCHMARKS BY ASSET CLASS AND INVESTMENT TYPE: FYE 2018**

<b>FYE 2018</b>		<b>More Correlated &amp; Constrained</b>	<b>Less Correlated &amp; Constrained</b>	<b>Private Investments</b>	<b>Total</b>
<b>Fixed Income</b>	<b>Investment Grade</b>	<b>Barclays Capital Global Aggregate Index (7.5%)</b>	2.0%	0.0%	9.5%
	<b>Credit-Related</b>	(0.0%)	4.0%	3.5%	7.5%
<b>Real Assets</b>	<b>Real Estate</b>	<b>FTSE EPRA/NAREIT Developed Index Net TRI USD (0.0%)</b>	0.0%	7.0%	7.0%
	<b>Natural Resources</b>	<b>Gold Spot price (XAU) (2.5%)</b>	0.0%	12.0%	14.5%
<b>Equity</b>	<b>Developed Country</b>	<b>MSCI World Index with Net Dividends (19.0%)</b>	13.0%	12.5%	44.5%
	<b>Emerging Markets</b>	<b>MSCI EM Index with Net Dividends (10.0%)</b>	2.0%	5.0%	17.0%
<b>Total</b>		<b>39.0%</b>	<b>21.0%</b>	<b>40.0%</b>	<b>100.0%</b>

 Hedge Fund Research Indices Fund of Funds Composite Index  
 Custom Cambridge Fund of Funds Benchmark

Investment Policy/Benchmarks are indicated in Black/Bold  
 Reportable Targets are indicated in Gray  
 UTIMCO 11/09/2017-08/10/2018

**THE UNIVERSITY OF TEXAS SYSTEM  
PERMANENT HEALTH FUND  
INVESTMENT POLICY STATEMENT**

**Purpose**

The Permanent Health Fund (the “PHF”), established by the Board of Regents of The University of Texas System (the “Board of Regents”), is a pooled fund for the collective investment of certain permanent funds for health-related institutions of higher education created, effective August 30, 1999, by Chapter 63 of the *Texas Education Code*. The permanent health funds which have assets in the PHF are:

- A. The Permanent Health Fund for Higher Education (the “PHFHE”), the distributions from which are to fund programs that benefit medical research, health education, or treatment programs at 10 health-related institutions of higher education; and
- B. Eight of the thirteen separate Permanent Funds for Health Related Institutions (the “PFHRIs”), the distributions from which are to fund research and other programs at health-related institutions of higher education that benefit public health. The PFHRIs invested in the PHF are:

- U. T. Health Science Center - San Antonio
- U. T. M. D. Anderson Cancer Center
- U. T. Southwestern Medical Center
- U. T. Medical Branch - Galveston
- U. T. Health Science Center - Houston
- U. T. Health Science Center - Tyler
- U. T. El Paso
- Regional Academic Health Center

The PHF provides for greater diversification of investments than would be possible if each account were managed separately.

**PHF Organization**

The PHF functions like a mutual fund in which each eligible fund purchases and redeems PHF units as provided herein.

## PHF Management

Chapter 63 of the *Texas Education Code* designates: a) the Board of Regents as the administrator for the PHFHE and b) the governing board of an institution for which a PFHRI fund is established as the administrator for its own PFHRI, or if the governing board so elects, the Comptroller of Public Accounts (State Comptroller). It permits the State Comptroller, in turn, to contract with the governing board of any institution that is eligible to receive a grant under Chapter 63. Pursuant to the foregoing and an Investment Management Services Agreement between the Board of Regents and the State Comptroller, the Board of Regents is the administrator responsible for managing the PHF. Chapter 63 further states that the Board of Regents may manage and invest the PHF in the same manner as the Board of Regents manages and invests other permanent endowments. It also requires that the administrator invest the funds in a manner that preserves the purchasing power of the funds' assets and distributions. It further requires that the administrator make distributions in a manner consistent with the administrator's policies and procedures for making distributions to the beneficiaries of its own endowments in the case of the PHFHE or the funds themselves in the case of the PFHRI funds.

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 Chapter 63 of the *Texas Education Code*, the Board of Regents has elected the PUF prudent investor standard to govern its management of the PHF.

Ultimate fiduciary responsibility for the PHF 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/Texas A&M Investment Management Company ("UTIMCO"), the PHF shall be managed by UTIMCO which shall: a) recommend investment policy for the PHF; b) recommend specific Asset Class ~~and Investment Type~~ allocation targets, ranges, and performance benchmarks consistent with PHF objectives; and c) monitor PHF performance against PHF objectives. UTIMCO shall invest the PHF assets in conformity with this Policy Statement. All changes to this Policy Statement or the exhibits to this Policy Statement, including

changes to Asset Class ~~and Investment Type~~ allocation targets, ranges and performance benchmarks, are subject to approval by the Board of Regents.

### **PHF 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 PHF assets shall comply with applicable law and be structured so as to provide essential safekeeping and trading efficiency.

### **Funds Eligible to Purchase PHF Units**

No fund shall be eligible to purchase units of the PHF unless it is a permanent health fund established pursuant to Chapter 63 of the *Texas Education Code*, under the control, with full discretion as to investments, of the Board of Regents.

Any fund 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 PHF.

### **PHF Investment Objectives**

The primary investment objective shall be to maximize investment returns within the risk parameters specified in this Policy Statement without regard to the distribution rate. Investment returns are expressed net of all investment-related expenses. Additional expenses include U. T. System administrative fees charged to the fund. The PHF's success in meeting its objectives depends upon its ability to generate high returns in periods of low inflation that will offset lower returns generated in years when the capital markets underperform the rate of inflation.

### **Asset Allocation and Policy**

PHF assets shall be allocated among the following investments:

- A. Cash and Cash Equivalents - Cash and Cash Equivalents has the same meaning as given to the term "Cash" in the Liquidity Policy.
- B. U. T. System General Endowment Fund (GEF) - See Exhibit B for the current GEF allocation, which is subject to changes by the Board of Regents. Upon any change to the GEF asset allocation, Exhibit B shall be revised accordingly.

In the event that actual Cash and Cash Equivalents positions move outside the range indicated in Exhibit A due to market forces that shift relative valuations, UTIMCO staff will immediately report this situation to the UTIMCO Board Chairman and take steps

to rebalance the Cash and Cash Equivalents positions back within the policy range in an orderly manner as soon as practicable. Extenuating circumstances that could cause immediate rebalancing to be irrational and detrimental to the interest of the PHF asset values could warrant requesting approval of the UTIMCO Board Chairman to waive immediate remedial action.

### **Performance Measurement**

The investment performance of the PHF will be measured by the PHF's custodian, an unaffiliated organization, with recognized expertise in this field and reporting responsibility to the UTIMCO Board, and compared against the stated Policy Benchmarks of the PHF, as indicated in Exhibits A and B (incorporating the impact of internal derivative positions) and reported to the UTIMCO Board and the Board of Regents at least quarterly. Monthly performance data and net asset values will be available on the UTIMCO website within a reasonable time after each month end.

### **Investment Guidelines**

The PHF must be invested at all times in strict compliance with applicable law. Investment guidelines for the U. T. System GEF shall be as stated in the GEF Investment Policy Statement.

### **PHF Distributions**

The PHF shall balance the needs and interests of present beneficiaries with those of the future. PHF spending policy objectives shall be to:

- A. provide a predictable, stable stream of distributions over time;
- B. ensure that the inflation adjusted value of distributions is maintained over the long term; and
- C. ensure that the inflation adjusted value of PHF assets after distributions is maintained over the long term.

The goal is for the PHF's average spending rate over time not to exceed the PHF's average annual investment return after inflation and expense ratio in order to preserve the purchasing power of PHF distributions and underlying assets.

The Board of Regents will designate a per unit distribution amount annually.

Distributions from the PHF to the unit holders shall be made quarterly as soon as practicable on or after the last business day of November, February, May, and August of each fiscal year.

## **PHF Accounting**

The fiscal year of the PHF shall begin on September 1st and end on August 31st. Market value of the PHF 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. The PHF’s financial statements shall be audited each year by an independent accounting firm selected by the Board of Regents.

## **Valuation of Assets**

As of the close of business on the last business day of each month, UTIMCO shall determine the fair market value of all PHF net assets and the net asset value per unit of the PHF. Valuation of PHF assets shall be based on the books and records of the custodian for the valuation date. The final determination of PHF net assets for a month end close shall normally be completed within eight business days but determination may be longer under certain circumstances.

The fair market value of the PHF’s net assets shall include all related receivables and payables of the PHF 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.

## **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 non-compliant activity within this Policy.

## **Purchase of PHF Units**

Purchase of PHF units may be made on any quarterly purchase date (September 1, December 1, March 1, and June 1 of each fiscal year or the first business day subsequent thereto) upon payment of cash to the PHF or contribution of assets approved by UTIMCO’s Chief Investment Officer, at the net asset value per unit of the PHF as of the most recent quarterly valuation date.

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

### **Redemption of PHF Units**

Redemption of PHF units shall be paid in cash as soon as practicable after the quarterly valuation date of the PHF. If the withdrawal is greater than \$10 million, advance notice of 60 business days shall be required prior to the quarterly valuation date. If the withdrawal is for less than \$10 million, advance notice of five business days shall be required prior to the quarterly valuation date. If the aggregate amount of redemptions requested on any redemption date is equal to or greater than 5% of the PHF's net asset value, the Board of Regents may redeem the requested units in installments and on a pro rata basis over a reasonable period of time that takes into consideration the time frame to liquidate illiquid investments and the best interests of all PHF unit holders. Withdrawals from the PHF shall be at the market value price per unit determined for the period of the withdrawal.

### **Investor Responsibility**

As a shareholder, the PHF has the right to a voice in corporate affairs consistent with those of any shareholder. These include the right and obligation to vote proxies in a manner consistent with the unique role and mission of higher education as well as for the economic benefit of the PHF. Notwithstanding the above, the UTIMCO Board shall discharge its fiduciary duties with respect to the PHF solely in the interest of PHF unit holders, in compliance with the Proxy Voting Policy then in effect, and shall not invest the PHF 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 ~~December 1, 2017~~ September 1, 2018.

**EXHIBIT A**

**PHF ASSET ALLOCATION**

**POLICY TARGETS, RANGES AND PERFORMANCE OBJECTIVES  
EFFECTIVE DATE SEPTEMBER 1, 2008**

	<b>Neutral Allocation</b>	<b>Range</b>	<b>Benchmark Return</b>
GEF Commingled Fund	100.0%	95% - 100%	Endowment Policy Portfolio
Cash and Cash Equivalents	0.0%	-1% - 5%	90 day T-Bills
Unencumbered Cash			
Temporary Cash Imbalance*			
Net non-trading receivable			

The endowment policy portfolio is the sum of the neutrally weighted benchmark returns for the GEF.

\*3 trading days or less



**EXHIBIT B - GENERAL ENDOWMENT FUND**  
**ASSET CLASS AND INVESTMENT TYPE TARGETS, RANGES, AND PERFORMANCE OBJECTIVES**  
**EFFECTIVE DECEMBER 1, 2017**

POLICY PORTFOLIO	FYE 2018		
	Min	Target	Max
<b><u>Asset Classes</u></b>			
Investment Grade Fixed Income	3.0%	9.5%	25.0%
Credit-Related Fixed Income	0.0%	7.5%	30.0%
Real Estate	0.0%	7.0%	12.5%
Natural Resources	2.5%	14.5%	20.0%
Developed Country Equity	30.0%	44.5%	65.0%
Emerging Markets Equity	8.0%	17.0%	25.0%
<b><u>Investment Types</u></b>			
More Correlated & Constrained	30.0%	39.0%	60.0%
Less Correlated & Constrained	15.0%	21.0%	37.5%
Private Investments	20.0%	40.0%	50.0%

~~The total Asset Class & Investment Type exposure, including the amount of derivatives exposure not collateralized by Cash, may not exceed 105% of the Asset Class & Investment Type exposures excluding the amount of derivatives exposure not collateralized by Cash.~~

POLICY BENCHMARK	FYE 2018
Barclays Capital Global Aggregate Index	7.5%
FTSE EPRA/NAREIT Developed Index Net TRI USD	0.0%
Gold Spot price (XAU)	2.5%
MSCI World Index with net dividends	19.0%
MSCI Emerging Markets with net dividends	10.0%
Hedge Fund Research Indices Fund of Funds Composite Index	21.0%
Custom Cambridge Fund of Funds Benchmark	40.0%

POLICY/TARGET RETURN/RISKS	FYE 2018
Expected 10-Year Annual Real Return (Benchmark)	3.93%
One Year Downside Volatility	11.23%
<b>Risk Bounds</b>	
Lower: 1 Year Downside Volatility	75.00%
Upper: 1 Year Downside Volatility	115.00%

Permanent Health Fund Investment Policy Statement (continued)

**EXHIBIT B - GENERAL ENDOWMENT FUND  
ASSET CLASS TARGETS, RANGES, AND PERFORMANCE OBJECTIVES  
EFFECTIVE SEPTEMBER 1, 2018**

Asset Class	FYE 2019			Benchmark
	Min	Target	Max	
<b>Global Equity:</b>				
U.S. Public Equity	2.0%	7.0%	12.0%	MSCI U.S. with Net Dividends
Non-U.S. Developed Public Equity	0.0%	4.0%	10.0%	MSCI EAFE and Canada with Net Dividends
Global Developed Public Equity	3.0%	8.0%	13.0%	MSCI World Index with Net Dividends
<i>Total Developed Public Equity</i>	12.0%	19.0%	26.0%	
Emerging Markets Public Equity	5.0%	10.0%	15.0%	MSCI Emerging Markets Index with Net Dividends
<i>Total Public Equity</i>	22.0%	29.0%	36.0%	
Directional Hedge Funds	7.0%	12.0%	17.0%	HFRI Fund of Funds Composite
Private Equity	18.0%	22.0%	27.0%	Blended Cambridge Buyouts, Emerging Markets Private Equity and Venture Capital, Credit Opportunities, and Venture Capital
<b>Total Global Equity</b>	<b>56.0%</b>	<b>63.0%</b>	<b>70.0%</b>	
<b>Stable Value:</b>				
Investment Grade Fixed Income	2.0%	9.5%	12.0%	Bloomberg Barclays Global Aggregate Index - Hedged
Credit-Related Fixed Income	0.0%	0.0%	5.0%	Bloomberg Barclays Capital Global High Yield Index
<i>Total Fixed Income</i>	2.0%	9.5%	12.0%	
Cash	(5.0%)	1.0%	6.0%	3 month T-Bills
Stable Value Hedge Funds	2.0%	7.0%	12.0%	HFRI Fund of Funds Conservative
<b>Total Stable Value</b>	<b>11.5%</b>	<b>17.5%</b>	<b>23.5%</b>	
<b>Real Return:</b>				
Inflation Linked Bonds	0.0%	0.0%	5.0%	Bloomberg Barclays Global Inflation Linked TR Index
Gold	0.0%	1.5%	5.0%	Gold Spot Price (XAU)
Commodities	0.0%	0.0%	6.0%	Bloomberg Commodity TRI
<i>Total Commodities</i>	0.0%	1.5%	6.0%	
Natural Resources	0.0%	8.0%	12.0%	Cambridge Natural Resources
Infrastructure	0.0%	2.0%	9.0%	Cambridge Infrastructure
Public Real Estate	0.0%	0.0%	5.0%	FTSE EPRA/NAREIT Developed Index Net TRIUSD
Private Real Estate	3.0%	8.0%	13.0%	Cambridge Real Estate
<b>Total Real Return</b>	<b>13.5%</b>	<b>19.5%</b>	<b>25.5%</b>	
<b>Total All Asset Classes</b>		<b>100.0%</b>		

The total Asset Class exposure, including the amount of derivatives exposure not collateralized by Cash, may not exceed 105% of the Asset Class exposure excluding the amount of derivatives exposure not collateralized by Cash.

POLICY/TARGET RETURN/RISKS	FYE 2019
Expected 10-Year Annual Real Return	4.30%
One Year Downside Volatility	10.83%
Risk Bounds	
Lower: 1 Year Downside Volatility	75.00%
Upper: 1 Year Downside Volatility	115.00%

**EXHIBIT B**  
**(continued)**  
**GENERAL ENDOWMENT FUND**  
**ASSET CLASS AND INVESTMENT TYPE TARGETS, RANGES AND PERFORMANCE OBJECTIVES**  
**EFFECTIVE DATE DECEMBER 1, 2017**

**POLICY BENCHMARKS BY ASSET CLASS AND INVESTMENT TYPE: FYE 2018**

<b>FYE 2018</b>		<b>More Correlated &amp; Constrained</b>	<b>Less Correlated &amp; Constrained</b>	<b>Private Investments</b>	<b>Total</b>
<b>Fixed Income</b>	<b>Investment Grade</b>	<b>Barclays Capital Global Aggregate Index (7.5%)</b>	<b>2.0%</b>	<b>0.0%</b>	<b>9.5%</b>
	<b>Credit-Related</b>	<b>(0.0%)</b>	<b>4.0%</b>	<b>3.5%</b>	<b>7.5%</b>
<b>Real Assets</b>	<b>Real Estate</b>	<b>FTSE EPRA/NAREIT Developed Index Net TRI USD (0.0%)</b>	<b>0.0%</b>	<b>7.0%</b>	<b>7.0%</b>
	<b>Natural Resources</b>	<b>Gold Spot price (XAU) (2.5%)</b>	<b>0.0%</b>	<b>12.0%</b>	<b>14.5%</b>
<b>Equity</b>	<b>Developed Country</b>	<b>MSCI World Index with Net Dividends (19.0%)</b>	<b>13.0%</b>	<b>12.5%</b>	<b>44.5%</b>
	<b>Emerging Markets</b>	<b>MSCI EM Index with Net Dividends (10.0%)</b>	<b>2.0%</b>	<b>5.0%</b>	<b>17.0%</b>
<b>Total</b>		<b>39.0%</b>	<b>21.0%</b>	<b>40.0%</b>	<b>100.0%</b>

 Hedge Fund Research Indices Fund of Funds Composite Index  
 Custom Cambridge Fund of Funds Benchmark  
 Benchmark

Investment Policy/Benchmarks are indicated in Black/Bold  
 Reportable Targets are indicated in Gray

**THE UNIVERSITY OF TEXAS SYSTEM  
LONG TERM FUND  
INVESTMENT POLICY STATEMENT**

**Purpose**

The Long Term Fund (the "LTF"), succeeded the Common Trust Fund in February 1995, and 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 private endowments and other long-term funds supporting various programs of The University of Texas System. The LTF provides for greater diversification of investments than would be possible if each account were managed separately.

**LTF Organization**

The LTF functions like a mutual fund in which each eligible account purchases and redeems LTF units as provided herein. The ownership of LTF 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.

**LTF 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 LTF.

Ultimate fiduciary responsibility for the LTF 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/Texas A&M Investment Management

Company (“UTIMCO”), the LTF shall be managed by UTIMCO, which shall a) recommend investment policy for the LTF, b) recommend specific Asset Class ~~and Investment Type~~ allocation targets, ranges, and performance benchmarks consistent with LTF objectives, and c) monitor LTF performance against LTF objectives. UTIMCO shall invest the LTF assets in conformity with this Policy Statement. All changes to this Policy Statement or the exhibits to this Policy Statement, including changes to Asset Class ~~and Investment Type~~ allocation targets, ranges and performance benchmarks, are subject to approval by the Board of Regents.

### **LTF 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 LTF assets shall comply with applicable law and be structured so as to provide essential safekeeping and trading efficiency.

### **Funds Eligible to Purchase LTF Units**

No account shall be eligible to purchase units of the LTF unless it is under the sole control, with full discretion as to investments, of the Board of Regents.

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 LTF.

### **LTF Investment Objectives**

The primary investment objective shall be to maximize investment returns within the risk parameters specified in this Policy Statement without regard to the distribution rate. Investment returns are expressed net of all investment-related expenses. Additional expenses include U. T. System administrative fees charged to the fund. The LTF’s success in meeting its objectives depends upon its ability to generate high returns in periods of low inflation that will offset lower returns generated in years when the capital markets underperform the rate of inflation.

### **Asset Allocation and Policy**

LTF assets shall be allocated among the following investments.

- A. Cash and Cash Equivalents – Cash and Cash Equivalents has the same meaning as given to the term “Cash” in the Liquidity Policy.
- B. U. T. System General Endowment Fund (GEF) - See Exhibit B for the current GEF allocation, which is subject to changes by the Board of

Regents. Upon any change to the GEF asset allocation, Exhibit B shall be revised accordingly.

In the event that actual Cash and Cash Equivalents positions move outside the range indicated in Exhibit A due to market forces that shift relative valuations, UTIMCO staff will immediately report this situation to the UTIMCO Board Chairman and take steps to rebalance ~~portfolio~~ Cash and Cash Equivalents positions back within the policy range in an orderly manner as soon as practicable. Extenuating circumstances that could cause immediate rebalancing to be irrational and detrimental to the interest of the LTF asset values could warrant requesting approval of the UTIMCO Board Chairman to waive immediate remedial action.

### **Performance Measurement**

The investment performance of the LTF will be measured by the LTF's custodian, an unaffiliated organization, with recognized expertise in this field and reporting responsibility to the UTIMCO Board, and compared against the stated Policy Benchmarks of the PHF, as indicated in Exhibits A and B (incorporating the impact of internal derivative positions) and reported to the UTIMCO Board and the Board of Regents at least quarterly. Monthly performance data and net asset values will be available on the UTIMCO website within a reasonable time after each month end.

### **Investment Guidelines**

The LTF must be invested at all times in strict compliance with applicable law. Investment guidelines for the U. T. System GEF shall be as stated in the GEF Investment Policy Statement.

### **LTF Distributions**

The LTF shall balance the needs and interests of present beneficiaries with those of the future. LTF spending policy objectives shall be to:

- A. provide a predictable, stable stream of distributions over time;
- B. ensure that the inflation adjusted value of distributions is maintained over the long term; and
- C. ensure that the inflation adjusted value of LTF assets after distributions is maintained over the long term.

The goal is for the LTF's average spending rate over time not to exceed the LTF's average annual investment return after inflation and expense ratio in order to preserve the purchasing power of LTF distributions and underlying assets.

Generally, pursuant to the Uniform Prudent Management of Institutional Funds Act, Chapter 163, *Texas Property Code*, as amended, (“Act”), subject to the intent of a donor in a gift instrument, the Board of Regents may appropriate for expenditure or accumulate so much of the LTF as it determines is prudent for the uses, benefits, purposes, and duration for which the LTF is established. Notwithstanding the preceding sentence, the Board of Regents may not appropriate for expenditure in any year an amount greater than nine percent (9%) of the LTF, calculated on the basis of market values determined at least quarterly and averaged over a period of not less than three years immediately preceding the year in which the appropriation for expenditure was made.

The Board of Regents will annually approve a per unit distribution amount.

Distributions from the LTF to the unit holders shall be made quarterly as soon as practicable on or after the last business day of November, February, May, and August of each fiscal year.

### **LTF Accounting**

The fiscal year of the LTF shall begin on September 1st and end on August 31st. Market value of the LTF 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. The LTF’s financial statements shall be audited each year by an independent accounting firm selected by the Board of Regents.

### **Valuation of Assets**

As of the close of business on the last business day of each month, UTIMCO shall determine the fair market value of all LTF net assets and the net asset value per unit of the LTF. Valuation of LTF assets shall be based on the books and records of the custodian for the valuation date. The final determination of LTF net assets for a month end close shall normally be completed within eight business days but determination may be longer under certain circumstances.

The fair market value of the LTF’s net assets shall include all related receivables and payables of the LTF 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.

## **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 non-compliant activity within this Policy.

## **Purchase of LTF Units**

Purchase of LTF units may be made on any quarterly purchase date (September 1, December 1, March 1, and June 1 of each fiscal year or the first business day subsequent thereto) upon payment of cash to the LTF or contribution of assets approved by UTIMCO's Chief Investment Officer, at the net asset value per unit of the LTF as of the most recent quarterly valuation date.

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

## **Redemption of LTF Units**

Redemption of LTF units shall be paid in cash as soon as practicable after the quarterly valuation date of the LTF. If the withdrawal is greater than \$25 million, advance notice of 60 business days shall be required prior to the quarterly valuation date. If the withdrawal is for less than \$25 million, advance notice of five business days shall be required prior to the quarterly valuation date. If the aggregate amount of redemptions requested on any redemption date is equal to or greater than 5% of the LTF's net asset value, the Board of Regents may redeem the requested units in installments and on a pro rata basis over a reasonable period of time that takes into consideration the time frame to liquidate illiquid investments and the best interests of all LTF unit holders. Withdrawals from the LTF shall be at the market value price per unit determined for the period of the withdrawal except as follows: withdrawals to correct administrative errors shall be calculated at the per unit value at the time the error occurred. To be considered an administrative error, the contribution shall have been invested in the LTF for a period less than or equal to one year determined from the date of the contribution to the LTF. Transfer of units between endowment unit holders shall not be considered redemption of units subject to this provision.

## **Investor Responsibility**

As a shareholder, the LTF has the right to a voice in corporate affairs consistent with those of any shareholder. These include the right and obligation to vote proxies in a



manner consistent with the unique role and mission of higher education as well as for the economic benefit of the LTF. Notwithstanding the above, the UTIMCO Board shall discharge its fiduciary duties with respect to the LTF solely in the interest of LTF unit holders, in compliance with the Proxy Voting Policy then in effect, and shall not invest the LTF 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 ~~December 1, 2017~~September 1, 2018.

**EXHIBIT A**

**LTF ASSET ALLOCATION**

**POLICY TARGETS, RANGES AND PERFORMANCE OBJECTIVES  
EFFECTIVE DATE SEPTEMBER 1, 2008**

	<b>Neutral Allocation</b>	<b>Range</b>	<b>Benchmark Return</b>
GEF Commingled Fund	100.0%	95% - 100%	Endowment Policy Portfolio
Cash and Cash Equivalents	0.0%	-1% - 5%	90 day T-Bills
Unencumbered Cash			
Temporary Cash Imbalance*			
Net non-trading receivable			

The endowment policy portfolio is the sum of the neutrally weighted benchmark returns for the GEF.

\*3 trading days or less

**EXHIBIT B - GENERAL ENDOWMENT FUND  
ASSET CLASS AND INVESTMENT TYPE TARGETS, RANGES, AND PERFORMANCE OBJECTIVES  
EFFECTIVE DECEMBER 1, 2017**

POLICY PORTFOLIO	FYE 2018		
	Min	Target	Max
<b>Asset Classes</b>			
Investment Grade Fixed Income	3.0%	9.5%	25.0%
Credit-Related Fixed Income	0.0%	7.5%	30.0%
Real Estate	0.0%	7.0%	12.5%
Natural Resources	2.5%	14.5%	20.0%
Developed Country Equity	30.0%	44.5%	65.0%
Emerging Markets Equity	8.0%	17.0%	25.0%
<b>Investment Types</b>			
More Correlated & Constrained	30.0%	39.0%	60.0%
Less Correlated & Constrained	15.0%	21.0%	37.5%
Private Investments	20.0%	40.0%	50.0%

The total Asset Class & Investment Type exposure, including the amount of derivatives exposure not collateralized by Cash, may not exceed 105% of the Asset Class & Investment Type exposures excluding the amount of derivatives exposure not collateralized by Cash.

POLICY BENCHMARK	FYE 2018
Barclays Capital Global Aggregate Index	7.5%
FTSE EPRA/NAREIT Developed Index Net TRI USD	0.0%
Gold Spot price (XAU)	2.5%
MSCI World Index with net dividends	19.0%
MSCI Emerging Markets with net dividends	10.0%
Hedge Fund Research Indices Fund of Funds Composite Index	21.0%
Custom Cambridge Fund of Funds Benchmark	40.0%

POLICY/TARGET RETURN/RISKS	FYE 2018
Expected 10-Year Annual Real Return (Benchmark)	3.93%
One Year Downside Volatility	11.23%
<b>Risk Bounds</b>	
Lower: 1 Year Downside Volatility	75.00%
Upper: 1 Year Downside Volatility	115.00%

**EXHIBIT B - GENERAL ENDOWMENT FUND  
ASSET CLASS TARGETS, RANGES, AND PERFORMANCE OBJECTIVES  
EFFECTIVE SEPTEMBER 1, 2018**

Asset Class	FYE 2019			Benchmark
	Min	Target	Max	
<b>Global Equity:</b>				
U.S. Public Equity	2.0%	7.0%	12.0%	MSCI U.S. with Net Dividends
Non-U.S. Developed Public Equity	0.0%	4.0%	10.0%	MSCI EAFE and Canada with Net Dividends
Global Developed Public Equity	3.0%	8.0%	13.0%	MSCI World Index with Net Dividends
<i>Total Developed Public Equity</i>	12.0%	19.0%	26.0%	
Emerging Markets Public Equity	5.0%	10.0%	15.0%	MSCI Emerging Markets Index with Net Dividends
<i>Total Public Equity</i>	22.0%	29.0%	36.0%	
Directional Hedge Funds	7.0%	12.0%	17.0%	HFRI Fund of Funds Composite
Private Equity	18.0%	22.0%	27.0%	Blended Cambridge Buyouts, Emerging Markets Private Equity and Venture Capital, Credit Opportunities, and Venture Capital
<b>Total Global Equity</b>	<b>56.0%</b>	<b>63.0%</b>	<b>70.0%</b>	
<b>Stable Value:</b>				
Investment Grade Fixed Income	2.0%	9.5%	12.0%	Bloomberg Barclays Global Aggregate Index - Hedged
Credit-Related Fixed Income	0.0%	0.0%	5.0%	Bloomberg Barclays Capital Global High Yield Index
<i>Total Fixed Income</i>	2.0%	9.5%	12.0%	
Cash	(5.0%)	1.0%	6.0%	3 month T-Bills
Stable Value Hedge Funds	2.0%	7.0%	12.0%	HFRI Fund of Funds Conservative
<b>Total Stable Value</b>	<b>11.5%</b>	<b>17.5%</b>	<b>23.5%</b>	
<b>Real Return:</b>				
Inflation Linked Bonds	0.0%	0.0%	5.0%	Bloomberg Barclays Global Inflation Linked TR Index
Gold	0.0%	1.5%	5.0%	Gold Spot Price (XAU)
Commodities	0.0%	0.0%	6.0%	Bloomberg Commodity TRI
<i>Total Commodities</i>	0.0%	1.5%	6.0%	
Natural Resources	0.0%	8.0%	12.0%	Cambridge Natural Resources
Infrastructure	0.0%	2.0%	9.0%	Cambridge Infrastructure
Public Real Estate	0.0%	0.0%	5.0%	FTSE EPRA/NAREIT Developed Index Net TRIUSD
Private Real Estate	3.0%	8.0%	13.0%	Cambridge Real Estate
<b>Total Real Return</b>	<b>13.5%</b>	<b>19.5%</b>	<b>25.5%</b>	
<b>Total All Asset Classes</b>		<b>100.0%</b>		

The total Asset Class exposure, including the amount of derivatives exposure not collateralized by Cash, may not exceed 105% of the Asset Class exposure excluding the amount of derivatives exposure not collateralized by Cash.

POLICY/TARGET RETURN/RISKS	FYE 2019
Expected 10-Year Annual Real Return	4.30%
One Year Downside Volatility	10.83%
Risk Bounds	
Lower: 1 Year Downside Volatility	75.00%
Upper: 1 Year Downside Volatility	115.00%

**EXHIBIT B**  
**(continued)**  
**GENERAL ENDOWMENT FUND**  
**ASSET CLASS AND INVESTMENT TYPE TARGETS, RANGES AND PERFORMANCE OBJECTIVES**  
**EFFECTIVE DATE DECEMBER 1, 2017**

**POLICY BENCHMARKS BY ASSET CLASS AND INVESTMENT TYPE: FYE 2018**

FYE 2018		More Correlated & Constrained	Less Correlated & Constrained	Private Investments	Total
Fixed Income	Investment Grade	Barclays Capital Global Aggregate Index (7.5%)	2.0%	0.0%	9.5%
	Credit-Related	(0.0%)	4.0%	3.5%	7.5%
Real Assets	Real Estate	FTSE EPRA/NAREIT Developed Index Net TRI USD (0.0%)	0.0%	7.0%	7.0%
	Natural Resources	Gold Spot price (XAU) (2.5%)	0.0%	12.0%	14.5%
Equity	Developed Country	MSCI World Index with Net Dividends (19.0%)	13.0%	12.5%	44.5%
	Emerging Markets	MSCI EM Index with Net Dividends (10.0%)	2.0%	5.0%	17.0%
<b>Total</b>		<b>39.0%</b>	<b>21.0%</b>	<b>40.0%</b>	<b>100.0%</b>

 Hedge Fund Research Indices Fund of Funds Composite Index  
 Custom Cambridge Fund of Funds Benchmark  
 Benchmark

Investment Policy/Benchmarks are indicated in Black/Bold  
 Reportable Targets are indicated in Gray

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

## **Purpose and Structure**

The University of Texas System Intermediate Term Fund (the “ITF”) 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 intermediate and long-term funds held by U. T. System institutions and U. T. System Administration.

## **ITF Organization**

The ITF functions as a mutual fund in which each eligible account purchases and redeems ITF units as provided herein. The ownership of ITF 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.

## **ITF 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 ITF.

Ultimate fiduciary responsibility for the ITF 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/Texas A&M Investment Management Company (“UTIMCO”), the ITF shall be managed by UTIMCO, which shall a) recommend investment policy for the ITF, b) recommend specific Asset Class **and**

~~Investment Type~~ allocation targets, ranges, and performance benchmarks consistent with ITF objectives, and c) monitor ITF performance against ITF objectives. UTIMCO shall invest the ITF assets in conformity with this Policy Statement. All changes to this Policy Statement or the exhibits to this Policy Statement, including changes to Asset Class ~~and Investment Type~~ allocation targets, ranges and performance benchmarks, are subject to approval by the Board of Regents.

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

### **ITF 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 ITF assets shall comply with applicable law and be structured so as to provide essential safekeeping and trading efficiency.

### **Funds Eligible to Purchase ITF Units**

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

### **ITF Investment Objectives**

The ITF consists of intermediate and long-term funds held by the U. T. System Board of Regents, as a fiduciary, for the benefit of U. T. System institutions, U. T. System Administration, and other affiliated funds. ITF assets are pooled for efficient investment purposes and managed by UTIMCO over the intermediate to longer term.

The primary investment objective of the ITF is to maximize investment returns within the risk parameters specified in this Policy Statement without regard to the distribution rate.

The secondary investment objective is to preserve the purchasing power of ITF assets by earning a compound annualized return over rolling five-year periods, net of all direct and allocated expenses, of at least inflation as measured by the Consumer Price Index (CPI-U) plus 3% and to generate average annual returns net of all investment-related expenses, in excess of the approved Policy Portfolio over rolling five-year periods. Investment returns are expressed net of all

investment-related expenses. Additional expenses include U. T. System administrative fees charged to the fund.

Investments must be ~~within the Asset Class and Investment Type ranges~~, prudently diversified, and within the approved Policy Downside Volatility Bounds, as defined in Exhibit A, and measured at least monthly by UTIMCO's risk model. Liquidity of the ITF will be governed by the Liquidity Policy, overseen by the Risk Committee of the UTIMCO Board.

ITF return, Asset Class ~~and Investment Type~~ allocations, and downside volatility targets are subject to adjustment from time to time by the Board of Regents.

### **Asset Class ~~and Investment Type~~ Allocation and Policy**

Asset Class ~~and Investment Type~~ allocation is the primary determinant of the volatility of investment return and, subject to the Asset Class ~~and Investment Type~~ allocation ranges specified in Exhibit A, is the responsibility of UTIMCO. The Asset Class ~~and Investment Type~~ allocation is designed to accommodate the intermediate investment horizon of the ITF assets with enhanced returns at moderate managed risk levels. UTIMCO is responsible for measuring actual Asset Class ~~and Investment Type~~ allocation at least monthly (incorporating the impact of derivative positions covered under the Derivative Investment Policy), and for reporting the actual portfolio Asset Class ~~and Investment Type~~ allocation to the UTIMCO Board and the Board of Regents at least quarterly. While specific Asset Class ~~and Investment Type~~ allocation positions may be changed within the ranges specified in Exhibit A based on the economic and investment outlook from time to time, the range limits cannot be intentionally breached without prior approval of the Board of Regents.

In the event that actual portfolio positions in Asset Class ~~or Investment Type~~ or the Projected Downside Volatility move outside the ranges indicated in Exhibit A due to market forces that shift relative valuations, UTIMCO staff will immediately report this situation to the UTIMCO Board Chairman and take steps to rebalance portfolio positions back within the policy ranges in an orderly manner as soon as practicable. Extenuating circumstances that could cause immediate rebalancing to be irrational and detrimental to the interest of the ITF asset values could warrant requesting approval of the UTIMCO Board Chairman to waive remedial action.

ITF assets shall be allocated among the following broad Asset Classes ~~and Investment Types~~ based upon their individual return/risk characteristics and relationships to other Asset Classes ~~and Investment Types~~:

#### Asset Classes:

~~Investment Grade Fixed Income — Investment Grade Fixed Income represents ownership of fixed income instruments across all maturities,~~



~~including real and nominal, US and non-US, that are rated investment grade, including Cash as defined in the Liquidity Policy.~~

~~Credit-Related Fixed Income — Credit-Related Fixed Income represents ownership of fixed income instruments across all maturities, including real and nominal, US and non-US, that are rated below investment grade.~~

~~Natural Resources — Natural Resources represents ownership directly or in securities, the value of which are directly or indirectly tied to natural resources including, but not limited to, energy, metals and minerals, agriculture, livestock, and timber.~~

~~Real Estate — Real Estate represents primarily equity ownership in real property including public and private securities.~~

~~Developed Country Equity — Developed Country Equity represents ownership in companies domiciled in developed countries as defined by the composition of the MSCI World Index.~~

~~Emerging Markets Equity — Emerging Markets Equity represents ownership in companies domiciled in emerging economies as defined by the composition of the MSCI Emerging Markets Index. In addition, such definition will also include those companies domiciled in economies that have yet to reach MSCI Emerging Markets Index qualification status (either through financial or qualitative measures).~~

Investment Types:

~~— More Correlated & Constrained Investments (“MCC”) — Mandates that exhibit higher levels of beta exposure to the underlying assets being traded, tend to be in a single Asset Class, have lower levels of short exposure and leverage, have more underlying security transparency, are more likely to be in publicly traded securities, and are less likely to entail lock-ups.~~

~~— Less Correlated & Constrained Investments (“LCC”) — Mandates that exhibit lower levels of beta exposure to the underlying assets being traded, may be across Asset Classes, may have higher levels of short exposure and leverage, may not have underlying security transparency, are more likely to be in publicly traded securities, and may entail lock-ups.~~

Global Equity:

U.S. Public Equity – U.S. Public Equity invests primarily in the equity securities of companies domiciled in the U.S. These securities are traded in public markets (on an exchange, over the counter, pursuant to SEC Rule 144a, or issued in an underwritten initial public offering (“IPO”)) or are restricted but expected to become public or otherwise freely marketable within three years

after the initial investment. U.S. Public Equity includes common stocks, preferred stocks, exchange traded funds, and derivatives based on common stocks or equity indices (including convertibles, warrants, rights, options, and futures).

Non-U.S. Developed Public Equity – Non-U.S. Developed Public Equity invests primarily in the equity securities of companies that are domiciled in the developed countries (other than the U.S.) that are part of the MSCI World Index. These securities are traded in public markets (on an exchange, over the counter, or issued in an underwritten initial public offering (“IPO”)) or are restricted but expected to become public or otherwise freely marketable within three years after the initial investment. Non-U.S. Developed Public Equity includes common stocks, depository receipts, preferred stocks, exchange traded funds, and derivatives based on common stocks or equity indices (including convertibles, warrants, rights, options, and futures).

Global Developed Public Equity – Global Developed Public Equity invests primarily in the equity securities of companies that are domiciled in the developed countries that are part of the MSCI World Index; however, the asset allocation between U.S. and non-U.S. may be variable over time. Global Developed Public Equity includes common stocks, depository receipts, preferred stocks, exchange traded funds, and derivatives based on common stocks or equity indices (including convertibles, warrants, rights, options, and futures).

Emerging Markets Public Equity – Emerging Markets Public Equity invests primarily in the equity securities of companies that are domiciled in (i) the emerging countries that are part of the MSCI Emerging Markets Index or (ii) countries that have yet to reach MSCI Emerging Markets Index qualification status. These securities are traded in public markets (on an exchange, over the counter, or issued in an underwritten initial public offering (“IPO”)) or are restricted but expected to become public or otherwise freely marketable within three years after the initial investment. Emerging Markets Public Equity includes common stocks, depository receipts, preferred stocks, exchange traded funds, and derivatives based on common stocks or equity indices (including convertibles, warrants, rights, options, and futures).

Directional Hedge Funds – Directional Hedge Funds invest long and short in equities, fixed income, commodities, currencies and other global market instruments including derivatives. Directional Hedge Funds exhibit some market sensitivity as defined by beta to public equities. Strategies may include but are not limited to long/short equity, multi-strategy, event-driven, distressed and stressed credit and global macro.

**Stable Value:**

Investment Grade Fixed Income – Investment Grade Fixed Income represents ownership of fixed income instruments across all maturities, U.S. and non-U.S., that are rated investment grade. These include debt issued by the Sovereign Governments, various government enterprises and agencies, and corporations. The principal securities include bonds, notes, bills and mortgage and asset-backed securities. In addition, derivative applications that serve as a fixed income substitute may be classified as Investment Grade Fixed Income.

Stable Value Hedge Funds – Stable Value Hedge Funds invest long and short in equities, fixed income, commodities, currencies and other global market instruments including derivatives. Stable Value Hedge Fund investments exhibit little to no market sensitivity, as defined by beta to U.S. Public Equity, and have an absolute return orientation. Strategies may include but are not limited to market-neutral equity, multi-strategy, re-insurance, risk premia, trend following, senior secured lending and global macro.

Cash – Cash consists of internal and external pooled investment funds, cash in foreign currencies, and other overnight funds that have not been allocated to a specific asset class.

### **Real Return:**

Inflation Linked Bonds – Inflation Linked Bonds include fixed income investments issued by both U.S. and Non-U.S. Governments where the principal value of the bond has been indexed to some rate of inflation, as well as derivatives referencing Inflation Linked Bonds or directly linked to inflation rates, including but not limited to inflation swaps. Inflation Linked Bonds are intended to provide some degree of inflation protection.

Commodities – Commodities investments represent ownership of bulk physical goods such as metals, grains, foods and energy products. These investments can be made through actual physical ownership of the goods, or through financial ownership of the underlying goods achieved through the purchase of derivatives based on commodities or commodities indices.

Public Real Estate – Public Real Estate invests principally in companies that are part of the FTSE/EPRA NAREIT Developed Index and that own or manage equity or debt interests in portfolios of real estate or real assets. These securities are traded in public markets (on an exchange, over the counter, or issued in an underwritten initial public offering) or are restricted but expected to become public or otherwise freely marketable within three years after the initial investment. Public Real Estate includes common stocks, depositary receipts, preferred stocks, exchange traded funds, and derivatives based on common stocks or equity indices (including convertibles, warrants, rights, options, and futures).

All mandates will be categorized at inception and on an ongoing basis by Asset Class ~~and Investment Type according to the Mandate Categorization Procedures as approved by the UTIMCO Board and then in effect.~~

## Performance Measurement

The investment performance of the ITF will be measured by the ITF's custodian, an unaffiliated organization, with recognized expertise in this field and reporting responsibility to the UTIMCO Board, compared against the stated Policy Benchmarks of the ITF, as indicated in Exhibit A (incorporating the impact of internal derivative positions) and reported to the UTIMCO Board and the Board of Regents at least quarterly. The Policy Portfolio benchmark will be maintained by UTIMCO and will be comprised of a blend of Asset Class ~~and Investment Type~~ indices reported by the independent custodian and weighted to reflect ITF's approved Asset Class ~~and Investment Type~~ allocation policy targets as defined in Exhibit A. Monthly performance data and net asset values will be available on the UTIMCO website within a reasonable time after each month end.

## Investment Guidelines

The ITF must be invested at all times in strict compliance with applicable law. Investment guidelines include the following:

### General

- 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 ITF assets in such investments.
- No securities may be purchased or held which would jeopardize the ITF's tax-exempt 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 in the Delegation of Authority Policy, the Derivative Investment Policy or by the UTIMCO Board.

- The ITF's investments in warrants shall not exceed more than 5% of the ITF's net assets or 2% with respect to warrants not listed on the New York or American Stock Exchanges.
- The ITF may utilize derivatives only in accordance with the Derivative Investment Policy. The aggregate prorated annual premium of Derivative Investments utilized to reduce long exposure to an Asset Class or hedge against risk shall not exceed 50 basis points of ITF value.

#### ~~MCC Investment Grade and Credit-Related Fixed Income~~

Not more than 5% of the market value of fixed income securities may be invested in corporate and municipal bonds of a single issuer.

#### ~~MCC Public Real Estate, Natural Resources, Developed Country Equity, and Emerging Markets Public Equity~~

- Not more than 25% of the market of equity securities may be invested in any one industry or industries (as defined by the standard industry classification code and supplemented by other reliable data sources) at cost.
- Not more than 5% of the market value of equity securities may be invested in the securities of one corporation at cost.

#### ~~MCC Public Equity Stable Value~~

- Not more than 7.5% of the market value of equity and fixed income securities taken together may be invested in one corporation at cost.

### **ITF Accounting**

The fiscal year of the ITF shall begin on September 1st and end on August 31st. Market value of the ITF 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. The ITF's financial statements shall be audited each year by an independent accounting firm selected by the Board of Regents.

### **Valuation of ITF Assets**

As of the close of business on the last business day of each month, UTIMCO shall determine the fair market value of all ITF net assets and the net asset value per unit of the ITF. The final determination of ITF net assets for a month end close

shall normally be completed within seven business days but determination may be longer under certain circumstances. Valuation of ITF assets shall be based on the books and records of the custodian for the valuation date.

The fair market value of the ITF's net assets shall include all related receivables and payables of the ITF 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.

## **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.

## **ITF Distributions**

The ITF shall provide monthly distributions to the unit holders. The Board of Regents will approve an annual distribution amount. Distributions from the ITF to the unit holders shall be made monthly on the first business day of each month. To calculate the monthly distribution, the distribution rate (% divided by 12) will be multiplied by each unit holder's account, determined as follows:

- Net asset value of each unit holder's account on the last business day of the second prior month;
- Plus value of each unit holder's net purchase/redemption amount on the first business day of the prior month;
- Less the distribution amount paid to each unit holder's account on the first business day of the prior month.

## **Purchase and Redemption of ITF Units**

The ITF participants may purchase units on the first business day of each month upon payment of cash or reinvestment of distributions to the ITF, at the net asset value per unit of the ITF as of the prior month ending valuation date. Such purchase commitments are binding. The ITF participants may redeem ITF units on a monthly basis. The unit redemption shall be paid in cash as soon as practicable after the month end valuation date of the ITF. Redemptions from the ITF shall be at the market price per unit determined at the time of the redemption. Such redemption commitments are binding.

Participants of the ITF are required to provide notification of purchases and redemptions based on specific notification requirements as set forth in The University of Texas System Allocation Policy for Non-Endowment Funds.

### **Securities Lending**

The ITF may participate in a securities lending contract with a bank or non-bank security lending agent for purposes of realizing additional income. Loans of securities by the ITF shall be collateralized by cash, letters of credit, or securities issued or guaranteed by the U.S. Government or its agencies. The collateral will equal at least 100% of the current market value of the loaned securities. The contract shall state acceptable collateral for securities loaned, duties of the borrower, delivery of loaned securities and collateral, acceptable investment of collateral and indemnification provisions. The contract may include other provisions as appropriate.

The securities lending program will be evaluated from time to time as deemed necessary by the UTIMCO Board. Monthly reports issued by the lending agent shall be reviewed by UTIMCO staff to ensure compliance with contract provisions.

### **Investor Responsibility**

As a shareholder, the ITF has the right to a voice in corporate affairs consistent with those of any shareholder. These include the right and obligation to vote proxies in a manner consistent with the unique role and mission of higher education as well as for the economic benefit of the ITF. Notwithstanding the above, the UTIMCO Board shall discharge its fiduciary duties with respect to the ITF solely in the interest of ITF unitholders, in compliance with the Proxy Voting Policy then in effect, and shall not invest the ITF 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 ~~December 1, 2017~~September 1, 2018.



**EXHIBIT A - INTERMEDIATE TERM FUND  
ASSET CLASS AND INVESTMENT TYPE TARGETS, RANGES, AND PERFORMANCE OBJECTIVES  
EFFECTIVE DATE DECEMBER 1, 2017**

POLICY PORTFOLIO	FYE 2018		
	Min	Target	Max
<b><u>Asset Classes</u></b>			
Investment Grade Fixed Income	20.0%	34.5%	50.0%
Credit-Related Fixed Income	0.0%	7.5%	12.0%
Real Estate	0.0%	0.0%	10.0%
Natural Resources	0.0%	2.5%	10.0%
Developed Country Equity	20.0%	44.0%	60.0%
Emerging Markets Equity	2.5%	11.5%	20.0%
<b><u>Investment Types</u></b>			
More Correlated & Constrained	45.0%	55.0%	65.0%
Less Correlated & Constrained	35.0%	45.0%	55.0%

~~The total Asset Class & Investment Type exposure, including the amount of derivatives exposure not collateralized by Cash, may not exceed 100% of the Asset Class & Investment Type exposures excluding the amount of derivatives exposure not collateralized by Cash.~~

POLICY BENCHMARK	FYE 2018
Barclays Capital Global Aggregate Index	30.0%
FTSE EPRA/NAREIT Developed Index Net TRI USD	0.0%
Gold Spot price (XAU)	2.5%
MSCI World Index with net dividends	15.0%
MSCI Emerging Markets with net dividends	7.5%
Hedge Fund Research Indices Fund of Funds Composite Index	45.0%

POLICY/TARGET RETURN/RISKS	FYE 2018
Expected 10-Year Annual Real Return (Benchmark)	2.03%
One Year Downside Volatility	5.98%
Risk Bounds	
Lower: 1 Year Downside Volatility	70.00%
Upper: 1 Year Downside Volatility	115.00%



Intermediate Term Fund Investment Policy Statement (continued)

**EXHIBIT A**  
**ASSET CLASS TARGETS, RANGES, AND PERFORMANCE OBJECTIVES**  
**EFFECTIVE SEPTEMBER 1, 2018**

Asset Class	FYE 2019			Benchmark
	Min	Target	Max	
<b>Global Equity:</b>				
U.S. Public Equity	0.7%	5.7%	10.7%	MSCI U.S. with Net Dividends
Non-U.S. Developed Public Equity	0.0%	3.4%	8.4%	MSCI EAFE and Canada with Net Dividends
Global Developed Public Equity	1.6%	6.6%	11.6%	MSCI World Index with Net Dividends
<i>Total Developed Public Equity</i>	7.5%	15.7%	22.5%	
Emerging Markets Public Equity	2.1%	7.1%	12.1%	MSCI Emerging Markets Index with Net Dividends
<i>Total Public Equity</i>	15.8%	22.8%	29.8%	
Directional Hedge Funds	25.0%	31.6%	38.0%	HFRI Fund of Funds Composite
<b>Total Global Equity</b>	<b>47.5%</b>	<b>54.4%</b>	<b>62.0%</b>	
<b>Stable Value:</b>				
Investment Grade Fixed Income	20.0%	28.7%	35.0%	Bloomberg Barclays Global Aggregate Index - Hedged
Cash	0.0%	3.0%	5.0%	3 month Tbills
Stable Value Hedge Funds	5.0%	10.2%	15.0%	HFRI Fund of Funds Conservative
<b>Total Stable Value</b>	<b>13.0%</b>	<b>41.9%</b>	<b>23.0%</b>	
<b>Real Return:</b>				
Inflation Linked Bonds	0.0%	0.0%	5.0%	Bloomberg Barclays Global Inflation Linked TR Index
Gold	0.0%	2.4%	7.5%	Gold Spot Price (XAU)
Commodities	0.0%	1.2%	6.0%	Bloomberg Commodity TRI
<i>Total Commodities</i>	0.0%	3.6%	8.5%	
Public Real Estate	0.0%	0.1%	5.0%	FT SE EPRA/NAREIT Developed Index Net TRIUSD
<b>Total Real Return</b>	<b>0.0%</b>	<b>3.7%</b>	<b>10.0%</b>	
<b>Total All Asset Classes</b>		<b>100.0%</b>		

The total Asset Class exposure, including the amount of derivatives exposure not collateralized by Cash, may not exceed 100% of the Asset Class exposure excluding the amount of derivatives exposure not collateralized by Cash.


POLICY/TARGET RETURN/RISKS	FYE 2019
Expected 10-Year Annual Real Return	2.10%
One Year Downside Volatility	5.36%
Risk Bounds	
Lower: 1 Year Downside Volatility	75.00%
Upper: 1 Year Downside Volatility	115.00%

EXHIBIT A - INTERMEDIATE TERM FUND  
(continued)

ASSET CLASS AND INVESTMENT TYPE TARGETS, RANGES AND PERFORMANCE OBJECTIVES  
EFFECTIVE DATE DECEMBER 1, 2017

POLICY BENCHMARKS BY ASSET CLASS AND INVESTMENT TYPE: FYE 2018

FYE 2018		More Correlated & Constrained	Less Correlated & Constrained	Total
Fixed Income	Investment Grade	Barclays Capital Global Aggregate Index (30.0%)	4.5%	34.5%
	Credit-Related	(0.0%)	7.5%	7.5%
Real Assets	Real Estate	FTSE EPRA/NAREIT Developed Index Net TRI USD (0.0%)	0.0%	0.0%
	Natural Resources	Gold Spot price (XAU) (2.5%)	0.0%	2.5%
Equity	Developed Country	MSCI World Index with Net Dividends (15.0%)	29.0%	44.0%
	Emerging Markets	MSCI EM Index with Net Dividends (7.5%)	4.0%	11.5%
<b>Total</b>		<b>55.0%</b>	<b>45.0%</b>	<b>100.0%</b>

 Hedge Fund Research  
Indices Fund of Funds  
Composite Index

Investment Policy/Benchmarks are indicated in Black/Bold  
Reportable Targets are indicated in Gray

# The University of Texas/Texas A&M Investment Management Company

## Liquidity Policy

---

Effective Date of Policy: ~~November 9, 2017~~August 10, 2018

Date Approved by U. T. System Board of Regents: ~~November 9, 2017~~August 10, 2018

Date Approved by UTIMCO Board: ~~September 11, 2017~~July 26, 2018

Original Effective Date of Policy: August 7, 2003

Supersedes: Liquidity Policy dated ~~November 5, 2015~~November 9, 2017

### **Purpose:**

The purpose of this Liquidity Policy is to establish limits on the overall liquidity profile of investments in (1) the Permanent University Fund (PUF) and the General Endowment Fund (GEF), hereinafter collectively referred to as the Endowment Funds and, (2) the Intermediate Term Fund (ITF). For the purposes of this policy, “liquidity” is defined as a measure of the ability of an investment position to be converted into Cash. The established liquidity profile limits will act in conjunction with, but do not supersede, the Investment Policies adopted by the U. T. System Board of Regents.

### **Objective:**

The objective of this Liquidity Policy is to control the element of total risk exposure of the Endowment Funds and the ITF stemming from the uncertainties associated with the ability to convert longer term investments to Cash to meet immediate needs or to change investment strategy, and the potential cost of that conversion.

### **Scope:**

This Liquidity Policy applies to all PUF, GEF, and ITF investments made by The University of Texas/Texas A&M Investment Management Company (UTIMCO), both by internal and by external managers. Policy implementation will be managed at the aggregate UTIMCO level and will not be a responsibility of individual internal or external managers managing a portion of the aggregate assets.

### **Definition of Liquidity Risk:**

“Liquidity risk” is defined as that element of total risk resulting from the uncertainty associated with both the cost and time period necessary to convert existing investment positions to Cash. Liquidity risk also entails obligations relating to the unfunded portions of capital commitments. Liquidity risk can result in lower than expected returns and reduced opportunity to make changes in investment positions to respond to changes in capital market conditions.

### **Definition of Cash:**

Cash is defined as short term (generally securities with time to maturity or mandatory purchase or redemption of three months or less), highly liquid investments that are readily convertible to known amounts and which are subject to a relatively small risk of changes in value. Holdings may include:

- the existing Dreyfus Institutional Preferred Money Market Fund mandate and any other UTIMCO Board approved SEC Rule 2a-7 money market fund rated AAAM by Standard & Poor’s 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 rated AAAM 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, and

## The University of Texas/Texas A&M Investment Management Company Liquidity Policy

- repurchase agreements and reverse repurchase agreements transacted with a dealer that is approved by UTIMCO and selected by the Federal Reserve as a Primary Dealer in U.S. Treasury securities and rated A-1 or P-1 or the equivalent.

### Liquidity Risk Measurement-The Liquidity Profile:

For the purposes of this Liquidity Policy, potential liquidity risk will be monitored by measuring the aggregate liquidity profile of the Endowment Funds and ITF. All individual investments within the Endowment Funds and ITF will be segregated into two categories:

- **Liquid:** Investments that could be converted to Cash within a period of 120 days or less in an orderly market at a discount of 10% or less.
- **Illiquid:** Investments that could be converted to Cash in an orderly market over a period of more than 120 days or in a shorter period of time by accepting a discount of more than 10%.

The UTIMCO Team will report individual investments within the Endowment Funds and ITF categorized as follows:

- Cash: Short term (generally securities with time to maturity or mandatory purchase or redemption of three months or less), highly liquid investments that are readily convertible to known amounts and which are subject to a relatively small risk of changes in value.
- Liquid (Weekly): Investments that could be converted to Cash within a period of one day to less than 7 days in an orderly market at a discount of 5% or less.
- Liquid (Annual): Investments that could be converted to Cash within a period of one day to less than 365 days in an orderly market at a discount of 10% or less.

The measurements necessary to segregate all existing investments into one of the two categories assume normally functioning capital markets and cash market transactions. In addition, swaps, derivatives, or other third party arrangements to alter the status of an investment classified as illiquid may be considered, with the prior approval of the UTIMCO Board or the Risk Committee, in determining the appropriate liquidity category for each investment.

The result of this liquidity risk measurement process will be a liquidity profile for the Endowment Funds and the ITF which indicates the percentage of the total portfolio assets within each liquidity category. This Liquidity Policy defines the acceptable range of percentage of total assets within each liquidity category, specifies ~~“trigger zones” when requiring special review or action is required~~ by the UTIMCO Team, ~~and when special action is required~~ by the UTIMCO Board or the Risk Committee, and specifies the method of monitoring and presenting actual versus policy liquidity profiles.

### Liquidity Policy Profile:

~~The current Liquidity Policy Profile ranges and trigger zones for each of the Endowment Funds are defined by the table below:~~

	<del>FY 14</del>
<del>Liquidity above trigger zone:</del>	<del>30.0%</del>
<del>Liquidity within trigger zone:</del>	<del>25.0% - 30.0%</del>
<del>Liquidity below trigger zone:</del>	<del>&lt;25.0%</del>

The permitted maximum for **illiquid** investments ~~for each of the Endowment Funds is 75%~~ 70% of the total portfolio for the Endowment Funds. ~~Investments for the Endowment Funds that maintain liquidity above the trigger zone do not require any action by the Risk Committee.~~ Any **illiquid** investments made ~~in the~~ that would cause illiquidity to exceed 70% ~~to 75% trigger zone~~ require prior approval by the Risk Committee after consultation with The University of

# The University of Texas/Texas A&M Investment Management Company

## Liquidity Policy

~~Texas System Office of Business Affairs. No investment may be made for the Endowment Funds which would cause illiquidity to be greater than 75%.~~

~~The current Liquidity Policy Profile ranges and trigger zones for the ITF are defined by the table below:~~

	<u>FY 14+</u>
<del>Liquidity above trigger zone:</del>	<del>50%</del>
<del>Liquidity within trigger zone:</del>	<del>45% - 50%</del>
<del>Liquidity below trigger zone:</del>	<del>&lt;45%</del>

The permitted maximum for **illiquid** investments for the ITF is 55% of the total portfolio for the ITF. ~~Investments for the ITF that maintain liquidity above the trigger zone do not require any action by the Risk Committee.~~ Any **illiquid** investments ~~made in the~~ that would cause illiquidity to exceed 50% ~~to 55% trigger zone~~ requires prior approval by the Risk Committee after consultation with The University of Texas System Office of Business Affairs. ~~No investment may be made for the ITF which would cause illiquidity to be greater than 55%.~~

Risk Committee review of new investments ~~in the illiquid trigger zone~~ above the permitted maximums will supplement, rather than replace, the procedures established by the UTIMCO Board for the approval of new investments.

### Unfunded Commitments:

As used herein, “unfunded commitments” refers to capital that has been legally committed from an Endowment Fund and has not yet been called but may still be called by the general partner or investment manager. The Maximum Permitted Amount of unfunded commitments for each Endowment Fund is:

	<u>FY 14+</u>
Unfunded Commitment as a percent of <del>the total invested assets</del> <u>Net Asset Value of the Endowment Funds:</u>	30.0%

No new commitments may be made for an Endowment Fund without approval from the Risk Committee if the actual amount of unfunded commitments for such Endowment Fund exceeds, or, as a result of such commitment, would exceed the Maximum Permitted Amount.

### Documentation and Controls:

Managing Directors responsible for each asset class are responsible for determining the liquidity category for each investment in that asset class as well as the amount of unfunded commitments ~~for each Endowment Fund.~~ The determination of liquidity will include underlying security trading volumes, notice periods, redemption dates, lock-up periods, and “soft” and “hard” gates. These classifications will be reviewed by the Risk Manager and the Chief Compliance Officer, and must receive final approval from the Chief Investment Officer. Classifications and weights within each liquidity category will be updated and reported on a monthly basis. All new investments considered will be categorized by liquidity category, and a statement regarding the effect on overall liquidity and the amount of unfunded commitments for each Endowment Fund of the addition of a new investment must be an element of the due diligence process and will be a part of the recommendation report to the UTIMCO Board.

As additional safeguards, ~~trigger zones~~ maximum illiquidity levels have been established as indicated above to ~~trigger~~ required review and action by the UTIMCO Board or the Risk Committee in the event any investment action would cause the actual investment position in illiquid investments to ~~enter the designated trigger zone~~ exceed the permitted maximum illiquidity levels, or in the event market actions caused the actual investment position in illiquid investments to ~~move into trigger zones~~ exceed the maximum illiquidity levels. In addition, any proposed investment actions which would increase the actual investment position in illiquid investments in any of the PUF, the GEF, or the ITF by 10%

**The University of Texas/Texas A&M Investment Management Company**  
**Liquidity Policy**

---

or more of the total asset value of such fund would also require review and action by the UTIMCO Board or the Risk Committee prior to the change. Any actual positions ~~in any trigger zones or~~ outside the policy ranges will be communicated to the Chief Investment Officer immediately. The Chief Investment Officer will then determine the process to be used to eliminate the exception and report promptly to the UTIMCO Board and the Risk Committee the circumstances of the deviation from Policy and the remedy to the situation. Furthermore, as indicated above, no new commitments may be made for an Endowment Fund without approval from the Risk Committee if the actual amount of unfunded commitments for such Endowment Fund exceeds, or, as a result of such new commitment, would exceed, the Maximum Permitted Amount.

**Reporting:**

The actual liquidity profiles of the Endowment Funds and the ITF, including a detailed analysis of liquidity by category, and the status of unfunded commitments for each Endowment Fund, and compliance with this Liquidity Policy will be reported to the UTIMCO Board on at least a quarterly basis. Any exception to this Liquidity Policy and actions taken to remedy the exception will be reported promptly.

## The University of Texas/~~Texas A&M~~ Investment Management Company Derivative Investment Policy

Effective Date of Policy: ~~August 25, 2016~~ August 10, 2018  
Date Approved by U. T. System Board of Regents: ~~August 25, 2016~~ August 10, 2018  
Date Approved by UTIMCO Board: ~~July 21, 2016~~ July 26, 2018  
Supersedes: Derivative Investment Policy approved ~~November 5, 2015~~ July 21, 2016

### Purpose:

The purpose of ~~the this~~ Derivative Investment Policy (the “Policy”) is to set forth the applications, documentation and limitations for investment in ~~derivatives~~ Derivative Investments in the Permanent University Fund (PUF), the General Endowment Fund (GEF), the Intermediate Term Fund (ITF), and the Separately Invested Funds (SIF), hereinafter referred to as the Funds. The Board of Regents approved investment policy guidelines for the Funds ~~to allow for investment in derivatives~~ Derivative Investments provided that ~~their use is they are~~ they are in compliance with ~~UTIMCO’s Board approved Derivative Investment~~ the Policy. This ~~Derivative Investment~~ Policy supplements the Investment Policy Statements for the Funds.

### Objective:

The objective of investing in ~~derivatives~~ Derivative Investments is to facilitate risk management and provide efficiency in the implementation of various investment strategies for the Funds. ~~Derivatives~~ Derivative Investments can provide the Funds with more economical means to improve the Funds’ risk/return profile.

### Scope:

This Policy applies to all ~~Derivatives~~ Investments in the Funds that are executed by UTIMCO ~~staff~~ and by external managers operating under an Agency Agreement. This Policy does not apply to external managers operating under limited partnership agreements, offshore corporations, or through other Limited Liability Entities that limit the liability exposure of the Funds’ investments. Derivative policies for external managers are established on a case-by-case basis with each external manager, as described below.

This Policy applies to both Exchange Traded Derivatives and Over the Counter (OTC) ~~Derivatives~~. This Policy shall not be construed to apply to ~~index or other common or~~ commingled funds that are not controlled by to which UTIMCO does not have full transparency and ownership control of the underlying assets. These commingled investment vehicles are governed by separate investment policy statements.

### External Managers:

External managers are selected to manage the Funds’ assets under either an Agency Agreement or through a Limited Liability Entity. An external manager operating under an Agency Agreement may engage in ~~derivative~~ Derivative investments ~~Investments~~ only if (i) such manager has been approved to use ~~derivatives~~ Derivative Investments by the UTIMCO ~~Chief Investment Officer~~ and (ii) the ~~investments~~ Derivative Investments are consistent with the overall investment objectives of the related account and in compliance with this Policy. The use of ~~derivatives~~ Derivative Investments by an external manager operating under an Agency Agreement shall be approved by ~~the~~ UTIMCO ~~Chief Investment Officer~~ only for external managers that (i) demonstrate investment expertise in their use, (ii) have appropriate risk management and valuation policies and procedures, (iii) have the legal and investment expertise to limit the downside effects of the proposed derivatives and (iv) ~~effectively~~ effectively monitor and control their use.

While this Policy does not specifically include external managers operating through a Limited Liability Entity, it is noted that selecting and monitoring external managers through a Limited Liability Entity requires a clear understanding of the external managers’ use of ~~derivatives~~ Derivative Investments, particularly as it relates to various risk controls and leverage. The permitted uses of ~~derivatives~~ Derivative Investments and leverage must be fully documented in the limited liability agreements with these managers.

### Definition of Derivatives:

Derivatives are financial instruments whose value is derived, in whole or part, from the value of ~~any~~ one or more underlying securities or assets, or index of securities or assets (such as bonds, stocks, commodities, and currencies). For the purposes of this Policy, derivatives shall include Derivative Investments as defined in Exhibit A, but shall not include

## The University of Texas/~~Texas A&M~~ Investment Management Company Derivative Investment Policy

~~a broader range of securities, such as mortgage-backed securities, structured notes (including participation notes), convertible bonds, exchange-traded funds (ETFs), and Bona Fide Spot Foreign Exchange Transactions. Derivatives may be purchased through a national or international exchange or through an OTC direct arrangement with a Counterparty. Refer to the attached Exhibit A for a glossary of terms.~~ If it is unclear whether a particular financial instrument meets the definition of Derivative Investment, the ~~Risk Manager~~Managing Director - Risk Management and Chief Compliance Officer, in consultation with the Chief Investment Officer (“CIO”) or ~~Deputy Chief Investment Officer (“Deputy CIO”)~~, will determine whether the financial instrument is a Derivative Investment. The ~~Chief Investment Officer~~CIO or Deputy CIO will report such determinations to the Chairman of the Risk Committee.

### Permitted Derivative Applications:

The primary intent of derivatives should be to hedge risk in portfolios or to implement investment strategies more effectively and at a lower cost than would be possible in the Cash Market.

Permitted Derivative Applications are Derivative Investments used:

- To implement investment strategies in a low cost and efficient manner;
- To alter the Funds’ market (systematic) exposure without trading the underlying Cash Market securities through purchases or short sales, or both, of appropriate derivatives;
- To construct portfolios with risk and return characteristics that could not be created with Cash Market securities;
- To hedge and control risks; or
- To facilitate transition trading.

UTIMCO ~~staff~~ may not enter into any Derivative Investment that is not a Permitted Derivative Application. To the extent a new Derivative 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~~ is a Permitted Derivative Application but is not of the types set forth on Exhibit B, any Director may require a complete review of the new Derivative Investment prior to implementation. Notwithstanding the foregoing, UTIMCO’s ~~Chief Investment Officer~~CIO or Deputy CIO, the ~~Risk Manager~~Managing Director - Risk Management, or Chief Compliance Officer may determine that presentation and approval of the proposed Derivative Investment at a Risk Committee meeting is warranted before engaging in the Derivative Investment.

### Risk and Investment Policy Controls:

~~Prior~~Following to the implementation of ~~any one or more similar~~ Derivative Investments, UTIMCO will model the impact of the derivative on the Funds’ projected downside volatility bounds, and projected exposure to the respective Asset Class and Investment Type, must be to ensure that the Funds remain within the permissible ranges as set forth in the Funds’ Investment Policy Statements.

### Documentation and Controls:

Prior to the implementation of ~~a new one or more similar~~ Derivative Investments by UTIMCO ~~staff~~, UTIMCO ~~staff~~ shall document the purpose, valuation method, methods for calculating delta, delta-adjusted exposure, Asset Class ~~and Investment Type~~ exposure, the effect on portfolio leverage (if applicable), risks (including, but not limited to modeling, pricing, liquidity and Counterparty risks), the expected increase or reduction in risk resulting from the Derivative Investments, and the procedures in place to monitor and manage the derivative exposure. For any short exposure, UTIMCO ~~staff~~ shall also document the basis risk and appropriate stop-loss procedures. UTIMCO shall establish appropriate risk management procedures and the appropriate frequency to monitor ~~daily~~ the risk of (i) internally managed Derivative Investments and (ii) externally managed accounts operating under Agency Agreements that permit derivatives. Internal control procedures to properly account and value the Funds’ exposure to the Derivative Investment shall be fully documented.

### Additional Risk Mitigants~~Limitations~~:

**Leverage:** Leverage is inherent in many ~~derivatives~~derivatives Derivative Investments. In Cash Markets, in most cases, the cash outlay is equal to the market exposure acquired. By contrast, Derivative Investments offer the possibility of establishing – for the same cash outlay – substantially larger market exposure. Therefore, risk management and control



## The University of Texas/~~Texas A&M~~ Investment Management Company Derivative Investment Policy

processes must focus on the total risk assumed in a Derivative Investment. Exhibits A of the Fund's Investment Policy Statements provide a limitation on the amount of uncollateralized derivative exposure that can be utilized by the Funds whereby, the total Asset Class ~~and Investment Type~~ exposure, including the amount of derivatives exposure not collateralized by cash, may not exceed 105% (100% in the ITF) of the Asset Class ~~and Investment Type~~ exposures excluding the amount of derivatives exposure not collateralized by cash.

**Counterparty Risks:** Rigorous Counterparty selection criteria ~~and netting agreements~~ shall be required to minimize Counterparty risk for Over the Counter (OTC) ~~Derivatives~~. ~~In order to be eligible as a~~ Any Counterparty ~~to~~ an OTC derivative transaction with the Funds, ~~whether the trade is initiated by UTIMCO, by an external manager under Agency Agreement, the Counterparty, or by a Limited Liability Entity where UTIMCO has full transparency and ownership control of the underlying assets, the Counterparty~~ must have a credit rating of at least A- (Standard and Poor's) or A3 (Moody's) ~~, unless an exception is approved by the Risk Manager~~ Managing Director - Risk Management and by the CIO or Deputy CIO. All OTC derivatives, with the exception of Derivative Investments where ISDA is not available or the market standard (e.g., Bona Fide Spot Foreign Exchange Transactions, participation notes (P-notes) and low exercise purchase options (LEPOs)), must be subject to established ISDA Netting Agreements and have full documentation of all legal obligations of the Funds. In limited circumstances, the August 2012 DF Protocol Agreement, as published on August 13, 2012 (the "August Protocol Agreement") and the 2002 ISDA Master Agreement with a Schedule (an "ISDA March 2013 DF Protocol Master Agreement"), developed in connection with ISDA's Dodd-Frank Documentation Initiative to implement and comply with the regulatory requirements imposed under Title VII of the Dodd-Frank Wall Street Reform and Consumer Protection Act, may be used in place of an ISDA Netting Agreement or on a temporary basis until an ISDA Netting Agreement with the Counterparty has been executed. In the event a Counterparty is downgraded below the minimum credit rating ~~requirements stated above~~ requirement, UTIMCO ~~staff~~ will take appropriate action to protect the interests of the Funds, ~~including availing itself of all potential remedies contained in the ISDA agreements~~.

The net market value, net of collateral postings, of all OTC derivatives for any individual Counterparty may not exceed ~~30bps~~ 1% of the total market value of the Funds.

### Risk Management and Compliance:

To ensure compliance with all terms and limitations of this Policy, all internally managed and externally managed Derivative Investments in accounts under Agency Agreements will be marked to market ~~on a daily basis~~ by the Funds' custodian and reviewed periodically, but no less frequently than monthly, for accuracy by the UTIMCO ~~Risk Manager~~ Managing Director - Risk Management. In addition, data from the external risk model will be reviewed for accuracy and completeness by the UTIMCO ~~Risk Manager~~ Managing Director - Risk Management.

Compliance with this Policy will be monitored by the UTIMCO Chief Compliance Officer using data provided by the custodian and the external risk model.

Any instances of noncompliance with this Policy will be reported immediately to the UTIMCO Chief Compliance Officer and ~~to~~ the UTIMCO ~~Chief Investment Officer~~ CIO or Deputy CIO, who will determine the appropriate remedy and report promptly to the Chairs of the Risk Committee, the Audit & Ethics Committee, and the UTIMCO Board Chairman. The UTIMCO Board Chairman may waive immediate remedial action in appropriate circumstances.

### Reporting:

On a quarterly basis, UTIMCO shall provide a comprehensive report to UTIMCO's Board and the Risk Committee. This report shall include all outstanding Derivative Investments, by type, entered into during the period being reported for both internal managers and external managers operating under Agency Agreements. Asset allocation as provided in the Funds' Investment Policy Statements shall incorporate the impact of uncollateralized derivative exposure associated with ~~derivatives~~ Derivative Investments. For risk reporting purposes, the models used to calculate the expected profit or loss in each scenario will include the effect of delta sensitivity and other derivative sensitivity parameters as appropriate. Risk calculations will take into account leverage, correlation, and exposure parameters such as beta for equities and duration for fixed income. The UTIMCO ~~Risk Manager~~ Managing Director - Risk Management will calculate risk attribution - i.e., how much of the overall risk is attributed to each Asset Class ~~and Investment Type~~, including the full effect on risk

The University of Texas/Texas A&M Investment Management Company  
Derivative Investment Policy

---

of the ~~derivatives~~ Derivative Investments in each. The UTIMCO ~~Risk Manager~~ Managing Director - Risk Management will calculate risk attribution for each Derivative Investment.

The University of Texas/~~Texas A&M~~ Investment Management Company  
Derivative Investment Policy

---

Derivative Investment Policy Exhibit A  
Glossary of Terms

**Agency Agreement** – A form of legal agreement that typically grants limited investment discretion to an external investment manager to act as the investment agent of the Funds but does not limit the liability of the Funds for actions taken by that agent.

**Basket** – A group of securities and a weighting scheme, or a proprietary index. Baskets are typically defined to achieve a certain investment goal, within certain limitations. For example, a Basket could replicate an emerging market index, excluding certain companies that UTIMCO is not permitted to hold.

**Bona Fide Spot Foreign Exchange Transaction** – ~~Generally, a foreign exchange transaction that settles via an actual delivery of the relevant currencies within two business days (T+2). In addition, an An~~ agreement, contract or transaction for the purchase or sale of an amount of foreign currency equal to the price of a foreign security with respect to which (i) the security and related foreign currency transactions are executed contemporaneously in order to effect delivery by the relevant securities settlement deadline and (ii) actual delivery of the foreign security and foreign currency occurs by such deadline (such transaction, a “Securities Conversion Transaction”). For Securities Conversion Transactions, the Commodity Futures Trading Commission (CFTC) will consider the relevant foreign exchange spot market settlement deadline to be the same as the securities settlement deadline. A Bona Fide Spot Foreign Exchange Transaction generally settles via actual delivery of the relevant currencies within a few business days; however, settlement may take longer due to differences in international market conditions exchanges may take longer.

**Cash Market** - The physical market for a commodity or financial instrument.

**Counterparty** - ~~The offsetting party in an exchange agreement entity with which a Derivative Investment is transacted, and which is not a national or international exchange.~~

**Derivative Investment** – ~~An investment in a Futures Contract, Forward Contract, swap, and all forms of options~~ A financial instrument whose value is derived, in whole or part, from the value of one or more underlying securities or assets, or index of securities or assets. A Derivative Investment can be either an Exchange Traded Derivative or an Over the Counter (OTC) Derivative. For the purpose of this Policy, Derivative Investments will include:

- All Over the Counter (OTC) Derivatives, with the exception of Bona Fide Spot Foreign Exchange Transactions, and and mortgage-backed securities, asset-backed securities, and collateralized mortgage obligations.
- As for Exchange Traded Derivatives, the definition will only include Futures Contracts, and listed Options, and cleared Swaps; in particular, the definition will not include exchange traded funds (“ETFs”) and ADRs depository receipts (“DRs”).

**Exchange Traded Derivatives** - A Derivative Investment traded on an established national or international exchange. These derivatives “settle” daily in that cash exchanges are made between the exchange and parties to the contracts consistent with the change in price of the instrument. Fulfillment of the contract is guaranteed by the exchange on which the derivatives are traded. Examples include S&P 500 Futures Contracts and Goldman Sachs Commodities Index Futures Contracts.

**Forward Contract** - A non-standardized contract for the physical or electronic (through a bookkeeping entry) delivery of a commodity or financial instrument at a specified price at some point in the future. The most typical Forward Contract is a forward foreign currency contract, which involves the contemplated exchange of two currencies.

**Futures Contract** - A standardized contract for either the physical delivery of a commodity or instrument at a specified price at some point in the future, or a financial settlement derived from the change in market price of the commodity or financial instrument during the term of the contract.

## The University of Texas/Texas A&M Investment Management Company Derivative Investment Policy

---

**ISDA Netting Agreement** - The International Swaps and Derivatives Association (ISDA) is the global trade association representing participants in the privately negotiated derivatives industry, covering swaps and options across all asset classes. ISDA has produced generally accepted "Master Agreements," a 1992 Master Agreement and a 2002 Master Agreement, that are used by most counterparties in OTC derivatives. Netting agreements are terms within the applicable Master Agreement that deal with the calculation of exposure for each Counterparty. These netting agreements require that exposures between counterparties will be "netted" so that payables and receivables under all existing derivatives between two Counterparties are offset in determining the net exposure between the two Counterparties.

**Limited Liability Entity** – A legal entity created to define how assets contributed to the entity by external partners to the agreement will be managed by the manager of the entity.– These entities are typically limited liability partnerships, corporations, or other such entities that limit the liability of external investors to the current value of the external investors' investment in the entity.

**Long Exposure to an Asset Class** – The Net Asset Value of the Asset Class and Investment Type as defined in the Funds' Investment Policy Statement.

**Option** - A derivative that conveys the right but not the obligation to buy or deliver the subject financial instrument at a specified price, at a specified future date.

**Over the Counter (OTC) Derivatives** - A derivative which results from direct negotiation between two entities, a buyer/seller and a Counterparty. The terms of such derivatives are non-standard and are the result of specific negotiations. Settlement occurs at the negotiated termination date, although the terms may include interim cash payments under certain conditions. Examples include currency swaps and Forward Contracts, interest rate swaps, and collars.

**Replicating Derivatives** – Derivatives that are intended to replicate the return characteristics of an underlying index or any other Cash Market security.

**Swap** - A contract whereby the parties agree to exchange cash flows of defined investment assets in amounts and times specified by the contract.

**The University of Texas/Texas A&M Investment Management Company**  
**Derivative Investment Policy**

---

**Derivative Investment Policy Exhibit B**  
**Delegated Derivative Investments**

Subject to the limitations contained in the Derivative Investment Policy, the UTIMCO Board hereby delegates to the UTIMCO Chief Executive Officer the authority to enter into the following Derivative Investments:

Delegated Derivative Investments:

1. Replicating Derivatives - Derivative Investments that replicate the return characteristics of a long exposure to an underlying index, Basket or commodity. These investments are generally Futures Contracts and swaps on a passive index, Basket or commodity.
2. Derivative Investments that upon their expiration would not exceed the loss of a similar investment in the cash market equivalent being referred to in the derivative contract. These investments may include swaps whereby the holder of the instrument will forgo potential upside return in exchange for downside protection or receive a multiple of a referenced return should the return of the underlying referenced cash market equivalent be within a certain range and may also include the selling of put options.
3. Derivative Investments that reduce Long Exposure to an Asset Class or hedge against risk, and limit maximum loss to the premium paid for the Derivative Investment, i.e., purchase options. The aggregate prorated annual premium of all Derivative Investments under this provision shall be as set forth in the respective Fund's Investment Policy Statement.
4. Futures Contracts and Forward Contracts on foreign currency if used (i) by an external fixed income manager within its investment guidelines, (ii) for hedging purposes by an external equities manager within its investment guidelines, or (iii) to hedge existing or prospective foreign currency risk or to gain long exposure to a foreign currency by UTIMCO ~~staff~~.
5. Derivative Investments used to manage bond duration or hedge equity exposure to countries, sectors or capitalization factors, or individual stock(s) swaps within the portfolio only if subsequent to the investment the portfolio would not be net short to any one of those factors. An example of such a hedge is selling Futures Contracts or call options on a country or sector index, provided the manager is exposed to that country or sector.
6. Derivative Investments used to gain Long Exposure to an Asset Class and limit maximum loss to the premium paid for the Derivative Investment.

The delegated authority set forth above should not be construed to permit UTIMCO ~~staff~~ to enter into Derivative Investments that are unhedged ~~or 'naked' short positions and containing~~ have the potential for unlimited loss.

**Modeling:** Each Delegated Derivative Investment must be such that it can be decomposed into one or more components, and each said component can be modeled using a model such as the CDS valuation model, Black-Scholes model, including modifications for foreign currency ("Quanto"), allowing both normal and log-normal distributions (the Black model), and modifications to handle dividends or other model approved by the Policy Committee.

**Leverage:** Each Delegated Derivative Investment must be modeled on a fully collateralized basis. During the course of the investment, cash collateral backing a Derivative Investment may be utilized to invest in other investments thereby creating leverage at the Fund level. This is only allowed if within the Funds' Investment Policy Statements.

**The University of Texas/Texas A&M Investment Management Company  
Delegation of Authority Policy**

---

Effective Date of Policy: ~~July 21, 2016~~ July 26, 2018

Date Approved by UTIMCO Board: ~~July 21, 2016~~ July 26, 2018

Supersedes: Delegation of Authority Policy approved by the UTIMCO Board on ~~May 5~~ July 21, 2016

**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~~employees. 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, oversee, 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.

**The University of Texas/Texas A&M Investment Management Company  
Delegation of Authority Policy**

---

**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.



## The University of Texas/Texas A&M Investment Management Company Delegation of Authority 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 ~~\$100,000~~250,000 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 ~~\$100,000~~250,000 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, provided that any Director may require a complete review by the UTIMCO Board of the investment prior to the execution of the investment if the investment exceeds any of the following thresholds:



**The University of Texas/Texas A&M Investment Management Company  
Delegation of Authority Policy**

---

- ~~More Correlated & Constrained (MCC) New Fund~~ Investments: ~~1.51.0%~~ of Applicable Assets (as defined below).
  - ~~Less Correlated & Constrained (LCC) Investments: 1.0% of Applicable Assets.~~
  - ~~Private Investments: 0.75% of Applicable Assets.~~
  - New Co-investments to a direct Public or Private Investment alongside an existing external manager: 0.300.66% 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, provided that any Director may require a complete review by the UTIMCO Board of the investment prior to the execution of the investment if the investment exceeds any of the following thresholds:
  - ~~More Correlated & Constrained (MCC) Subsequent Fund~~ Investments: 1.0% of Applicable Assets ~~in each subsequent 12-month period.~~
  - ~~Less Correlated & Constrained (LCC) Investments: 0.75% of Applicable Assets in each subsequent 12-month period.~~
  - ~~Private Investments: 0.50% of Applicable Assets in each subsequent 12-month period.~~
  - Subsequent Co-investments to a direct Public or Private Investment alongside an existing external manager: 0.300.66% of Applicable Assets ~~in each subsequent 12-month period.~~
- Small Co-investments: Notwithstanding the above, with respect to Co-investments of \$30 Million or less, each Managing Director of an investment portfolio is authorized to commit UT System funds to a new co-investment alongside an existing manager during the first six months of the relationship and to a subsequent co-investment to an existing manager or mandate, and the accompanying authority to negotiate and execute agency, partnership or subscription agreements. Prior to committing to such a Co-investment, the Managing Director will present the Co-investment to the internal Co-investment Committee for approval. All Co-investments made pursuant to this section must be reported to the Internal Investment Committee at a regular meeting.
- *Terms Applicable to All Internal and External Managers:*
  - Any Director may require a complete review by the UTIMCO Board of an investment prior to the execution of the investment if, as a result of the investment:
    - Total Assets managed by the internal or external manager exceed 50% of the Total Assets managed by the manager in that investment strategy;
    - Total Assets managed by the internal or external manager exceed 3.0% of Applicable Assets in any one of the Global Equity, Stable Value, or Real Return portfolios (4.0% for managers limited to Fixed Income mandates); or
    - Total Assets managed by the internal or external manager exceed 36.0% of Applicable Assets in the aggregate for all Investment Types Public and Private Investments (4.0% for managers limited to MCC Investment Grade Fixed Income mandates). For purposes of this

**The University of Texas/Texas A&M Investment Management Company  
Delegation of Authority Policy**

---

- provision, if Total Assets managed by the internal or external manager includes an allocation to Private Investments and ~~MCC and/or LCCPublic~~ Investments, Applicable Assets will include the total combined NAV of the Endowments plus the ITF.
- 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 the UTIMCO Chief Executive Officer~~ and the ~~Staff UTIMCO Chief Executive Officer~~ 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 UTIMCO Board shall vote on whether or not to approve such investment.
  - “Applicable Assets” is defined as follows:
    - For ~~MCC and LCCPublic~~ 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.
  - “Total Assets” shall be defined as NAV plus unfunded commitments.
  - 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 UTIMCO Chief Compliance Officer~~ will send each UTIMCO Board member a description of the proposed investment and a Certificate of Compliance for the investment.
  - 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.
  - The UTIMCO Chief Executive Officer will periodically report to the UTIMCO Board ~~at its regularly scheduled Board meetings~~ regarding all decisions made under this delegated authority.
  - *Manager Monitoring and Termination:* The UTIMCO Board hereby delegates to the UTIMCO Chief Executive Officer all decisions regarding monitoring and termination of existing internal or external investment managers.
  - Notwithstanding, on a quarterly basis, manager mandates (excluding passive exposure) shall be aggregated across all Funds, ~~asset classes~~ Asset Classes and investment types and any mandate resulting in ~~three-six~~ percent (36%) or more exposure relative to the total Funds (excluding the ITF for Private Investments) will be reported to the Risk Committee at its next meeting. The UTIMCO ~~staff Chief Executive Officer~~ will be required to make a presentation and prepare a recommendation to the Risk Committee regarding an appropriate course of action for any manager mandate resulting in ~~five-six~~ percent (56%) or more exposure relative to the total Funds (excluding the ITF for the Private Investments). Such presentation and recommendation will include information regarding the manager mandate, 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 the UTIMCO ~~staff~~ Chief Executive Officer, determine a different appropriate level of exposure or request additional information to be presented at a subsequent meeting before action may be taken by the UTIMCO ~~staff~~ Chief

**The University of Texas/Texas A&M Investment Management Company  
Delegation of Authority Policy**

---

Executive Officer. The UTIMCO staff Chief Executive Officer 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 Deputy CIO, the Managing Director – Risk Management, and the Managing Director – Global Asset Allocation 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, provided that the Managing Director – Risk Management, and the Managing Director – Global Asset Allocation may not enter into any Derivative Investment he or she has recommended. Any Director may require a complete review of any new Derivative Investment recommended by UTIMCO staff-employees or for the engagement of an external manager operating under an Agency Agreement that has been approved by UTIMCO's Chief Investment Officer if the new Derivative Investment is not of the types authorized in Exhibit B of the Derivative Investment Policy.
- *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 employees subject to the same limitations applicable to Co-investments to a direct Public or Private Investment , excepting Fixed Income Investments.
- *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.

**The University of Texas/Texas A&M Investment Management Company**  
**Mandate Categorization Procedure**

---

Effective Date of Procedure: July 22, 2013

Date Approved by UTIMCO Board: July 22, 2013

Supersedes Mandate Categorization Procedure dated August 1, 2011

**Background:** The Investment Policy Statements for the Permanent University Fund (“PUF”), General Endowment Fund (“GEF”), and Intermediate Term Fund (“ITF”) (collectively, the Funds) provide that assets of the Funds shall be allocated among a broad set of Asset Classes and Investment Types based on their individual risk/return characteristics and relationships to other Asset Classes and Investment Types. Asset Classes and Investment Types are defined in the Funds’ Investment Policy Statements coupled with policy targets and ranges. Policy targets and ranges are a primary component of the Investment Policy Statements. The Derivative Investment Policy provides guidelines on accepted derivative applications that the Funds may deploy and broadly speaks to the reporting of such applications to the UTIMCO Board.

Individual investment mandates may exhibit a multitude of investment characteristics whereby the classification of such mandates is not entirely straightforward. As investment mandates with managers are less constrained in order to take advantage of capital market opportunities, coupled with the increasing use of derivative instruments and other investment tools, greater transparency regarding the process of classifying an investment mandate is desired.

**Purpose:** The purpose of this Mandate Categorization Procedure is to provide guidance in determining the classification and reporting of an investment mandate within the Asset Class and Investment Type definitions of the Investment Policy Statements.

**Objective:** The objective of this Procedure is to provide greater transparency into the process of classifying an investment mandate within the approved Asset Classes and Investment Types as defined in the Funds’ Investment Policy Statements.

**Scope:** Investment mandates shall include derivative applications for both internal and external investment manager mandates.

**Investment Mandate Guidelines:**

Within the Investment Policy Statements there are six Asset Classes:

- A. Investment Grade Fixed Income
- B. Credit-Related Fixed Income
- C. Natural Resources
- D. Real Estate
- E. Developed Country Equity
- F. Emerging Markets Equity

The definitions of these Asset Classes are more fully described in the Funds’ Investment Policy Statements. The six Asset Classes are coupled with three Investment Types:

- 1. More Correlated & Constrained Investments
- 2. Less Correlated & Constrained Investments
- 3. Private Investments

**The University of Texas/Texas A&M Investment Management Company  
Mandate Categorization Procedure**

Investment mandates shall be classified according to their Asset Class and Investment Type. For example, a manager investing primarily in distressed private securities would be classified as follows:

Asset Class: Credit-Related Fixed Income  
Investment Type: Private Investments

Investment mandates that invest in more than one Asset Class shall be classified by the responsible Managing Director in a single Asset Class based on (i) where the majority of the assets will be invested by the manager and/or (ii) UTIMCO's objective/intent when entering into the mandate. The Managing Director may recommend a percentage split of a mandate across Asset Classes, but this should only occur in instances where significant amounts are invested and the mandate does not have an Asset Class concentration or where the Asset Class concentrations are likely to vary over time.

The Investment Type for any given mandate shall be classified based on its investment characteristics. The following investment characteristics will be utilized to assess a particular investment mandate:

<b>Criteria</b>	<b>More Correlated &amp; Constrained Investments/Mandates</b>	<b>Less Correlated &amp; Constrained investments/Mandates</b>	<b>Private Investments</b>
Single Asset Class	Generally one asset class	Often multiple asset classes	Generally one asset class
Beta	Generally higher levels of beta (e.g., 0.75+)	Often less beta (e.g., <0.75)	Generally higher levels of beta (e.g., 0.75+)
Traded Securities	Generally publicly traded	Majority publicly traded but also non-publicly traded	Generally not publicly traded
Gross Leverage	Limited levels of leverage, typically 160% or less, and typically net long not over 100%	Often utilize leverage and may be net long over 100%	Limited levels of leverage, typically 160% or less, and typically net long not over 100%
Shorting	Limited levels of shorting	Often utilize short positions	Generally do not utilize short positions
Use Derivatives	Limited use of derivatives	Generally use derivatives	Limited use of derivatives
Transparency	Significant position-level transparency for UTIMCO or risk provider	Limited position-level transparency	Generally investment-level transparency
Liquidity	Generally limited use of lock-ups, notice periods and redemption windows	Often lock-ups, notice periods and/or redemption windows	Typically capital commitment/call/distribution structure
Performance Fees	May include performance fees, but often over asset class hurdle	Generally include performance fees	Generally include performance fees

**Investment Mandate Process**

## The University of Texas/Texas A&M Investment Management Company Mandate Categorization Procedure

---

Each new mandate will be assessed as to Investment Type according to the above criteria by the Managing Director recommending or monitoring the investment.

The Managing Director will recommend the Asset Class and Investment Type categorization for each mandate. The Chief Compliance Officer and Chief Investment Officer will provide his/her agreement or recommended categorization. The Chief Investment Officer will report the categorization of new mandates to the Risk Committee at its next regular meeting for their approval or re-categorization. Prior to each Risk Committee meeting, the Chief Compliance Officer will review existing mandate categorizations with the Chief Investment Officer and Managing Directors to determine whether there have been any change(s) in the investment characteristics of the mandate that warrant a re-categorization. If the Chief Investment Officer, a Managing Director, or the Chief Compliance Officer determine there has been a change(s) in the investment characteristics of the mandate that warrant a re-categorization, the Chief Investment Officer will designate the new Asset Class and Investment Type re-categorization and will report such to the Risk Committee at its next regular meeting for their approval or re-categorization.

### **Criteria for Classification of Derivatives<sup>1</sup>:**

Internally managed Derivative Applications shall be classified in the Asset Class and Investment Type for which the derivative application was intended to replicate or increase exposure or to reduce risk.

---

<sup>1</sup> Definitions of the terms used in this section may be found in the Derivative Investment Policy Exhibit A Glossary of Terms.

**Agenda Item**  
UTIMCO Board of Directors Meeting  
July 26, 2018

**Agenda Item:** Report from Compensation Committee, including (1) Discussion and Appropriate Action Related to CEO's Base Salary for 2018-2019 Fiscal Year; and (2) Discussion and Appropriate Action Related to the UTIMCO Compensation Program, Amended and Restated effective July 1, 2018

**Developed By:** Team

**Presented By:** Rothrock

**Type of Item:** Action item; Action required by UTIMCO Board

**Description:** The Compensation Committee (the "Committee") met on July 19, 2018. The Committee's agenda included (1) discussion and appropriate action related to minutes of the February 21, 2018 meeting; (2) discussion and appropriate action related to base salaries for the UTIMCO Officers and other UTIMCO Compensation Program Participants for 2018-2019 fiscal year; and (3) discussion and appropriate action related to the UTIMCO Compensation Program, Amended and Restated effective July 1, 2018. The Committee also met in Executive Session for the purpose of deliberating individual personnel compensation matters.

**Discussion:** **(1) Base Salaries.** The Committee will report on its action related to the base salaries for all UTIMCO officers and Plan Participants (other than the CEO) for the 2018-19 Fiscal Year. The Committee will report on its recommendation and request that the Board take appropriate action related to the CEO's base salary.

**(2) UTIMCO Compensation Program.** The UTIMCO Compensation Program effective September 1, 2015 (the "Prior Plan") consists of two elements: base salary and an annual incentive plan. The UTIMCO Board has the discretion to interpret the compensation program and may from time to time adopt such rules and regulations that it may deem necessary to carry out the compensation program and may also amend the compensation program. The proposed UTIMCO Compensation Program effective July 1, 2018 (the "Plan") amends and restates the Prior Plan.

Mr. Harris and Mr. Hall will review the recommended changes to the Plan. The proposed changes are as follows:

- Section 1 has been changed to reflect a new effective date of July 1, 2018.
- Section 5.2 has been changed to reflect the new Performance Period beginning July 1st and ending June 30th.
- Section 5.3 has been changed to provide that if an employee is in an Eligible Position, the employee is a Participant in the Plan. The employee will become a Participant on the later of the first day of the Performance Period or employee's hire date in the Performance Period. Employees hired within the last six months of the Performance Period will not be eligible to

**Agenda Item**  
UTIMCO Board of Directors Meeting  
July 26, 2018

participate for that Performance Period. These changes streamline plan participation and eliminates the need for the Compensation Committee to annually select the Participants in the Plan.

- Sections 5.4 and 5.8 terminology has been changed from “Performance Goals” to “Performance Standards”. Performance Standards consist of both Quantitative and Qualitative Performance Standards. Quantitative Performance Standards include Benchmark Performance, i.e., Entity (Total Endowment Assets (TEA) and Intermediate Term Fund (ITF), Asset Class and Peer Group Performance). Weightings for each of the components of the Quantitative and Qualitative Performance Standards are assigned in Table 1.
- Section 5.4 has also been changed to provide that except for the CEO and CCO, Performance Standards are determined jointly by the Participant and his or her supervisor, subject to approval of the CEO. Performance Standards for the CEO are determined and approved by the Board. Performance Standards for the CCO are limited to Qualitative Performance Standards and these are determined jointly by the CEO and Chairman of the Audit and Ethics Committee (a change from the requirement to have the Committee take action).
- Section 5.7 has been changed to modify the deferral period for nonvested awards from three to two years.
- Section 5.8 has been changed to provide details on the Quantitative Performance Standards methodology.
- Section 5.8 also has been changed to reflect the new methodology for determining Qualitative Performance Standards for each Participant. Qualitative Performance Standards are measured during the annual performance appraisal process for each employee and include a 360 review of the employee’s adherence to UTIMCO’s cultural values, training requirements, and supervisor evaluation.
- Section 5.9 has been changed to eliminate the phase-in for a newly hired Participant which means that all Participants will be measured and rewarded in the same manner.
- Section 5.11 has been changed to modify the deferral period for voluntarily deferred awards from three to two years; the same as applies to nonvested awards.
- Section 5.12 has been changed to remove the language related to the Extraordinary Circumstance of automatic deferral of Performance Awards when the Net Returns of the Total Endowment Assets are negative 10.00% or below between the end of the Performance Period and the determination and approval of Performance Awards by the Board.
- Section 6.2 has been changed consistent with the change in Section 5.3 regarding participation in the Plan; the power to determine the Eligible Positions remains with the Board but the selection of Participants in Eligible Positions will be automatic and no longer require Board action.



**Agenda Item**  
UTIMCO Board of Directors Meeting  
July 26, 2018

- Section 8.24 has been changed to define the new Peer Group for the Plan as all endowment funds with assets greater than \$1 billion exclusive of the Total Endowment Assets.
- Appendix A, Performance Award Methodology has been changed consistent with the new Quantitative and Qualitative Performance Standards.
- Appendix B has been deleted. The Peer Group will be determined by Cambridge Associates for each Performance Period.
- Table 1 has been changed to include specific Quantitative Weightings for the TEA, ITF, Asset Class and Peer Group. The Target Award Opportunity has been removed. Additional Eligible Positions have been included for the Global Asset Allocation team, Chief of Staff, and Investment Counsel. The Risk Eligible Positions' Maximum Award Opportunities have been changed to reflect a progression from the Senior Analyst's Award Opportunity of 110% to the Risk Managing Director's current Award Opportunity of 135%.
- Table 2 has been changed to include benchmarks for all Quantitative Performance Standards.
- Table 3 has been changed to include Associate Directors in the list of Eligible Positions of Affected Participants.
- Miscellaneous nonsubstantive and editorial changes consistent with adoption of new terminology for the Corporation, in the Plan, and in the Investment Policy Statements, and for clarification.

**Recommendation:** The Committee will request appropriate action from the Board related to (1) the CEO's Base Salary for 2018-19 Fiscal Year; and (2) the amended and restated Plan effective July 1, 2018

**Reference:** UTIMCO Compensation Program, Amended and Restated effective July 1, 2018  
*Proposed Revisions to UTIMCO Compensation Program* presentation

**RESOLUTION REGARDING CEO'S BASE SALARY**

RESOLVED, that the Board of Directors of UTIMCO hereby approves the Base Salary of the Corporation's CEO for the Fiscal Year 2018-2019 in the amount of \$\_\_\_\_\_.

**RESOLUTION RELATED TO AMENDMENTS TO THE UTIMCO  
COMPENSATION PROGRAM**

WHEREAS, Section 7.2 of the UTIMCO Compensation Program (the “Plan”) provides that UTIMCO, by action of its Board of Directors (the “Board”), has the right in its discretion to amend the Plan or any portion thereof from time to time; and

WHEREAS, the Compensation Committee of the Board (the “Committee”) has reviewed the proposed amendments to the Plan incorporated into an Amended and Restated Plan, effective July 1, 2018 (the “Amended and Restated Plan”), in the form previously provided to the Board but deferred to the Board on action on the Amended and Restated Plan; and

WHEREAS, the Board has reviewed the Amended and Restated Plan.

NOW, THEREFORE, be it:

RESOLVED, that the Board hereby approves and adopts the Amended and Restated Plan, effective as of July 1, 2018, subject to the approval of the Board of Regents of The University of Texas System.



# **The University of Texas/Texas A&M Investment Management Company**

---

## **Proposed Revisions to UTIMCO Compensation Program**

July 2018

# Proposed Revisions to UTIMCO Compensation Program

---



- **Proposal:** Revise the existing UTIMCO Compensation Program to reflect Total Alignment, Transparency and Openness, and to attract and retain high performance investment professionals:
  - Eliminate asymmetric payoffs by adopting “straight-line” structure
  - Introduce a formulaic peer comparison against other large endowments
  - Judge asset class performance against policy benchmarks, eliminate manager peer sets
  - Qualitative component based on annual Talent Management process
  - Other changes
    - Move Performance Year to June 30<sup>th</sup>
    - Reduce effective deferral period after initial payment from 3 years to 2 years
    - Eligible new hires will automatically be included in the plan
- The Proposed Plan changes the mix of incentives while not meaningfully changing the level of total compensation
  - Using FY 2017 Salaries and Performance, the Proposed Plan would have lead to a Total Performance Award roughly \$528,000 less than the actual FY 2017 Award

# Summary of Current Plan



Target and Maximum Awards create asymmetries

No formulaic approach to measuring performance vs. peers

Only measures Total Entity Alpha

Deferral Amounts, Qualitative vs. Quantitative Split by Title

Eligible Position	Weighting		Incentive Award Opportunity (% of Salary)		Percentage of Award		
	Qualitative		< Threshold	Threshold	Target	Maximum	Deferred
	Entity	(Individual)					
<i>Investment Professionals</i>							
CEO & Chief Investment Officer	80%	20%	0%	0%	200%	450%	50%
Deputy Chief Investment Officer	80%	20%	0%	0%	150%	375%	50%
Senior Managing Director - Investments	70%	30%	0%	0%	120%	300%	45%
Managing Director - Investments	65%	35%	0%	0%	100%	250%	40%
Managing Director - Fixed Income	65%	35%	0%	0%	80%	200%	40%
Managing Director - Risk Management	65%	35%	0%	0%	70%	135%	40%
Senior Director - Investments	60%	40%	0%	0%	70%	185%	35%
Director - Investments	50%	50%	0%	0%	65%	175%	30%
Director - Risk Management	50%	50%	0%	0%	35%	80%	30%
Associate Director - Investments	40%	60%	0%	0%	60%	155%	20%
Associate Director - Risk Management	40%	60%	0%	0%	45%	140%	20%
Associate - Investments	35%	65%	0%	0%	50%	145%	15%
Associate - Risk Management	35%	65%	0%	0%	35%	120%	15%
Senior Analyst - Investments	30%	70%	0%	0%	40%	110%	0%
Analyst - Investments	20%	80%	0%	0%	30%	75%	0%
Analyst - Risk Management	20%	80%	0%	0%	25%	75%	0%
Senior Investment Counsel	50%	50%	0%	0%	40%	80%	25%
<i>Support and Control Professionals</i>							
Senior Managing Director	20%	80%	0%	0%	50%	90%	40%
Chief Technology Officer	20%	80%	0%	0%	30%	70%	30%
Corporate Counsel & Chief Compliance Officer	0%	100%	0%	0%	30%	70%	30%
Senior Manager	20%	80%	0%	0%	30%	60%	25%
Manager	20%	80%	0%	0%	30%	60%	25%
Senior Financial Analyst	20%	80%	0%	0%	15%	35%	20%
Mgr, Infrastructure and CISO	20%	80%	0%	0%	25%	50%	20%
Mgr, Development	20%	80%	0%	0%	25%	50%	20%
Business Analyst and Document System Manager	20%	80%	0%	0%	25%	50%	20%

# Summary of Proposed Changes



Eliminate asymmetric payoffs by move to “straight-line” bonus structure

Introduce Formulaic Peer Component

Include Asset Class Specific Benchmarks

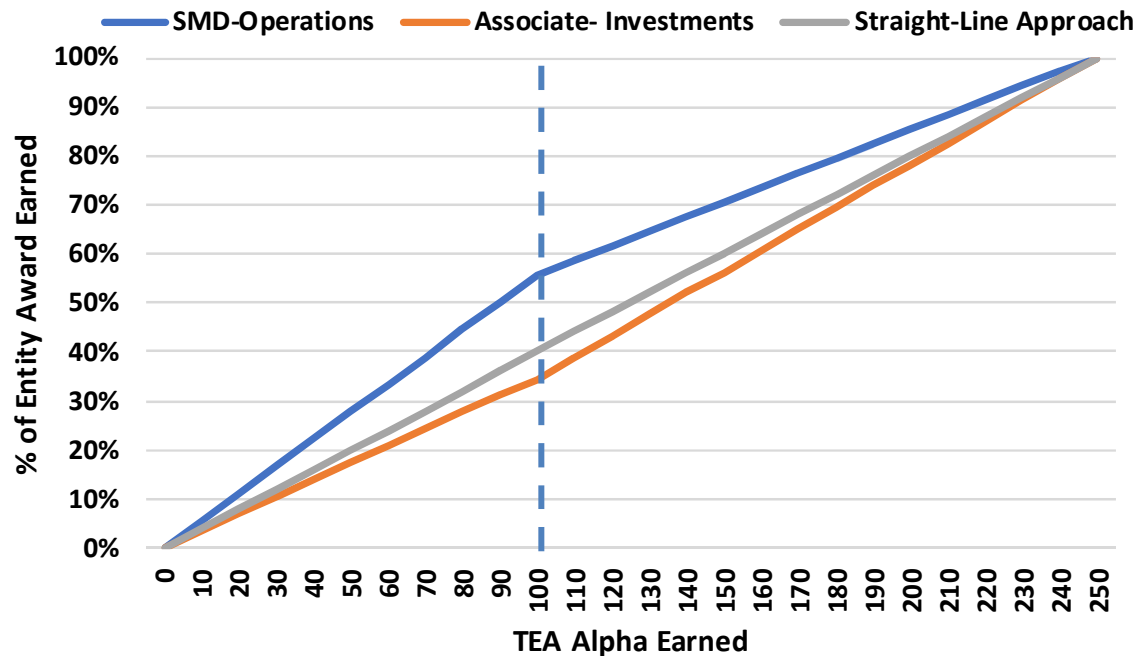
No change to: Deferral Amounts, Qualitative vs. Quantitative Split by Title

Eligible Position	Weighting		Quantitative Weightings				Award Opportunity (% of Base Salary)		Percentage of Award Deferred
	Quantitative	Qualitative	Benchmark Performance		Asset Class	Peer Group	Threshold	Maximum	
			Entity						
			TEA	ITF					
<b>Investment Professionals</b>									
CEO & Chief Investment Officer	80%	20%	51.2%	12.8%	0.0%	16.0%	0%	450%	50%
Deputy Chief Investment Officer	80%	20%	51.2%	12.8%	0.0%	16.0%	0%	450%	50%
Senior Managing Director - Investments	70%	30%	31.4%	7.8%	16.8%	14.0%	0%	300%	45%
Managing Director - Investments	65%	35%	29.1%	7.3%	15.6%	13.0%	0%	250%	40%
Managing Director - Fixed Income	65%	35%	29.1%	7.3%	15.6%	13.0%	0%	200%	40%
Managing Director - Global Asset Allocation	65%	35%	41.6%	10.4%	0.0%	13.0%	0%	250%	40%
Managing Director - Risk Management	65%	35%	41.6%	10.4%	0.0%	13.0%	0%	135%	40%
Senior Director - Investments	60%	40%	26.9%	6.7%	14.4%	12.0%	0%	185%	35%
Senior Director - Risk Management	60%	40%	38.4%	9.6%	0.0%	12.0%	0%	130%	35%
Senior Investment Counsel	50%	50%	32.0%	8.0%	0.0%	10.0%	0%	80%	25%
Director - Investments	50%	50%	22.4%	5.6%	12.0%	10.0%	0%	175%	30%
Director - Risk Management	50%	50%	32.0%	8.0%	0.0%	10.0%	0%	125%	30%
Director - Chief of Staff	50%	50%	32.0%	8.0%	0.0%	10.0%	0%	175%	30%
Investment Counsel	40%	60%	25.6%	6.4%	0.0%	8.0%	0%	60%	25%
Associate Director - Investments	40%	60%	17.9%	4.5%	9.6%	8.0%	0%	155%	20%
Associate Director - Risk Management	40%	60%	25.6%	6.4%	0.0%	8.0%	0%	120%	20%
Associate - Investments	35%	65%	15.7%	3.9%	8.4%	7.0%	0%	145%	15%
Associate - Global Asset Allocation	35%	65%	22.4%	5.6%	0.0%	7.0%	0%	145%	15%
Associate - Risk Management	35%	65%	22.4%	5.6%	0.0%	7.0%	0%	115%	15%
Senior Analyst - Investments	30%	70%	13.4%	3.4%	7.2%	6.0%	0%	110%	0%
Senior Analyst - Risk Management	30%	70%	19.2%	4.8%	0.0%	6.0%	0%	110%	0%
Analyst - Investments	20%	80%	9.0%	2.2%	4.8%	4.0%	0%	75%	0%
Analyst - Risk Management	20%	80%	12.8%	3.2%	0.0%	4.0%	0%	75%	0%
<b>Support and Control Professionals</b>									
Senior Managing Director	20%	80%	12.8%	3.2%	0.0%	4.0%	0%	90%	40%
Chief Technology Officer	20%	80%	12.8%	3.2%	0.0%	4.0%	0%	70%	30%
Corporate Counsel & Chief Compliance Officer	0%	100%	0.0%	0.0%	0.0%	0.0%	0%	70%	30%
Senior Director	20%	80%	12.8%	3.2%	0.0%	4.0%	0%	60%	25%
Director	20%	80%	12.8%	3.2%	0.0%	4.0%	0%	60%	25%
Director - Security; Information Technology	20%	80%	12.8%	3.2%	0.0%	4.0%	0%	50%	20%

# Payoffs: Eliminating Asymmetry



- Asymmetry between Target and Max Awards in certain titles creates misalignment across the organization with different roles valuing Alpha in different ways at different thresholds
- Straight-line approach would create Total Alignment and reduce complexity

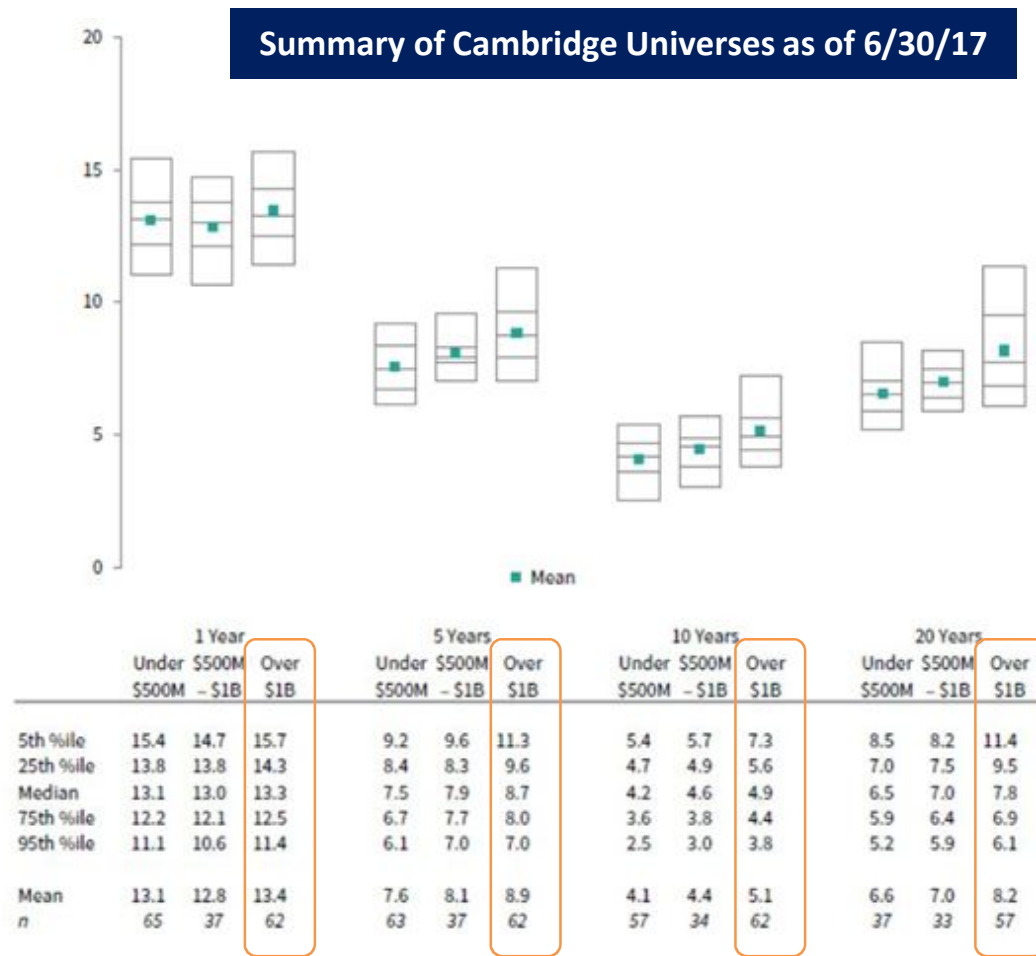




# Quantitative Component: Peers



- Under the proposed plan, 20% of the quantitative component comes from UTIMCO's performance vs. peer endowments on a trailing 3-year basis
- Propose adopting Cambridge Associates College and University Endowments with greater than \$1 Bn as formal peer



Source: College and university data as reported to Cambridge Associates LLC.  
 Note: Five-, ten-, and 20-year returns are annualized.

# Quantitative Component: Benchmarks



- Under the proposed plan, 80% of the quantitative component comes from alpha generated by UTIMCO vs. its benchmarks at both the Total Entity and Asset Class levels
- Investment teams will get 70% of this component from their performance vs. Entity (Total Endowment Assets, ITF) and 30% from their performance vs. their asset class benchmark in policy

Entity and Asset Class	Benchmark	Performance Standards	
		Threshold	Maximum
Entity: Peer Group (Total Endowment Funds)	Peer Group (Endowments w/>>\$1 B assets)	50th %ile	25th %ile
Entity: Benchmark (Total Endowment Funds)	Policy Portfolio	+0 bps	+250 bps
Entity: Benchmark (Intermediate Term Fund)	Policy Portfolio	+0 bps	+150 bps
Public Equity	Public Equity Policy Benchmarks	+0 bps	+150 bps
Hedge Funds	Hedge Fund Policy Benchmarks	+0 bps	+300 bps
Private Equity	Private Equity Policy Benchmarks	+0 bps	+250 bps
Fixed Income	Fixed Income Policy Benchmarks	+0 bps	+50 bps
Natural Resources	Natural Resource Policy Benchmarks	+0 bps	+250 bps
Real Estate	Real Estate Policy Benchmarks	+0 bps	+250 bps

(1) Benchmark will be based on the appropriate benchmark in the respective Investment Policy Statement(s) in effect during each Performance Period.

# Qualitative Component



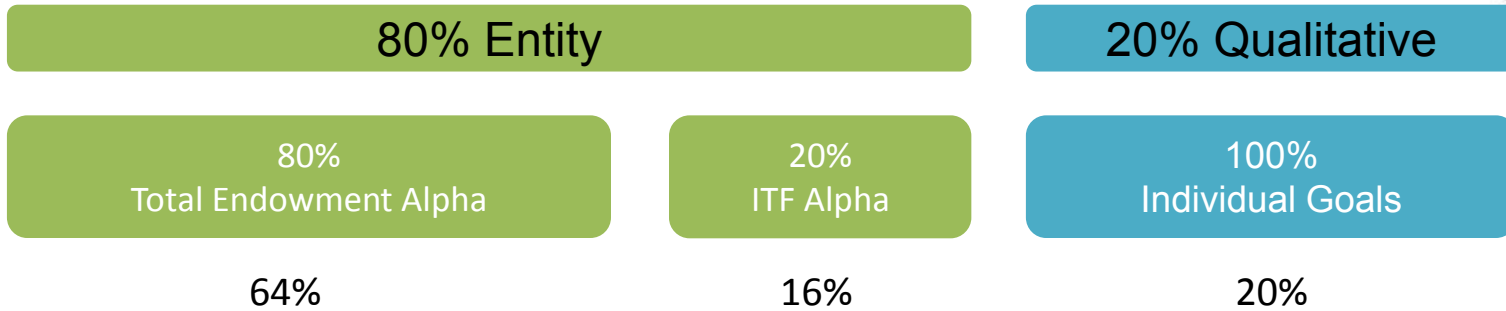
- Proposal removes individual/unit goals from the incentive plan, and instead judges employees via a comprehensive talent management system comprised of 3 key components
  - 360 Surveys for all UTIMCO employees, rating them on adherence to cultural values
  - Completion of required training hours (50 hours per employee)
  - Manager's rating of technical proficiency and effectiveness on the job
- Scorecard for each employee is created and discussed by UTIMCO's management committee at an annual offsite, where all employees are ranked and placed in a grid to determine their qualitative award

<b>Box 3:</b> Top 30%	<b>Box 2:</b> Top 20%	<b>Box 1:</b> Top 10%
<b>Box 6:</b> Top 60%	<b>Box 5:</b> Top 50%	<b>Box 4:</b> Top 40%
<b>Box 9:</b> Bottom 10%	<b>Box 8:</b> Bottom 20%	<b>Box 7:</b> Bottom 30%

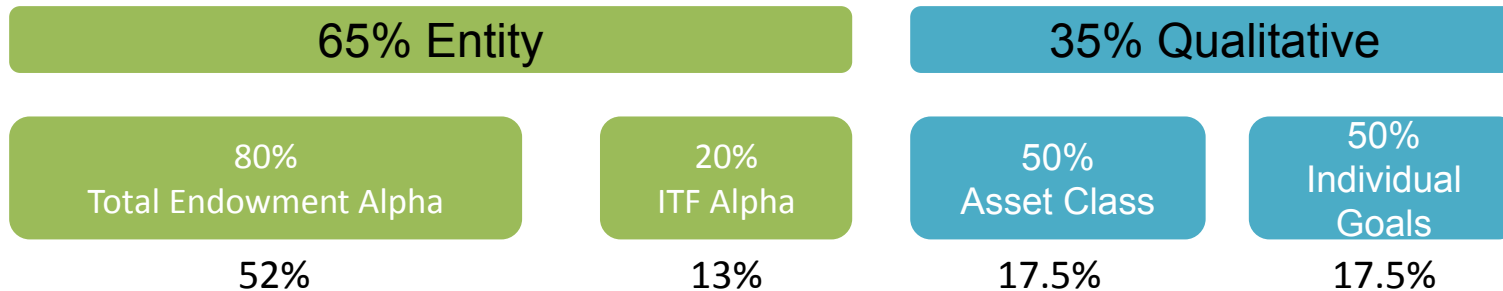
# Example of Current Calculations



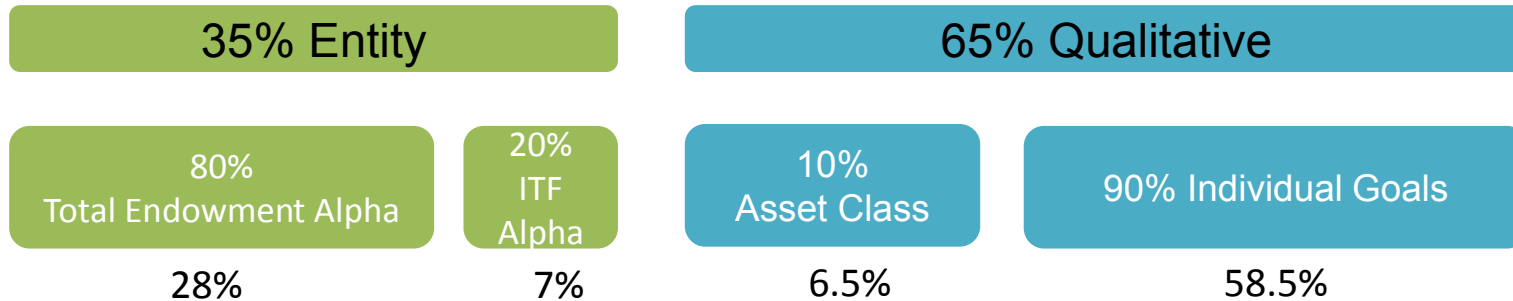
CEO



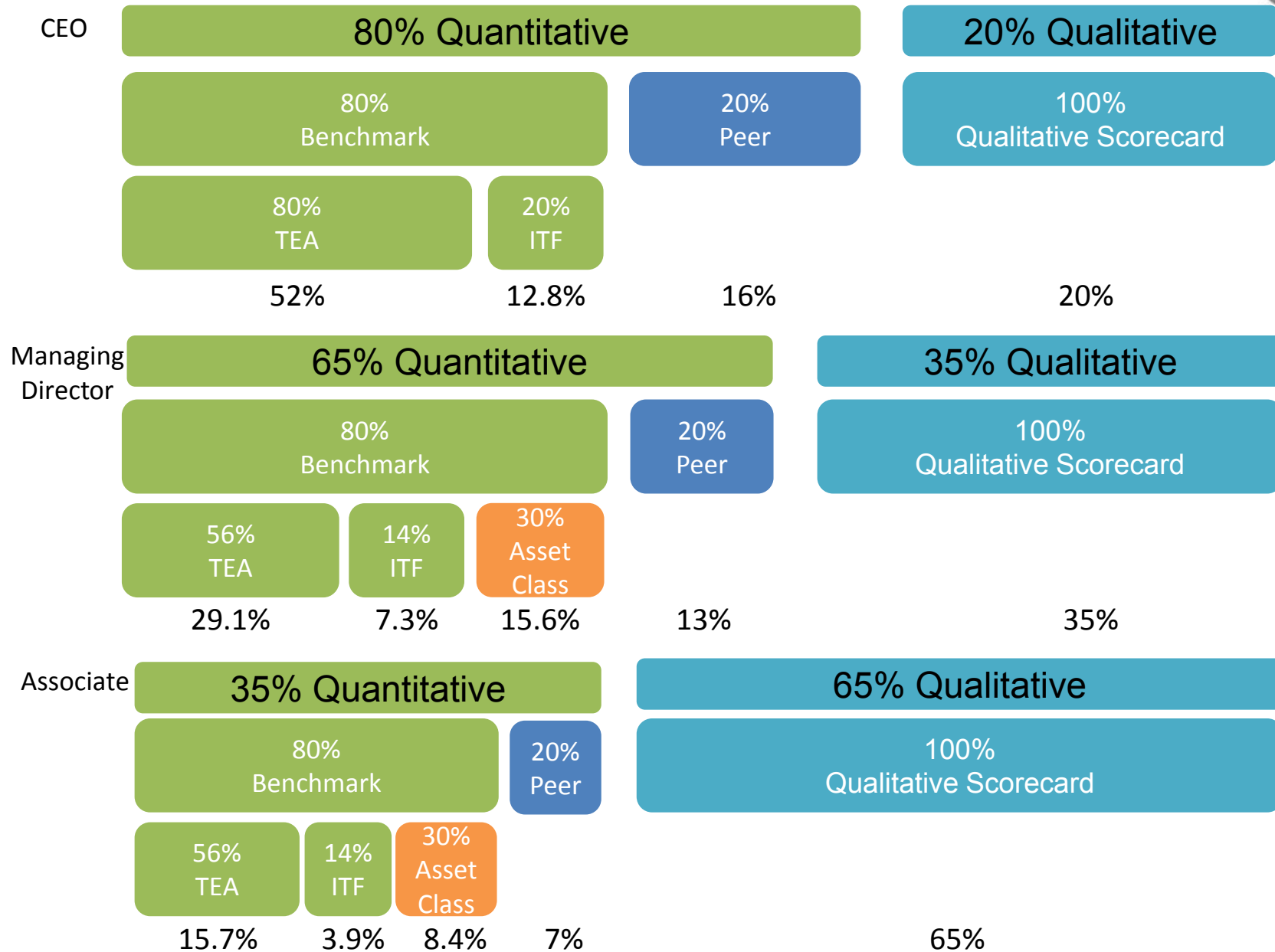
Managing Director



Associate



# Example of Proposed Calculations



# Other Important Changes

---



- **Move from plan year from 8/31 to 6/30**
  - Performance period ending on calendar quarter improves peer comparison and coincides with industry standard reporting
  - Endowment peers report most reliable numbers as of June 30<sup>th</sup>
  
- **Reduce Deferral Period from 3 years to 2 years**
  - Current plan requires employees subject to deferral receive deferred compensation over a 3 year period
    - Example: A role with 50% deferral would receive 50% of their award in the current year, then 17% at the end of year 1, another 17% at the end of the year 2, and the remainder at the end of year 3.
  - Shortening payback period by one year still accomplishes goal of retention and alignment of interests while making UTIMCO's compensation plan more competitive
    - Example: Same role would receive 50% of their award in the current year, then 25% at the end of year 1, and the remainder at the end of year 2.
  
- **Eligible new hires will be automatically included in the plan**
  - Current process requires Compensation Committee approval of all new entrants into the plan
  - Proposed policy will detail the proposed Eligible Titles, all new hires with an Eligible Title will be automatically entered into the plan
  - Does not give UTIMCO team authority to make any other changes to the plan



# Appendix

---

# Asset Class Alpha Targets



- Considered two approaches to evaluating Alpha potential for each asset class
  - Potential Alpha – Cambridge analysis of manager returns for each asset class showed the amount of possible alpha available over past 10 years
  - Top-Quartile Peer Alpha – Compare Top-Quartile Endowment Peers to UTIMCO Benchmark Performance over past 10 years

	Public Equity	Hedge Funds	Private Equity	Fixed Income	Natural Resources	Real Estate
<b>Potential Alpha</b>	225	300	300	50	300	300
<b>Top-Quartile Peer Alpha</b>	100	419	190	-	117	202
Proposed Alpha Maximum	150	300	250	50	250	250

Source: Cambridge, UTIMCO





# UTIMCO COMPENSATION PROGRAM

**Amended and Restated**  
**Effective ~~September 1, 2015~~ July 1, 2018**

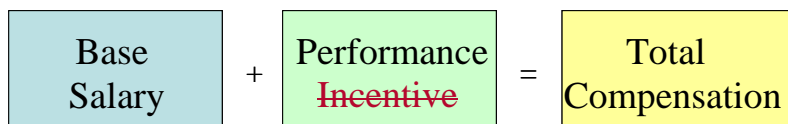
*(Appendices updated as of September 1, 2017)*

## TABLE OF CONTENTS

1. Compensation Program Structure and Effective Date .....	1
2. Compensation Program Objectives .....	1
3. Total Compensation Program Philosophy.....	2
4. Base Salary Administration.....	2
4.1 Salary Structure .....	2
4.2 Salary Adjustments .....	3
5. Performance <del>Incentive</del> Plan .....	3
5.1 Purpose of the Performance <del>Incentive</del> Plan .....	3
5.2 Performance Period .....	3
5.3 Eligibility and Participation .....	4
5.4 Performance <del>Goals</del> Standards .....	5
5.5 <del>Incentive</del> -Award Opportunity Levels and Performance <del>Incentive</del> Awards .....	7
5.6 Form and Timing of Payouts of Performance <del>Incentive</del> Awards.....	8
5.7 Nonvested Deferred Awards .....	9
5.8 Performance Measurement Standards .....	10
5.9 Modifications of Measurement Period for Measuring Entity and Asset Class/ <del>Investment Type</del> Performance .....	11
5.10 Termination Provisions .....	13
5.11 Eligibility for Retirement .....	14
5.12 Extraordinary Circumstances .....	16
5.13 Recovery of Performance <del>Incentive</del> Awards.....	17
6. Compensation Program Authority and Responsibility.....	18
6.1 Board as Plan Administrator .....	18
6.2 Powers of Board .....	18
7. Compensation Program Interpretation .....	18
7.1 Board Discretion .....	18
7.2 Duration, Amendment, and Termination .....	19
7.3 Recordkeeping and Reporting .....	19
7.4 Continued Employment.....	19
7.5 Non-transferability of Awards .....	19
7.6 Unfunded Liability .....	20
7.7 Compliance with State and Federal Law.....	20
7.8 Federal, State, and Local Tax and Other Deductions.....	20
7.9 Prior Plan.....	20
8. Definition of Terms .....	22
Appendix A .....	A-1
<del>Appendix B</del> Table 1 .....	<del>B-1</del>
<del>Appendix C</del> Table 2 .....	<del>C-1</del>
Table 3 <del>Appendix D</del> .....	D-1
Table 4 <del>Appendix E</del> .....	<del>E-1</del>

## 1. COMPENSATION PROGRAM STRUCTURE AND EFFECTIVE DATE

The UTIMCO Compensation Program (“Compensation Program” or “Plan”) consists of two elements: base salary and an annual ~~incentive~~performance plan (the “Performance ~~Incentive~~ Plan”):



The base salary portion of the Compensation Program sets forth a structure and guidelines for establishing and adjusting the salaries of key investment and operations ~~staff~~employees. The Performance ~~Incentive~~ Plan portion of the Compensation Program sets forth the criteria for calculating and receiving annual ~~incentive~~performance awards for key investment and operations ~~staff~~employees who are eligible Participants in the Performance ~~Incentive~~ Plan. Provisions of the Compensation Program relating solely to the base salary portion of the Compensation Program are described in Section 4. Provisions of the Compensation Program relating solely to the Performance ~~Incentive~~ Plan portion of the Compensation Program are described in Section 5. Sections 1, 2, 3, 6, 7, and 8 of the Compensation Program relate to both the base salary portion and the Performance ~~Incentive~~ Plan portion except where otherwise specified in any such Section.

**Effective Date:** Except as provided in Section 7.9, this document, with an “Effective Date” of ~~September 1, 2015~~July 1, 2018, supersedes the UTIMCO Compensation Program that was effective September 1, ~~2013~~2015.

## 2. COMPENSATION PROGRAM OBJECTIVES

UTIMCO’s Compensation Program serves a number of objectives:

- To attract and retain key investment and operations ~~staff~~employees of outstanding competence and ability.
- To encourage key investment ~~staff~~employees to develop a strong commitment to the performance of the assets for which UTIMCO has been delegated investment responsibility.
- To motivate key investment ~~staff~~employees to focus on maximizing real, long-term returns for all funds managed by UTIMCO while assuming appropriate levels of risk.
- To facilitate teamwork so that members of UTIMCO operate as a cohesive group.

### 3. TOTAL COMPENSATION PROGRAM PHILOSOPHY<sup>1</sup>

UTIMCO aspires to attract and retain high caliber employees from nationally recognized peer institutions and the investment management community in general. UTIMCO strives to provide a total compensation program that is competitive nationally, with the elements of compensation evaluated relative to comparably sized university endowments, foundations, and for-profit investment management firms with a similar investment philosophy (e.g., externally managed funds).

UTIMCO's total Compensation Program is positioned against the competitive market as follows:

- Base salaries are targeted at the market median (e.g., 50th percentile).
- Target total compensation (salary plus target ~~Incentive~~-Award Opportunity) is positioned at the market median.
- Maximum total compensation (salary plus maximum ~~Incentive~~-Award Opportunity) is targeted at the market 75th percentile if individual performance is outstanding.

Although base salaries, as well as target and maximum total compensation, have a targeted positioning relative to market, an individual employee's actual total compensation may vary from the targeted positioning based on the individual's experience, education, knowledge, skills, and performance as well as UTIMCO's investment performance as described in this document. Except as provided in Sections 5.8 and 5.9 for purposes of determining the length of historical performance, base salaries and ~~Incentive~~-Award Opportunities (as well as the actual Performance ~~Incentive~~-Awards) are not determined based on seniority at UTIMCO.

### 4. BASE SALARY ADMINISTRATION

#### 4.1. Salary Structure

- (a) Base salaries are administered through a Salary Structure as set forth in this Section 4.1. Each employment position has its own salary range, with the midpoint set approximately equal to the market median base salary for employment positions with similar job content and level of responsibility.
- (b) The salary range midpoints will be determined by the Compensation Committee based on consultation with an outside compensation consultant and with UTIMCO management. Salary range midpoints for key management, investment, and operations positions will be updated at least every three years based on a salary benchmarking study conducted by a qualified compensation consultant selected by the Compensation Committee. In years in which the Compensation Committee does not commission a formal salary survey, the

---

<sup>1</sup> This explanation of UTIMCO's "Total Compensation Program Philosophy" is not intended to modify any of the substantive provisions of this document.

base salary midpoints may be adjusted at the Compensation Committee's discretion based on expected annual salary structure adjustments as reported in one or more published compensation planning surveys.

#### 4.2. *Salary Adjustments*

- (a) The base salary of the CEO is determined by the Board. The base salary of the Chief Compliance Officer ("CCO") will be determined by the Compensation Committee based on the joint recommendation of the Audit and Ethics Committee and the CEO and the base salaries of the other key investment and operations employees are determined by the Compensation Committee. Base salaries will be set within the salary range for each employment position. An individual's base salary within the range may be higher or lower than the salary range midpoint based on his or her level of experience, education, knowledge, skills, and performance. On an exception basis, the Board may set individual base salaries outside of the salary range if an individual either substantially exceeds or does not meet all of the market criteria for a particular position.
- (b) Individuals may receive an annual adjustment (increase or decrease) of their base salaries at the discretion of the Compensation Committee or, in the case of the CEO, at the discretion of the Board. Base salary adjustments, if any, will be determined based on each individual employee's experience, education, knowledge, skills, and performance; provided that, in the case of the CCO, any such adjustment shall be based on the joint recommendation of the Audit and Ethics Committee and the CEO. Employees are not guaranteed an annual salary increase.

## 5. PERFORMANCE ~~INCENTIVE~~ PLAN

### 5.1. *Purpose of the Performance ~~Incentive~~ Plan*

The purpose of the Performance ~~Incentive~~ Plan is to provide annual Performance ~~Incentive~~ Awards to eligible Participants based on specific objective criteria relative to UTIMCO's and each Participant's performance. The primary objectives of the Performance ~~Incentive~~ Plan are outlined in Section 2.

### 5.2. *Performance Period*

- (a) For purposes of the Performance ~~Incentive~~ Plan, the "Performance Period" begins on ~~September~~July 1 of each year and ends the following ~~August 31~~June 30.
- (b) Except as otherwise provided under Sections 5.8 and 5.9, performance for each year in the historical performance period will be measured between ~~September~~July 1 and the following ~~August 31~~June 30 of the applicable year for gauging achievement of the ~~Entity~~Quantitative Performance ~~Goal~~Standard.

### 5.3. Eligibility and Participation

- (a) ~~As further described in (b), e~~Each employee of UTIMCO who holds an “Eligible Position” will be a “Participant” in the Performance ~~Incentive~~ Plan for a Performance Period ~~if (and only if) he or she is both (i) employed by UTIMCO in an employment position that is designated as an “Eligible Position” for that Performance Period and (ii) selected by the Board as eligible to participate in the Performance Incentive Plan for that Performance Period.~~ “Eligible Positions” for a Performance Period include senior management, investment ~~staff~~employees, and other key positions as designated by the CEO and approved by the Board as Eligible Positions for that Performance Period. An employment position that is an Eligible Position in one Performance Period is not automatically an Eligible Position in any subsequent Performance Period, ~~and each Eligible Position must be confirmed or re-confirmed by the Board as being an “Eligible Position” for the applicable Performance Period. Similarly, an employee who is eligible to participate in the Performance Incentive Plan in one Performance Period is not automatically eligible to participate in any subsequent Performance Period (notwithstanding that such employee may be employed in an Eligible Position in that subsequent Performance Period), and each employee must be designated or re-designated by the Board as being eligible to participate in the Performance Incentive Plan for the applicable Performance Period. The Board will confirm the Eligible Positions and designate the eligible employees who will become Participants for a Performance Period within the first 90 days of the Performance Period or, if later, as soon as administratively feasible after the start of the Performance Period.~~ The Board in its discretion may also designate the employment position of a newly hired or promoted employee as an “Eligible Position” during a ~~and may designate such newly hired or promoted employee as eligible to participate in the Performance Incentive 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 after such hire or promotion.~~ A list of Eligible Positions for each Performance Period is set forth in Table 1, ~~which is attached as Appendix C.~~ Table 1 will be revised and attached each Performance Period when necessary to set forth the Eligible Positions for that Performance Period ~~as soon as administratively practicable after confirmation of such Eligible Positions by the Board for such Performance Period, and such revised Table 1 will be attached as Appendix C.~~
- (b) An employee in an Eligible Position ~~who has been selected by the Board to participate in the Performance Incentive Plan~~ will become a Participant on the later of (i) the date he or she is employed in an Eligible Position or (ii) the first day of the Performance Period if the employee is employed on that date ~~he or she is selected by the Board to participate in the Performance Incentive Plan;~~ provided, however, that the Board in its discretion may designate any earlier or later date (but not earlier than such employee’s date of hire and not later than such employee’s date of Termination of employment) upon which such employee will become a Participant, and such employee will instead become a Participant ~~on such earlier or later date.~~ The preceding notwithstanding,

~~except as provided below, an employee may not commence participation in the Performance Incentive Plan and first become a Participant during the last six months of any Performance Period; provided however, that the Board may select an employee to participate in the Performance Incentive Plan during the last six months of the Performance Period when compelling individual circumstances justify a shorter period of time and such circumstances are recorded in the minutes of a meeting of the Board in which event participation of the employee in the Performance Incentive Plan will begin on the participation date selected by the Board for the employee but not earlier than the employee's date of hire (assuming such employee is employed by UTIMCO in an Eligible Position on such date).~~

- (c) An employee will cease to be a Participant in the Performance ~~Incentive~~ Plan on the earliest to occur of: (i) the date such employee is no longer employed in an Eligible Position; (ii) the date of Termination of such employee's employment with UTIMCO for any reason (including Voluntary Termination and Involuntary Termination, death, and Disability); (iii) the date of termination of the Performance ~~Incentive~~ Plan; (iv) the date such employee commences a leave of absence; or (v) the date such employee begins participation in any other UTIMCO incentive performance program; ~~(vi) the date the Board designates that such employee's employment position is not an Eligible Position (or fails to designate the employee's employment position as an Eligible Position with respect to a Performance Period); or (vii) any date designated by the Board as the date on which such employee is no longer a Participant.~~
- (d) Except as provided in Sections 5.10(b) and (c), only individuals who are Participants on the last day of a Performance Period are eligible to receive Performance ~~Incentive~~ Awards under the Performance ~~Incentive~~ Plan for that Performance Period.

#### **5.4. Performance ~~Goals~~ Standards**

- ~~(a) Within the first 60 days of each Performance Period, except as provided below, the CEO will recommend goals ("Performance Goals") for each Participant (other than the Performance Goals for the CEO, which are determined as provided in Section 5.4(c), and the Performance Goals for employees who are hired or promoted later during a Performance Period) subject to approval by the Compensation Committee within the first 90 days of the Performance Period. The CEO will also 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 Compensation Committee as soon as administratively feasible after such Performance Goals are recommended). If the position of the CCO is determined to be an Eligible Position and the employee in the Eligible Position has been designated by the Compensation Committee as a Participant in the Performance Incentive Plan for the Performance Period, the Performance Goals of the employee holding the position of CCO will be determined jointly by the Audit and Ethics Committee and the CEO.~~

~~References to the CCO hereafter assume that the position of CCO has been determined to be an Eligible Position and the employee holding the position of CCO has been determined to be a Participant in the Performance Incentive Plan for the Performance Period. If the position of CCO has not been determined to be an Eligible Position for the Performance Period the provisions hereafter specific to the CCO have no force and effect.~~

~~(b)(a)~~ There are two categories of Performance GoalsStandards:

- ~~(1) EntityQuantitative Performance (measured as described in Section 5.8(a))~~
- ~~(2) Qualitative Performance (measured as described in Section 5.8(b))~~

~~Except for the CEO and CCO, Qualitative Performance GoalsStandards will be defined jointly by each Participant and his or her supervisor, subject to approval by the CEO ~~and subject to final approval by the Compensation Committee. If the position of the CCO is determined to be an Eligible Position, the Qualitative Performance Standards of the employee holding the position of CCO will be determined jointly by the Chairman of the Audit and Ethics Committee and the CEO. References to the CCO hereafter assume that the position of CCO has been determined to be an Eligible Position and the employee holding the position of CCO has been determined to be a Participant in the Performance Incentive Plan for the Performance Period. If the position of CCO has not been determined to be an Eligible Position for the Performance Period the provisions hereafter specific to the CCO have no force and effect. Qualitative Performance Goals for the CCO will be defined jointly by the Audit and Ethics Committee and the CEO. Qualitative Performance Goals may be established in one or more of the following areas:~~~~

- ~~\* Asset Class/Investment Type Performance~~
- ~~\* Leadership~~
- ~~\* Implementation of operational goals~~
- ~~\* Management of key strategic projects~~
- ~~\* Effective utilization of human and financial resources~~
- ~~\* UTIMCO investment performance relative to the Peer Group~~

~~(e)(b)~~ The CEO's Performance GoalsStandards will be determined and approved by the Board.

~~(d)(c)~~ Each Performance GoalStandard for each Eligible Position is assigned a weight for the Performance Period. The Chairman of the Audit and Ethics Committee and the CEO will jointly recommend to the Compensation Committee the weightings of the Performance GoalsStandards for the CCO.



~~For each Performance Period, the Compensation Committee will approve (or adjust as it deems appropriate) the weightings of the Performance Goals at the same time it approves the Performance Goals. The weightings for each Eligible Position are set forth in Table 1, which is attached as Appendix C. Table 1 will be revised and attached each Performance Period when necessary to set forth the weightings for the Eligible Positions for that Performance Period as soon as administratively practicable after such weightings are approved by the Compensation Committee for such Performance Period. Notwithstanding the identified weighting for a Performance Goal for an Eligible Position, the Compensation Committee, may adjust the weightings (up or down) for any Participant for a Performance Period when it considers the identified weighting for a Performance Goal to be inappropriate for such Participant because of his or her length of service with UTIMCO, his or her tenure in the respective Eligible Position, his or her prior work experience, or other factors as deemed appropriate by the Compensation Committee; provided that, in the case of the CCO, any such adjustment shall be based on the joint recommendation of the Audit and Ethics Committee and the CEO. The weightings for the Performance GoalsStandards for each Performance Period are subject to approval by the Board.~~

#### 5.5. ~~Incentive~~ Award Opportunity Levels and Performance ~~Incentive~~ Awards

- (a) ~~At the beginning of each Performance Period, e~~Each Eligible Position is assigned an “~~Incentive~~ Award Opportunity” for each Performance ~~GoalStandard~~ for the Participants in that Eligible Position. ~~The Audit and Ethics Committee and CEO will jointly recommend the Incentive Award Opportunity for the CCO to the Compensation Committee. Each Incentive Award Opportunity is determined by the Compensation Committee (and subject to approval by the Board) and each Award Opportunity~~ is expressed as a percentage of base salary earned during the Performance Period. The ~~Incentive~~ Award Opportunities include a threshold, ~~target~~, and maximum award for achieving commensurate levels of performance of the respective Performance ~~GoalStandard~~.
- (b) ~~Incentive~~ Award Opportunities for each Performance Period are set forth in Table 1, ~~which is attached as Appendix C~~. Table 1 will be revised ~~and attached~~ each Performance Period when necessary to set forth the ~~Incentive~~ Award Opportunities for that Performance Period as soon as administratively practicable after approval of the ~~Incentive~~ Award Opportunities by the Board for such Performance Period, ~~and such revised Table 1 will be attached as Appendix C~~.
- (c) Actual “Performance ~~Incentive~~ Awards” are the amounts that are actually awarded to Participants for the respective Performance Period. Actual Performance ~~Incentive~~ Awards will range from zero (if a Participant performs ~~at or~~ below threshold on all Performance ~~GoalsStandards~~) to the maximum ~~Incentive~~ Award Opportunity (if a Participant performs at or above maximum on all Performance ~~GoalsStandards~~) depending on performance relative to

objectives. Awards are capped at maximum levels regardless of whether a Participant exceeds the stated maximum Performance ~~GoalsStandards~~.

- (d) Following the end of each Performance Period, the Compensation Committee will review the actual performance of each Participant against the Performance ~~GoalsStandards~~ of the respective Participant and determine the Participant's level of achievement of his or her Performance ~~GoalsStandards~~. The Compensation Committee may seek and rely on the independent confirmation of the level of Performance ~~GoalStandard~~ achievement from an external investment consultant to evaluate Entity Performance, ~~and~~ Asset Class/~~Investment Type~~ Performance, ~~and Peer Group Performance~~. The CEO will submit a written report to the Compensation Committee, which documents the Participant's performance relative to the Participant's Performance ~~GoalsStandards~~ set at the beginning of the Performance Period, and upon which the Compensation Committee may rely in evaluating the Participant's performance. The Audit and Ethics Committee and the CEO will jointly determine the CCO's level of achievement relative to the CCO's Performance ~~GoalsStandards~~. The Board will determine the CEO's level of achievement relative to the CEO's Performance ~~GoalsStandards~~.
- (e) Performance ~~Incentive~~ Awards will be calculated for each Participant based on the percentage achieved of each Performance ~~GoalStandard~~, taking into account the weightings for the Participant's ~~EntityQuantitative~~ Performance and Qualitative Performance ~~GoalsStandards~~ and each Participant's ~~Incentive~~ Award Opportunity. The methodology for calculating ~~Incentive~~ Award Opportunities and Performance ~~Incentive~~ Awards is presented on Appendix A. Performance ~~Incentive~~ Awards will be interpolated in a linear fashion between threshold and ~~target as well as between target and~~ maximum.
- (f) Within ~~120~~180 days following the end of a Performance Period, and after review by the external auditor, the Compensation Committee will review all Performance ~~Incentive~~ Award calculations, and make any changes it deems appropriate. The Compensation Committee will submit its recommendations to the Board for approval. Subject to the provisions of Section 7.1, the Board will approve Performance ~~Incentive~~ Awards.
- (g) Following the approval of a Performance ~~Incentive~~ Award by the Board, each Participant will be notified as to the amount, if any, of his or her Performance ~~Incentive~~ Award as well as the terms, provisions, conditions, and limitations of the Nonvested Deferred Award portion of such Performance ~~Incentive~~ Award.

#### **5.6. Form and Timing of Payouts of Performance ~~Incentive~~ Awards**

Except as provided in Sections 5.11, 5.12, and 5.13, approved Performance ~~Incentive~~ Awards will be paid as follows:

- (a) Subject to the Applicable Deferral Percentage of an Eligible Position as documented in Table 1, ~~which is attached as Appendix C,~~ the Performance ~~Incentive~~ Award will be paid to the Participant (“Paid Performance ~~Incentive~~ Award”) within ~~120~~180 days of the completion of the Performance Period on a date selected in the discretion of UTIMCO and in no event later than the last day of the calendar year in which the Performance Period ends, and
- (b) An amount of the Performance ~~Incentive~~ Award for an Eligible Position equal to the Applicable Deferral Percentage set forth on Table 1 will be treated as a “Nonvested Deferred Award” subject to the terms of Section 5.7 and paid in accordance with that Section. Table 1 will be revised and attached, as necessary, for each Performance Period to set forth any Applicable Deferral Percentage for each Eligible Position as soon as administratively practicable after approval of the deferral percentages by the Board for such Performance Period ~~and such revised Table 1 will be attached as Appendix C.~~

### **5.7. Nonvested Deferred Awards**

- (a) For each Performance Period, a hypothetical account on UTIMCO’s books (“Nonvested Deferred Award Account”) will be established for each Participant. As of the date that the corresponding Paid Performance ~~Incentive~~ Award is paid to the Participant, each Participant’s Nonvested Deferred Award for a Performance Period will be credited to his or her Nonvested Deferred Award Account established for that Performance Period; provided, however, that, in the case of any Participant whose Nonvested Deferred Award has been forfeited pursuant to Section 5.10(a) or Section 5.13 on the date such Nonvested Deferred Award would be so credited to his or her Nonvested Deferred Award Account, such Nonvested Deferred Award will not be credited to such Participant’s Nonvested Deferred Award Account. The Nonvested Deferred Award Accounts will be credited (or debited) monthly with an amount equal to the net investment returns of the Total Endowment Assets (“Net Returns”) for the month multiplied by the balance of the respective Participant’s Nonvested Deferred Award Account(s) as of the last day of the month. When the Nonvested Deferred Award is initially credited to the Nonvested Deferred Award Account, the Nonvested Deferred Award Account will be credited (or debited) with Net Returns for the month of the initial credit of a Nonvested Deferred Award, but the Net Returns will be prorated to reflect the number of days of the month during which the amounts were credited to the Nonvested Deferred Award Account. Participants are not entitled to their Nonvested Deferred Award Accounts unless and until they become vested in those accounts in accordance with Section 5.7(b).
- (b) Unless a Participant’s Nonvested Deferred Award has been forfeited pursuant to Section 5.10(a) or Section 5.13, such Participant will become vested in, and entitled to payment of, his or her Nonvested Deferred Award Account for each respective Performance Period according to the following schedule:

- (1) On the first anniversary of the last day of the Performance Period for which the Nonvested Deferred Award was earned, one ~~third~~half of the amount then credited to the Participant's Nonvested Deferred Award Account for that Performance Period will be vested and paid to the Participant.
- (2) On the second anniversary of the end of the Performance Period for which the Nonvested Deferred Award was earned, ~~one half of the~~ remaining amount then credited to the Participant's Nonvested Deferred Award Account for that Performance Period will be vested and paid to the Participant.
- ~~(3) On the third anniversary of the end of the Performance Period for which the Nonvested Deferred Award was earned, the remaining amount then credited to the Participant's Nonvested Deferred Award Account for that Performance Period will be vested and paid to the Participant.~~
- ~~(4)~~(3) Nonvested Deferred Award Accounts payable under the above paragraphs of this Section 5.7(b) will be paid on a date selected in the discretion of UTIMCO after the applicable portion of any such Nonvested Deferred Award Account becomes vested and in no event later than the last day of the calendar year in which the applicable portion of such Nonvested Deferred Award Account becomes vested.

#### 5.8. Performance Measurement Standards

- (a) ~~Entity~~Quantitative Performance— is comprised of two categories: (i) performance measured against predetermined benchmarks and applicable excess return targets ("Benchmark Performance"), and (ii) performance measured against a predetermined Peer Group ("Peer Group Performance"). Due to the delay in availability of final performance data for private assets, calculation and payment of Performance Awards will be delayed until after such time that performance measurement for these investment areas are available.
  - ~~(1)~~ Benchmark Performance is comprised of Entity Performance and Asset Class Performance:
    - ~~(1)~~a. Entity Performance for purposes of the Performance ~~Incentive~~ Plan is determined based on the performance of the Total Endowment Assets ~~("TEA") (weighted at 80%)~~ and the Intermediate Term Fund ~~("ITF") (weighted at 20%) as stated in Table 1.~~
    - ~~(2)~~i. The performance of the ~~Total Endowment Assets ("TEA")~~ is measured based on the TEA's performance relative to the TEA Policy Portfolio Return (TEA benchmark).

~~(3)~~ii. The performance of the ~~Intermediate Term Fund~~ITF will be measured based on the performance of the ITF relative to the ITF Policy Portfolio Return (ITF benchmark).

iii. Performance standards related to the TEA and ITF for each Performance Period beginning after ~~August 31, 2013~~June 30, 2018, will be updated as necessary and set forth on a revised table for each such Performance Period in ~~Appendix D~~Table 2 as soon as administratively practicable after such standards are determined. Performance of the TEA and ITF is measured net of fees, meaning performance is measured after factoring in all administrative and other fees incurred for managing the TEA and ITF.

~~(4)~~iv. Entity Performance will be measured relative to the appropriate benchmark based on three-year historical performance.

b. Asset Class Performance is the performance of specific asset classes within the TEA and the ITF (such as U.S. public equity, private equity, etc.). Except as provided in Section 5.9, Asset Class Performance will be measured relative to the appropriate benchmark based on three-year historical performance. Performance standards for each asset class will vary depending on the ability to outperform the respective benchmark. The benchmarks for each asset class, as well as threshold and maximum performance standards in effect during the three-year historical period, culminating with the current Performance Period, are set forth on Table 2. Table 2 will be revised and attached, as necessary, for subsequent Performance Periods to reflect new benchmarks, as well as threshold and maximum performance standards, in effect during the three-year historical period, culminating with the subsequent Performance Period, in which event, such revised Table 2 will be attached as soon as administratively practicable after the change in such benchmarks and standards necessitating such change are set.

i. For purposes of measuring Asset Class Performance for the Performance Periods beginning July 1, 2016, 2017, and 2018, the three-year historical performance asset class benchmark will be the applicable benchmark set forth in Exhibit A of the respective Investment Policy Statement in effect as of September 1, 2018.

(2) Peer Group Performance:

a. The Peer Group will be as defined in Section 8.24.

b. Peer Group performance will be measured based on the TEA's performance relative to the Peer Group.

~~(5)c.~~ Cambridge Associates will determine the performance of the Peer Group annually for the Performance Period. Cambridge Associates will calculate a percentile rank for the performance of the TEA relative to the Peer Group, with the 1<sup>st</sup> percentile representing the highest rank and the 100<sup>th</sup> percentile representing the lowest rank.

(b) Qualitative Performance

- (1) The level of a Participant's Qualitative Performance will be measured by the CEO (in the case of the CCO, jointly by the Audit and Ethics Committee and the CEO), subject to approval by the Compensation Committee, based on the level of attainment (below threshold, threshold, ~~target~~, or maximum) of the Participant's Qualitative Performance ~~GoalsStandards~~ for the Performance Period. In the case of the CEO, the level of the CEO's Qualitative Performance will be measured by the Compensation Committee subject to review and approval by the Board.
- (2) ~~For purposes of determining the level of attainment of a Participant's Qualitative Performance Goal for the Performance Period related to Asset Class/Investment Type Performance, except as provided in Sections 5.8 and 5.9, as a starting point, Asset Class/Investment Type Performance will be based on three year rolling historical performance measured between September 1 and the following August 31 of the applicable year relative to top quartile performance of a universe of peer funds as determined annually by the Compensation Committee. The Qualitative Performance Standard will be measured systematically as part of each Participant's annual performance appraisal process aimed at evaluating, using predetermined standard criteria established before the beginning of each Performance Period, each Participant's adherence to UTIMCO's cultural values, and may include multi-rater feedback regarding a variety of contributions and behaviors needed for organizational success such as interpersonal relationship skills, accountability, effective teamwork, etc.~~
- ~~(3)~~ For purposes of determining the level of attainment of each Participant's Qualitative Performance ~~GoalsStandard~~ for the Performance Period, the Participant will receive 0% (threshold level) if he or she fails to complete any of his or her Qualitative Performance ~~GoalsStandards~~ for that Performance Period; ~~target level if he or she successfully completes 50% of his or her Qualitative Performance Goals for that Performance Period,~~ and the maximum level if he or she successfully completes 100% of his or her Qualitative Performance ~~GoalsStandards~~ for that Performance Period (with interpolation for levels of attainment between threshold, ~~target~~, and maximum).



~~(3) (4) In determining the percentage of successful completion of a Participant's Qualitative Performance Goals, the CEO, and in the case of the CCO, the Audit and Ethics Committee (in the initial determination) and the Compensation Committee (in its review of the attained levels for approval) need not make such determination based solely on the number of Qualitative Performance Goals successfully completed but may take into account the varying degrees of importance of the Qualitative Performance Goals, changes in the Participant's employment duties occurring after the Qualitative Performance Goals are determined for the Performance Period, and any other facts and circumstances determined by the CEO, and in the case of the CCO, the Audit and Ethics Committee, or Compensation Committee (as applicable) to be appropriate for consideration in evaluation of the level of achievement of the Participant's Qualitative Performance Goals for the Performance Period.~~

#### **5.9. Modifications of Measurement Period for Measuring Entity and Asset Class/~~Investment Type~~ Performance**

~~(a) Although generally Entity Performance and most Asset Class/~~Investment Type~~ Performance are measured based on three year rolling historical performance, newly hired Participants will be phased into the Performance Incentive Plan so that Entity Performance and Asset Class/~~Investment Type~~ Performance are measured over a period of time consistent with each Participant's tenure at UTIMCO. This provision ensures that a Participant is measured and rewarded over a period of time consistent with the period during which he or she influenced the performance of the entity or a particular asset class and investment type. In the Performance Period in which a Participant begins participation in the Performance Incentive Plan, the Entity Performance and Asset Class/~~Investment Type~~ Performance will be based on one full year of historical performance (i.e., the performance for the Performance Period during which the Participant commenced Performance Incentive Plan participation). During a Participant's second year of Performance Incentive Plan participation, the Entity Performance and Asset Class/~~Investment Type~~ Performance will be based on two full years of historical performance. In the third year of a Participant's Performance Incentive Plan participation and beyond, the Entity and Asset Class/~~Investment Type~~ Performance will be based on the three full years of rolling historical performance.~~

~~(b)~~ (a) For purposes of measuring Quantitative Performance, the three-year historical performance cycle will not be utilized for any specific asset class ~~and investment type~~ (or subset of an asset class ~~and investment type~~) until that asset class ~~and investment type~~ (or subset of that asset class ~~and investment type~~) has three years of historical performance as part of the Performance ~~Incentive~~ Plan and, until that time, the actual years (full and partial) of historical performance of that asset class ~~and investment type~~ (or subset of that asset class ~~and investment type~~) while part of the Performance ~~Incentive~~ Plan will be used as the measurement period.

~~(b)~~ (b) For purposes of measuring Quantitative Performance of an asset class ~~and investment type~~ (or subset of

an asset class ~~and investment type~~) that is removed from the Performance ~~Incentive~~ Plan prior to completion of the then in-progress three-year historical performance cycle, the three-year historical performance cycle will not be utilized for that removed asset class ~~and investment type~~ (or subset of an asset class ~~and investment type~~), but instead the actual number of full months that the removed asset class ~~and investment type~~ was part of the Performance ~~Incentive~~ Plan during the then in-progress three-year historical performance cycle will be used as the measurement period.

- (dc) For purposes of measuring Asset Class/~~Investment Type~~ Performance for a particular Participant of an asset class ~~and investment type~~ (or subset of an asset class ~~and investment type~~) that is removed from or added to the Participant's responsibility during the then in-progress three-year historical performance cycle, the three-year historical performance cycle will not be utilized for that removed or added asset class ~~and investment type~~ (or subset of an asset class ~~and investment type~~), but instead the actual number of full months that the removed or added asset class ~~and investment type~~ was part of the Participant's responsibility during the then in-progress three-year historical performance cycle will be used as the measurement period for evaluating the Asset Class/~~Investment Type~~ Performance with respect to such Participant.

#### **5.10. Termination Provisions**

- (a) Except as otherwise provided in this Section 5.10, any Participant who ceases to be a Participant (either because of Termination of employment with UTIMCO or for any other reason stated in Section 5.3(c)) prior to the end of a Performance Period will not be eligible to receive payment of any Performance ~~Incentive~~ Award for that or any subsequent Performance Periods. In addition, a Participant will forfeit any Nonvested Deferred Awards at such Participant's Voluntary Termination or Involuntary Termination for Cause. Further, upon Involuntary Termination for reasons other than Cause, the amount in the Nonvested Deferred Award Accounts of such terminated individual will vest immediately and be paid on a date selected by UTIMCO and in no event later than the last day of the calendar year in which such Termination occurs.
- (b) If a Participant ceases to be a Participant in the Performance ~~Incentive~~ Plan under Section 5.3(c) prior to the end of a Performance Period because his or her employment position is no longer an Eligible Position (but such employee continues to be employed with UTIMCO), such Participant's Performance ~~Incentive~~ Award for the current Performance Period, if any, will be calculated on a prorated basis from the first day of the Performance Period to the Performance Measurement Date immediately preceding or, if applicable, coinciding with the date the Participant ceases to be in an Eligible Position, and such individual will not be entitled to any Performance ~~Incentive~~ Awards for any Performance Period thereafter (unless he or she again becomes a Participant in accordance with Sections 5.3(a) and (b)). All Nonvested Deferred Awards of such individual continue to vest and be paid subject to the provisions of Section 5.7(b).



- (c) If a Participant ceases to be a Participant in the Performance ~~Incentive~~-Plan under Section 5.3(c) prior to the end of a Performance Period because his or her employment with UTIMCO terminates due to death or Disability, the Participant's Performance ~~Incentive~~-Award for the Performance Period in which Termination occurs, in lieu of any other Performance ~~Incentive~~-Award under the Performance ~~Incentive~~-Plan, will be ~~paid at target~~calculated on a prorated basis from the first day of the Performance Period to the Performance Measurement Date immediately preceding or, if applicable, coinciding with the date of the Participant's death or Disability, and such individual will not be entitled to any Performance ~~Incentive~~-Awards for any Performance Period thereafter (unless he or she again becomes a Participant in accordance with Sections 5.3(a) and (b)). All Nonvested Deferred Award Accounts of such terminated individual will vest immediately and be paid on a date selected in the discretion of UTIMCO and in no event later than the last day of the calendar year in which such termination occurs. Payments under this provision will be made to the estate or designated beneficiaries of the deceased Participant or to the disabled Participant, as applicable.
- (d) If a Participant ceases to be a Participant in the Performance ~~Incentive~~-Plan under Section 5.3(c) prior to the end of a Performance Period because he or she commences a leave of absence, such Participant's Performance ~~Incentive~~ Award for the current Performance Period, if any, will be calculated on a prorated basis from the first day of the Performance Period to the Performance Measurement Date immediately preceding or coinciding with the date the Participant commences such leave of absence, and such individual will not be entitled to any Performance ~~Incentive~~-Awards for any Performance Period thereafter (unless he or she again becomes a Participant in accordance with Sections 5.3(a) and (b)). All Nonvested Deferred Awards of such individual continue to vest and be paid subject to the provisions of Section 5.7(b).
- (e) In the case of any Participant who ceases to be a Participant in the Performance ~~Incentive~~-Plan prior to the end of Performance Period and is entitled to a Performance ~~Incentive~~-Award or a prorated Performance ~~Incentive~~-Award under this Section 5.10, such Performance ~~Incentive~~-Award will be calculated at the time and in the manner provided in Section 5.5 and Appendix A and paid in accordance with Section 5.6 and will not be calculated or paid prior to such time.

### ***5.11. Eligibility for Retirement***

A participant is eligible for retirement on the last day of the month in which the sum of the Participant's age and years of service, including months of age and months of service credit, equals or exceeds the number 75.

In the case of any Participant who is eligible for retirement, any Performance Incentive Award to which the Participant becomes entitled, as well as any remaining Nonvested Deferred Award, will vest immediately and be includible in the Participant's gross

income for Federal income tax purposes in the calendar year in which vesting occurs without regard to when payment is made to the Participant. The vested Performance Incentive Award and any remaining Nonvested Deferred Award will be paid to the participant on a date selected by UTIMCO and in no event later than the last day of the calendar year unless the Participant has agreed to a Voluntary Deferral of all or a portion of his Performance Incentive Award that would otherwise have been deferred had the Participant not been eligible for retirement (“Amount Voluntarily Deferred”). If the Participant has agreed to a Voluntary Deferral of such amount of his Performance Incentive Award,

- (a) the Amount Voluntarily Deferred (1) will be credited to a hypothetical account established in the Participant’s name on UTIMCO’s books (“Amount Voluntarily Deferred Account”) and (2) will be credited (or debited) monthly with an amount equal to the Net Returns for the month multiplied by the balance in the Participant’s Amount Voluntarily Deferred Account as of the last day of the month, provided that when the Amount Voluntarily Deferred is initially credited to the Participant’s Amount Voluntarily Deferred Account, the Participant’s Amount Voluntarily Deferred Account will be credited (or debited) with Net Returns for the month of the initial credit, but the Net Returns will be prorated to reflect the number of days of the month during which the amounts were credited to the Participant’s Amount Voluntarily Deferred Account;
- (b) except as provided in clause (c) below, the amount credited to the Participant’s Amount Voluntarily Deferred Account shall be paid to the Participant only on the following dates and in the following amounts:
  - (1) On the first anniversary of the last day of the Performance Period for which the Amount Voluntarily Deferred was earned, one ~~third~~half of the amount then credited to the Participant’s Amount Voluntarily Deferred Account for that Performance Period will be paid to the Participant;
  - (2) On the second anniversary of the end of the Performance Period for which the Amount Voluntarily Deferred was earned, ~~one-half of the~~ remaining amount then credited to the Participant’s Amount Voluntarily Deferred Account for that Performance Period will be paid to the Participant;
  - ~~(3) On the third anniversary of the end of the Performance Period for which the Amount Voluntarily Deferred was earned, the remaining amount then credited to the Participant’s Amount Voluntarily Deferred Account for that Performance Period will be paid to the Participant.~~
  - ~~(4)~~(3) Amount Voluntarily Deferred Accounts payable under the above paragraphs of this Section 5.11(b) will be paid on a date selected in the discretion of UTIMCO and in no event later than the last day of the

calendar year in which the applicable portion of such Amount Voluntarily Deferred Account becomes due and payable; and

- (c) any net credits or debits to the Participant's Amount Voluntarily Deferred Account pursuant to clause (a)(2) above will be includible in the Participant's gross income and taxable to the Participant as ordinary income for Federal income tax purposes, and will be subject to Federal employment taxes and wage withholding during the year in which such amounts are paid pursuant to clauses (a) or (b) above.

#### **5.12. Extraordinary Circumstances**

Notwithstanding anything in this Plan to the contrary, the timing and amount of Performance ~~Incentive~~-Awards of each Participant holding an Eligible Position listed on Table 3, ~~which is attached as Appendix E~~ (each, an "Affected Participant"), are subject to automatic adjustment as follows:

- (a) If the Net Returns of the Total Endowment Assets during the Performance Period for which Performance ~~Incentive~~-Awards are being determined are negative at the end of such Performance Period, (i) an amount otherwise equal to the Paid Performance ~~Incentive~~-Award attributable to such Performance Period for each Affected Participant will be treated as an "Extraordinary Nonvested Deferral Award" for such Affected Participant that is subject to forfeiture in the same manner and for the same reasons as Nonvested Deferral Awards pursuant to Section 5.10(a), (ii) a separate hypothetical account for such Affected Participant will be established on UTIMCO's books ("Extraordinary Nonvested Deferral Award Account"), which will be (1) credited with such Affected Participant's Extraordinary Nonvested Deferral Award and (2) credited (or debited) monthly with Net Returns of the Total Endowment Assets on the same dates and in the same manner as applies to Nonvested Deferral Award Accounts pursuant to Section 5.7(a), and (iii) unless such Affected Participant's Extraordinary Nonvested Deferral Award has been forfeited pursuant to Section 5.10(a) or Section 5.13, such Affected Participant will become vested in, and entitled to payment of, the amount of his or her Extraordinary Nonvested Deferral Award Account on the first anniversary of the last day of such Performance Period; provided that upon the death, Disability or Involuntary Termination of an Affected Participant for reasons other than Cause, the amount in the Extraordinary Nonvested Deferral Award Account of such Affected Participant will vest immediately and be paid (to the Affected Participant or, in the case of death, to the estate or designated beneficiaries of the deceased Affected Participant) on a date selected by UTIMCO and in no event later than the last day of the calendar year in which such Termination occurs; provided, further, that nothing in this clause (a) shall affect the vesting and payment of Nonvested Deferral Awards to any Affected Participant nor shall it affect the vesting and payment of Performance ~~Incentive~~ Awards to a Participant that has satisfied the requirements for Eligibility for Retirement;

- (b) ~~If the Net Returns of the Total Endowment Assets since the end of the Performance Period for which Performance Incentive Awards are being determined are a negative 10.00% or below (measured as of the most recent month end for which performance data are available) on the date the Board approves the Performance Incentive Award for an Affected Participant, an amount otherwise equal to such Affected Participant's Paid Performance Incentive Award attributable to such Performance Period will also be treated as an "Extraordinary Nonvested Deferral Award" for such Affected Participant that is subject to clause (a) above; provided that nothing in this clause (b) shall affect the vesting and payment of Nonvested Deferral Awards to any Affected Participant nor shall it affect the vesting and payment of Performance Incentive Awards to a Participant that has satisfied the requirements for Eligibility for Retirement; and~~
- (c) ~~Table 3, which is attached as Appendix E,~~ will be revised and attached, as necessary, for each Performance Period to identify the Eligible Positions whose Performance ~~Incentive~~ Awards are subject to automatic adjustment as to timing and amount pursuant to clauses (a) ~~and (b)~~ above as soon as administratively practicable after approval by the Board ~~and such revised Table 3 will be attached as Appendix E.~~

### 5.13. *Recovery of Performance ~~Incentive~~ Awards*

Notwithstanding anything in this Plan to the contrary, if the Board (in its sole discretion, but acting in good faith) determines (a) that a Participant has engaged in willful misconduct that materially disrupts, damages, impairs or interferes with the business, reputation or employee relations of UTIMCO or The University of Texas System, such Participant will not be entitled to any Performance ~~Incentive~~ Awards for the Performance Periods during which the Board determines such misconduct occurred, or (b) that a Participant has engaged in fraudulent misconduct that caused or contributed to a restatement of the investment results upon which such Participant's Performance ~~Incentive~~ Awards were determined by knowingly falsifying any financial or other certification, knowingly providing false information relied upon by others in a financial or other certification, or engaging in other fraudulent activity, or knowingly failing to report any such fraudulent misconduct by others in accordance with UTIMCO's Employee Handbook, such Participant will not be entitled to any Performance ~~Incentive~~ Awards for the Performance Periods for which investment results were so restated. To the extent a Participant has been awarded Performance ~~Incentive~~ Awards to which he or she is not entitled as a result of clause (a) or (b) above, Performance ~~Incentive~~ Awards shall be recovered by UTIMCO pursuant to the following remedies in the order listed: first, such Participant's Nonvested Deferred Awards and Extraordinary Nonvested Deferred Awards will be automatically forfeited; second, any Paid Performance ~~Incentive~~ Award not then paid to such Participant will be withheld and automatically forfeited; and third, such Participant must return to UTIMCO the remaining excess amount. Recovery of Performance ~~Incentive~~ Awards to which a Participant is not entitled pursuant to this Section 5.13 does not constitute a settlement of other claims that UTIMCO may have

against such Participant, including as a result of the conduct giving rise to such recovery. Further, the remedies set forth above are in addition to, and not in lieu of, any actions imposed by law enforcement agencies, regulators or other authorities.

## 6. COMPENSATION PROGRAM AUTHORITY AND RESPONSIBILITY

### 6.1. Board as Plan Administrator

Except as otherwise specifically provided in this Compensation Program with respect to powers, duties, and obligations of the Compensation Committee, the Compensation Program will be administered by the Board.

### 6.2. Powers of Board

The Board has all powers specifically vested herein and all powers necessary or advisable to administer the Compensation Program as it determines in its discretion, including, without limitation, the authority to:

- (1) Establish the conditions for the determination and payment of compensation by establishing the provisions of the Performance ~~Incentive~~-Plan.
- (2) ~~Select the employees who are eligible to be Participants~~Determine the Eligible Positions in the Performance ~~Incentive~~-Plan.
- (3) Delegate to any other person, committee, or entity any of its ministerial powers and/or duties under the Compensation Program as long as any such delegation is in writing and complies with the UTIMCO Bylaws.

## 7. COMPENSATION PROGRAM INTERPRETATION

### 7.1. Board Discretion

- (a) Consistent with the provisions of the Compensation Program, the Board has the discretion to interpret the Compensation Program and may from time to time adopt such rules and regulations that it may deem advisable to carry out the Compensation Program. All decisions made by the Board in selecting the Participants approved to receive Performance ~~Incentive~~-Awards, including the amount thereof, and in construing the provisions of the Compensation Program, including without limitation the terms of any Performance ~~Incentive~~ Awards, are final and binding on all Participants.
- (b) Notwithstanding any provision of the Compensation Program to the contrary and subject to the requirement that the approval of Performance ~~Incentive~~ Awards that will result in an increase of 5% or more in the total Performance ~~Incentive~~-Awards calculated using the methodology set out on Appendix A must have the prior approval of the U. T. System Board of Regents, the Board

has the discretion and authority to make changes in the terms of the Compensation Program in determining a Participant's eligibility for, or amount of, a Performance ~~Incentive~~-Award for any Performance Period whenever it considers that circumstances have occurred during the Performance Period so as to make such changes appropriate in the opinion of the Board, provided, however, that any such change will not deprive or eliminate an award of a Participant after it has become vested and that such circumstances are recorded in the minutes of a meeting of the Board.

### **7.2. Duration, Amendment, and Termination**

The Board has the right in its discretion to amend the Compensation Program or any portion thereof from time to time, to suspend it for a specified period, or to terminate it entirely or any portion thereof. However, if the Performance ~~Incentive~~-Plan is suspended or terminated during a Performance Period, Participants will receive a prorated Performance ~~Incentive~~-Award based on performance achieved and base salary earned through the Performance Measurement Date immediately preceding such suspension or termination. The Compensation Program will be in effect until suspension or termination by the Board; provided, however, that if the Board so determines at the time of any suspension or termination of the Performance ~~Incentive~~ Plan, Nonvested Deferred Awards credited to Participants' Nonvested Deferred Award Account(s) as of the effective date of such suspension or termination will continue to be administered under the terms of the Performance ~~Incentive~~-Plan after any suspension or termination, except as the Board otherwise determines in its discretion at the time of such suspension or termination.

### **7.3. Recordkeeping and Reporting**

- (a) All records for the Compensation Program will be maintained by the Senior Managing Director of Accounting, Finance, and Administration at UTIMCO. Relative performance data and calculations will be reviewed by UTIMCO's external auditor before Performance ~~Incentive~~-Awards are finalized and approved by the Board.
- (b) UTIMCO will provide all Participants with a comprehensive report of the current value of their respective Nonvested Deferred Award and Extraordinary Nonvested Deferred Award Account balances, including a complete vesting status of those balances, on at least a quarterly basis.

### **7.4. Continued Employment**

Nothing in the adoption of the Compensation Program or the awarding of Performance ~~Incentive~~-Awards will confer on any employee the right to continued employment with UTIMCO or affect in any way the right of UTIMCO to terminate his or her employment at any time.



### **7.5. *Non-transferability of Awards***

Except for the rights of the estate or designated beneficiaries of Participants to receive payments, as set forth herein, Performance ~~Incentive~~-Awards under the Performance ~~Incentive~~-Plan, including both the Paid Performance ~~Incentive~~-Award portion and the Nonvested Deferred Award portion, are non-assignable and non-transferable and are not subject to anticipation, adjustment, alienation, encumbrance, garnishment, attachment, or levy of any kind. The preceding notwithstanding, the Compensation Program will pay any portion of a Performance ~~Incentive~~-Award that is or becomes vested in accordance with an order that meets the requirements of a “qualified domestic relations order” as set forth in Section 414(p) of the *Internal Revenue Code* and Section 206(d) of ERISA.

### **7.6. *Unfunded Liability***

- (a) Neither the establishment of the Compensation Program, the award of any Performance ~~Incentive~~-Awards, nor the creation of Nonvested Deferred Awards Accounts will be deemed to create a trust. The Compensation Program will constitute an unfunded, unsecured liability of UTIMCO to make payments in accordance with the provisions of the Compensation Program. Any amounts set aside by UTIMCO to assist it in the payment of Performance ~~Incentive~~ Awards or other benefits under the Compensation Program, including without limitation, amounts set aside to pay for Nonvested Deferred Awards, will be the assets of UTIMCO, and no Participant will have any security or other interest in any assets of UTIMCO or the U. T. System Board of Regents by reason of the Compensation Program.
- (b) Nothing contained in the Compensation Program will be deemed to give any Participant, or any personal representative or beneficiary, any interest or title to any specific property of UTIMCO or any right against UTIMCO other than as set forth in the Compensation Program.

### **7.7. *Compliance with State and Federal Law***

No portion of the Compensation Program will be effective at any time when such portion violates an applicable state or federal law, regulation, or governmental order or directive.

### **7.8. *Federal, State, and Local Tax and Other Deductions***

All Performance ~~Incentive~~-Awards under the Compensation Program will be subject to any deductions (1) for tax and withholding required by federal, state, or local law at the time such tax and withholding is due (irrespective of whether such Performance ~~Incentive~~-Award is deferred and not payable at such time) and (2) for any and all amounts owed by the Participant to UTIMCO at the time of payment of the Performance ~~Incentive~~-Award. UTIMCO will not be obligated to advise an employee of the existence of the tax or the amount that UTIMCO will be required to withhold.

### 7.9. *Prior Plan*

- (a) Except as provided in the following paragraphs of this Section 7.9, this Compensation Program supersedes any prior version of the Compensation Program (“Prior Plan”).
- (b) All nonvested deferred awards under a Prior Plan will retain the vesting schedule in effect under the Prior Plan at the time such awards were allocated to the respective Participant’s account. In all other respects, as of the Effective Date, those nonvested deferred amounts will (1) be credited or debited with the Net Returns over the remaining deferral period in accordance with Section 5.7(a), and (2) be subject to the terms and conditions for Nonvested Deferred Awards under the Performance ~~Incentive~~ Plan as set forth in this restated document.



## 8. DEFINITION OF TERMS

- 8.1. **Affected Participant** is defined in Section 5.12.
- 8.2. **Applicable Deferral Percentage** means, as to each Eligible Position, the percentage set forth opposite such Eligible Position under the heading “Percentage of Award Deferred” on Table 1, ~~which is attached as Appendix C.~~
- 8.3. **Asset Class/~~Investment Type~~ Performance** is the performance of specific asset classes ~~and investment types~~ within the Total Endowment Assets and the Intermediate Term Fund (such as ~~developed country~~U.S. public equity, private ~~investment~~equity, etc.).
- 8.4. **Board** is the UTIMCO Board of Directors.
- 8.5. **Cause** means, as to any employee, that such employee has committed (as determined by UTIMCO in its sole discretion) any of the following: (1) a violation of any securities law or any other law, rule or regulation; (2) willful conduct that reflects negatively on the public image of UTIMCO or the U. T. System; or (3) a breach of UTIMCO’s Code of Ethics.
- 8.6. **Compensation Committee** is the Compensation Committee of the UTIMCO Board of Directors.
- 8.7. **Compensation Program** is defined in Section 1.
- 8.8. **Disability** means a condition whereby a Participant either (i) is unable to engage in any substantial gainful activity by reason of a medically determinable physical or mental impairment that is expected either to result in death or to last for a continuous period of not less than 12 months or (ii) is, by reason of a medically determinable physical or mental impairment that is expected to last for a continuous period of not less than 12 months, receiving income replacement benefits for a period of not less than three months under a disability plan maintained or contributed to by UTIMCO for the benefit of eligible employees.
- 8.9. **Effective Date** is defined in Section 1.
- 8.10. **Eligible for Retirement** is defined in Section 5.11.
- 8.11. **Eligible Position** is defined in Section 5.3(a).
- 8.12. **Entity Performance** represents the performance of the Total Endowment Assets and the Intermediate Term Fund (based on the measurement standards set forth in Section 5.8(a)).
- 8.13. **Extraordinary Nonvested Deferral Award** is defined in Section 5.12.
- 8.14. **Extraordinary Nonvested Deferral Award Account** is defined in Section 5.12.
- 8.15. ~~Incentive~~-**Award Opportunity** is defined in Section 5.5(a).

**8.16. Intermediate Term Fund or ITF** is The University of Texas System (“U. T. System”) Intermediate Term Fund established by the U. T. System Board of Regents as a pooled fund for the collective investment of operating funds and other intermediate and long-term funds held by the U. T. System institutions and U. T. System Administration. Performance of the Intermediate Term Fund is measured net of fees, meaning performance is measured after factoring in all administrative and other fees incurred for managing the Intermediate Term Fund.

**8.17. Intermediate Term Fund Policy Portfolio Return** is the benchmark return for the Intermediate Term Fund policy portfolio and is calculated by summing the neutrally weighted index returns (percentage weight for each asset class ~~and investment type~~ multiplied by the benchmark return for the asset class ~~and investment type~~) for the various asset classes ~~and investment types~~ in the Intermediate Term Fund policy portfolio for the Performance Period.

**8.18. Involuntary Termination** means, as to any person the Termination of such person’s employment with UTIMCO wholly initiated by UTIMCO and not due to such person’s implicit or explicit request, at a time when such person is otherwise willing and able to continue to perform services for UTIMCO.

**8.19. Net Returns** is the investment performance return of the Total Endowment Assets, net of fees. Net of fees factors in all administrative and other fees for managing the Total Endowment Assets. The net investment return will be calculated as follows:

$$\frac{\text{Permanent University Fund Beginning Net Asset Value}}{\text{Total Endowment Beginning Net Asset Value}} \times \text{Permanent University Fund Net Investment Return}$$

Plus

$$\frac{\text{General Endowment Fund Beginning Net Asset Value}}{\text{Total Endowment Beginning Net Asset Value}} \times \text{General Endowment Fund Net Investment Return}$$

**8.20. Nonvested Deferred Award** is defined in Section 5.6(b).

**8.21. Nonvested Deferred Award Account** is defined in Section 5.7(a).

**8.22. Paid Performance ~~Incentive~~ Award** is defined in Section 5.6(a).

**8.23. Participant** is defined in Section 5.3(a).

**8.24. Peer Group** is a peer group of endowment funds that is comprised 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 \$12.5 billion, ~~all to be determined as of the last day of each of the three immediately preceding Performance Periods as set forth on Appendix B~~ determined by Cambridge Associates; provided, however, that the Total Endowment Assets are excluded from the Peer Group. The Peer Group will be updated from time to time as deemed appropriate by the Board, ~~and Appendix B will be amended accordingly.~~

**8.25. Performance ~~Goals Standards~~** are defined in Section 5.4.

**8.26. Performance ~~Incentive~~ Award** is the component of a Participant’s total compensation that is based on specific performance ~~goals standards~~ and awarded as

current income or deferred at the end of a Performance Period in accordance with Section 5 and Appendix A.

- 8.27. Performance ~~Incentive~~ Plan** is as defined in Section 1 and described more fully in Section 5.
- 8.28. Performance Measurement Date** is the close of the last business day of the month.
- 8.29. Performance Period** is defined in Section 5.2.
- 8.30. Prior Plan** is defined in Section 7.9.
- 8.31. Salary Structure** is described in Section 4.1.
- 8.32. Termination** means, as to any person, a complete severance of the relationship of employer and employee between UTIMCO and such person.
- 8.33. Total Endowment Assets or TEA** means the combination of the Permanent University Fund and the General Endowment Fund, but does not include any other endowment funds monitored by UTIMCO such as the Separately Invested Fund. Performance of the Total Endowment Assets is measured net of fees, meaning performance is measured after factoring in all administrative and other fees incurred for managing the Total Endowment Assets.
- 8.34. Total Endowment Assets Policy Portfolio Return** is the benchmark return for the Total Endowment Assets policy portfolio and is calculated by summing the neutrally weighted index returns (percentage weight for each asset class ~~and investment type~~) multiplied by the benchmark return for the asset class ~~and investment type~~ for the various asset classes ~~and investment types~~ in the Total Endowment Assets policy portfolio for the Performance Period.
- 8.35. Voluntary Terminations** means, as to any person, the Termination of such person's employment with UTIMCO not resulting from an Involuntary Termination or by reason of Death or disability.

## Appendix A

### Performance ~~Incentive~~ Award Methodology (for Performance Periods beginning on or after ~~September~~ July 1, 2015~~2018~~)

#### I. Determine “~~Incentive~~ Award Opportunities” for Each Participant<sup>2</sup>

Step 1. Identify the weights to be allocated to each of the two Performance ~~Goals~~Standards for each Participant’s Eligible Position. The weights vary for each Eligible Position ~~each Performance Period~~ and are set forth in Table 1 ~~on Appendix C~~ for the applicable Performance Period. The total of the weights ascribed to the two Performance ~~Goals~~Standards (Quantitative and Qualitative) must add up to 100% for each Participant. For example, Table 1 ~~on Appendix C~~ may reflect for a Performance Period for the CEO that the weight allocated to the ~~Entity~~Quantitative Performance ~~Goal~~Standard is 80%, and the weight allocated to the ~~Individual~~Qualitative Performance ~~Goal~~Standard is 20%.

Step 2. Identify the weights to be allocated to the various components of Quantitative Performance for each Participant’s Eligible Position as set forth on Table 1: Benchmark Performance, i.e., Entity and Asset Class Performance, and Peer Performance. Entity Performance consists of both TEA and ITF Performance. For example, Table 1 may reflect for a Performance Period for the CEO that the weight allocated to the TEA Performance is 51.2%, the weight allocated to ITF Performance is 12.8%, the weight allocated to Asset Class Performance is 0%, and the weight allocated to Peer Performance is 16%.

Step ~~2~~3. Identify the percentage of base salary for the Participant’s Eligible Position that determines the Performance ~~Incentive~~ Award for achievement of the Threshold, ~~Target~~, and Maximum levels of the Performance ~~Goals~~Standards. The percentages vary for each Eligible Position ~~each Performance Period~~ and are set forth in Table 1 ~~on Appendix C~~ for the applicable Performance Period. For example, Table 1 ~~on Appendix C~~ may show that for a Performance Period the applicable percentages for determining the Performance ~~Incentive~~ Award for the CEO are 0% of his or her base salary for achievement of Threshold level performance of both Performance ~~Goals~~Standards, ~~200% of his or her base salary for achievement of Target level performance of both~~

<sup>2</sup> These ~~Incentive~~ Award Opportunities represent amounts that each Participant will be awarded if he or she achieves his or her Performance ~~Goals~~Standards at varying levels and are calculated at the beginning of each Performance Period or, if later, the date such Participant commences participation in the Performance ~~Incentive~~ Plan.

~~Performance Goals~~, and 450% of his or her base salary for achievement of Maximum level performance of both Performance GoalsStandards.

Step ~~34~~. Calculate the dollar amount of the potential Threshold, ~~Target~~, and Maximum awards (the “~~Incentive—Award Opportunities~~”) for each Participant by multiplying the Participant’s base salary for the Performance Period by the applicable percentage (from Step #2 above). For example, assuming the CEO has a base salary of \$750,000 for a Performance Period, based on the assumed percentages set forth in Step #2 above, the CEO will be eligible for a total award of \$0 if he or she achieves Threshold level performance of both Performance GoalsStandards, ~~\$1,500,000 (200% of his or her base salary) if he or she achieves Target level performance of both Performance Goals~~, and \$3,375,000 (450% of his or her base salary) if he or she achieves Maximum level performance of both Performance GoalsStandards.

Step ~~45~~. Because a Participant may achieve different levels of performance for the various components of the different Performance GoalsStandards and be eligible for different levels of awards for that achievement (e.g., he or she may achieve Target-Threshold performance in the Entity-TEA Performance GoalStandard and be eligible to receive a Target-Threshold award for that goalStandard and achieve Maximum performance in the Qualitative Performance GoalStandard and be eligible to receive a Maximum award for that Performance GoalStandard), it is necessary to determine the Incentive Award Opportunity of the Threshold, ~~Target~~, and Maximum award for each of the various components of these separate Performance GoalStandards (and, because achievement of the Entity Performance Goal is determined in part by achievement of the Total Endowment Assets and in part by achievement of the Intermediate Term Fund, a Threshold, Target, and Maximum Incentive Award Opportunity separately for the TEA and the ITF must be determined). This is done by multiplying the dollar amount of the Threshold, ~~Target~~, and Maximum awards for the performance of both the various components of the Performance GoalsStandards calculated in Step #3 above for the Participant by the weight allocated for that Participant to the particular component of the Performance GoalStandard (and, further, by multiplying the Incentive Award Opportunity for the Entity Performance by the weight ascribed to achievement of the Total Endowment Assets (80%) and by the weight ascribed to achievement of the Intermediate Term Fund (20%)).

Step ~~56~~. After Steps ~~#3-4~~ and ~~#4-5~~ above are performed for each of the ~~three-two~~ levels of performance for each of the components of the two Performance GoalsStandards, there will be up to 910 different Incentive Award Opportunities for each Participant. For example, for the CEO (based on an assumed base salary of \$750,000, the assumed weights for the Performance GoalsStandards set forth in Step #1 above, and the assumed percentages of base salary for the awards set forth in Step #2 above), the 910 different Incentive Award Opportunities for achievement of the Performance GoalsStandards for the Performance Period are as follows:

**Incentive Award Opportunities for CEO**  
(based on assumed base salary of \$750,000)

Performance <del>Goal</del> Standard	Weight	Threshold Level Award	Maximum Level Award
Entity (TEA v. TEA Policy Portfolio Return)	64.51.2% (.80 x .80)	\$0	<del>\$2,160,172</del> 8,000
Entity (ITF v. ITF Policy Portfolio Return)	16.12.8% (.20 x .80)	\$0	<del>\$540,000</del> 432,000
Asset Class	0%	\$0	\$0
Peer Group	16%	\$0	\$540,000
Qualitative	20%	\$0	\$675,000
Total	100%	\$0 (0% of salary)	\$3,375,000 (450% of salary)

**II. Calculate Performance Incentive Award for Each Participant**

Step ~~6~~7. Identify the achievement percentiles or achieved basis points that divide the Threshold, ~~Target,~~ and Maximum levels for each Performance ~~Goal~~Standard. These divisions for the level of achievement of the ~~Entity various components of the Qualitative Performance Standard~~ are set forth in ~~the table Table 2~~ for the applicable Performance Period ~~as set forth on Appendix D~~. The measurement for the level of achievement (i.e., Threshold, ~~Target,~~ or Maximum) for the Qualitative Performance ~~Goal~~Standard is initially determined each Performance Period by the ~~Participant's supervisor, if any CEO,~~ (in the case of the CCO, jointly by the Audit and Ethics Committee and the CEO), and then is approved (or adjusted) by the Compensation Committee as it deems appropriate in its discretion. ~~If the Participant has no supervisor, the measurement for the level of achievement for the Qualitative Performance Goal is determined each Performance Period by the Compensation Committee.~~ The ~~Board Compensation Committee~~ will determine the CEO's level of achievement relative to the CEO's Performance ~~Goals~~Standards and make its recommendation to the Board, which is then approved (or adjusted) by the Board as it deems appropriate in its discretion.

Step ~~7~~8. Determine the percentile or basis points achieved for each component of the Performance ~~Goal~~Standards for each Participant using the standards set forth in Sections 5.5 and 5.8 of the Compensation Program, as modified in Section 5.9. ~~Determine the level of achievement of each Participant's Qualitative Performance Goal.~~

Step ~~8~~9. Calculate the amount of each Participant's award attributable to each component of the Performance ~~Goal~~Standards by identifying the ~~Incentive~~ Award Opportunity amount for each component of the Performance ~~Goal~~Standards (e.g., as assumed and set forth for the CEO in the table in Step



#56 above) commensurate with the Participant's level of achievement for that component of the Performance Goal Standard (determined in Steps #67 and #78 above). An award for achievement percentiles in between the stated Threshold, ~~Target~~, and Maximum levels is determined by linear interpolation. For example, if +150 bps of the TEA benchmark portion of the ~~Total Endowment Assets~~ TEA portion of the Entity Performance Goal Standard has been achieved, that +150 bps is between the Target Threshold (+100 bps) and the Maximum (+250 bps) levels, so to determine the amount of the award attributable to +150 bps of achievement of the TEA benchmark portion of the Total Endowment Assets portion of the Entity Performance Goal Standard, perform the following steps: ~~–(i) subtract the difference between the dollar amounts of the Target and Maximum Incentive Award Opportunities for the Participant (e.g., for the CEO, as illustrated in the table in Step #5, the difference is \$1,200,000 (\$2,160,000–960,000)); (ii) divide 50/150 (the attained level of achievement) (the bps difference between the Target level of +100 bps and the attained level of +150 bps) by 150/250 (the bps difference between the Target level and Maximum level) to get the fraction 50/150 to determine the pro rata portion of the difference between Target and Maximum percentage actually achieved (150/250 = 0.60); and (iii) multiply the amount determined percentage of achievement in the preceding Step (i) by the fraction determined in the preceding Step (ii) Maximum Award Level of the CEO of \$1,728,000 as assumed in the above table in Step 6 to calculate the actual award earned of \$1,036,800 (\$1,200,000 x 0.60 = \$720,000); and (iv) add the amount determined in the preceding Step (iii) to the Target Incentive Award Opportunity for the Participant to get the actual award for the Participant attributable to for each the TEA portion of the Entity Performance Goal Standard (\$720,000 + \$960,000 = \$1,680,000).~~

~~Step 9. In determining the award attributable to the Entity Performance Goal, achievement of the Total Endowment Assets portion of the Entity Performance Goal (and the commensurate award) is weighted at 80% (and then multiplied by the weight assigned to the Entity Performance Goal for the Participant), and achievement of the Intermediate Term Fund portion of the Entity Performance Goal (and commensurate award) is weighted at 20% (and then multiplied by the weight assigned to the Entity Performance Goal for the Participant). For example, assuming a base salary of \$750,000, if the CEO achieved the Target level (+100 bps) of the TEA benchmark portion of the Total Endowment Assets portion of the Entity Performance Goal, and achieved the Maximum level (+150 bps) of the Intermediate Term Fund portion of the Entity Performance Goal, he or she would have earned an award of \$1,500,000 for his or her level of achievement of the Entity Performance Goals as follows: \$960,000 for Target level of achievement of the TEA benchmark portion of the TEA portion of Entity Performance Goal (.80 x .80 x \$1,500,000) plus \$540,000 for Maximum level of achievement of the ITF portion of the Entity Performance Goal (.20 x .80 x \$3,375,000).~~

- Step 10. No award is given for an achievement percentile at or below Threshold, and no award above the Maximum award is given for an achievement percentile above the Maximum level.
- Step 11. Subject to any applicable adjustment in Step #12 below, add the awards determined in Steps ~~#8~~and #9 above for each component of the Performance ~~Goal~~Standards (as modified by Step #10) together to determine the total amount of the Participant's Performance ~~Incentive~~ Award for the Performance Period.
- Step 12. In the case of any Participant who becomes a Participant in the Performance ~~Incentive~~ Plan after the first day of the applicable Performance Period but within the first six months, such Participant's Performance ~~Incentive~~ Award (determined in Step ~~#11~~#12) will be prorated to reflect the actual portion of the Performance Period in which he or she was a Participant. In the case of a Participant who ceases to be a Participant prior to the end of a Performance Period, his or her entitlement to any Performance ~~Incentive~~ Award is determined under Section 5.10 and, in the case of such entitlement, such Participant's Performance ~~Incentive~~ Award, if any, will be prorated and adjusted as provided in Section 5.10.



## Appendix B

### UTIMCO Peer Group

- Brown University
- Columbia University
- Cornell University
- Dartmouth College
- Duke University
- Emory University
- Harvard University
- Johns 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: Cambridge Associates. 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 fiscal year-end June 2014, 2015, and 2016.

**Appendix C**

**Eligible Positions  
Weightings  
Incentive Award Opportunities  
Percentage of Award Deferred  
for each Eligible Position  
(for each Performance Period)**

B-1D-1

**TABLE 1 (For the Performance Periods beginning after August 31, 2017June 30, 2018)**

Eligible Position	Weighting		Incentive Award Opportunity (% of Salary)				Percentage
	Qualitative						of Award
	Entity	(Individual)	< Threshold	Threshold	Target	Maximum	Deferred
<i>Investment Professionals</i>							
CEO & Chief Investment Officer	80%	20%	0%	0%	200%	450%	50%
Deputy Chief Investment Officer	80%	20%	0%	0%	150%	375%	50%
Senior Managing Director - Investments	70%	30%	0%	0%	120%	300%	45%
Managing Director - Investments	65%	35%	0%	0%	100%	250%	40%
Managing Director - Fixed Income	65%	35%	0%	0%	80%	200%	40%
Managing Director - Risk Management	65%	35%	0%	0%	70%	135%	40%
Senior Director - Investments	60%	40%	0%	0%	70%	185%	35%
Director - Investments	50%	50%	0%	0%	65%	175%	30%
Director - Risk Management	50%	50%	0%	0%	35%	80%	30%
Associate Director - Investments	40%	60%	0%	0%	60%	155%	20%
Associate Director - Risk Management	40%	60%	0%	0%	45%	140%	20%
Associate - Investments	35%	65%	0%	0%	50%	145%	15%
Associate - Risk Management	35%	65%	0%	0%	35%	120%	15%
Senior Analyst - Investments	30%	70%	0%	0%	40%	110%	0%
Analyst - Investments	20%	80%	0%	0%	30%	75%	0%
Analyst - Risk Management	20%	80%	0%	0%	25%	75%	0%
Senior Investment Counsel	50%	50%	0%	0%	40%	80%	25%
<i>Support and Control Professionals</i>							
Senior Managing Director	20%	80%	0%	0%	50%	90%	40%
Chief Technology Officer	20%	80%	0%	0%	30%	70%	30%
Corporate Counsel & Chief Compliance Officer	0%	100%	0%	0%	30%	70%	30%
Senior Manager	20%	80%	0%	0%	30%	60%	25%
Manager	20%	80%	0%	0%	30%	60%	25%
Senior Financial Analyst	20%	80%	0%	0%	15%	35%	20%
Mgr, Infrastructure and CISO	20%	80%	0%	0%	25%	50%	20%
Mgr, Development	20%	80%	0%	0%	25%	50%	20%
Business Analyst and Document System Manager	20%	80%	0%	0%	25%	50%	20%

**Table 1**  
**Eligible Positions, Weightings, Award Opportunities, and Percentage of Award Deferred for each Eligible Position**  
**(for the Performance Periods Beginning After June 30, 2018)**

Eligible Position	Weighting		Quantitative Weightings				Peer Group	Award Opportunity (% of Base Salary)		Percentage of Award Deferred
			Benchmark Performance			Peer Group		Threshold	Maximum	
	Quantitative	Qualitative	Entity							
			TEA	ITF	Asset Class					
<i>Investment Professionals</i>										
CEO & Chief Investment Officer	80%	20%	51.2%	12.8%	0.0%	16.0%	0%	450%	50%	
Deputy Chief Investment Officer	80%	20%	51.2%	12.8%	0.0%	16.0%	0%	450%	50%	
Senior Managing Director - Investments	70%	30%	31.4%	7.8%	16.8%	14.0%	0%	300%	45%	
Managing Director - Investments	65%	35%	29.1%	7.3%	15.6%	13.0%	0%	250%	40%	
Managing Director - Fixed Income	65%	35%	29.1%	7.3%	15.6%	13.0%	0%	200%	40%	
Managing Director - Global Asset Allocation	65%	35%	41.6%	10.4%	0.0%	13.0%	0%	250%	40%	
Managing Director - Risk Management	65%	35%	41.6%	10.4%	0.0%	13.0%	0%	135%	40%	
Senior Director - Investments	60%	40%	26.9%	6.7%	14.4%	12.0%	0%	185%	35%	
Senior Director - Risk Management	60%	40%	38.4%	9.6%	0.0%	12.0%	0%	130%	35%	
Senior Investment Counsel	50%	50%	32.0%	8.0%	0.0%	10.0%	0%	80%	25%	
Director - Investments	50%	50%	22.4%	5.6%	12.0%	10.0%	0%	175%	30%	
Director - Risk Management	50%	50%	32.0%	8.0%	0.0%	10.0%	0%	125%	30%	
Director - Chief of Staff	50%	50%	32.0%	8.0%	0.0%	10.0%	0%	175%	30%	
Investment Counsel	40%	60%	25.6%	6.4%	0.0%	8.0%	0%	60%	25%	
Associate Director - Investments	40%	60%	17.9%	4.5%	9.6%	8.0%	0%	155%	20%	
Associate Director - Risk Management	40%	60%	25.6%	6.4%	0.0%	8.0%	0%	120%	20%	
Associate - Investments	35%	65%	15.7%	3.9%	8.4%	7.0%	0%	145%	15%	
Associate - Global Asset Allocation	35%	65%	22.4%	5.6%	0.0%	7.0%	0%	145%	15%	
Associate - Risk Management	35%	65%	22.4%	5.6%	0.0%	7.0%	0%	115%	15%	
Senior Analyst - Investments	30%	70%	13.4%	3.4%	7.2%	6.0%	0%	110%	0%	
Senior Analyst - Risk Management	30%	70%	19.2%	4.8%	0.0%	6.0%	0%	110%	0%	
Analyst - Investments	20%	80%	9.0%	2.2%	4.8%	4.0%	0%	75%	0%	
Analyst - Risk Management	20%	80%	12.8%	3.2%	0.0%	4.0%	0%	75%	0%	
<i>Support and Control Professionals</i>										
Senior Managing Director	20%	80%	12.8%	3.2%	0.0%	4.0%	0%	90%	40%	
Chief Technology Officer	20%	80%	12.8%	3.2%	0.0%	4.0%	0%	70%	30%	
Corporate Counsel & Chief Compliance Officer	0%	100%	0.0%	0.0%	0.0%	0.0%	0%	70%	30%	
Senior Director	20%	80%	12.8%	3.2%	0.0%	4.0%	0%	60%	25%	
Director	20%	80%	12.8%	3.2%	0.0%	4.0%	0%	60%	25%	
Director - Security; Information Technology	20%	80%	12.8%	3.2%	0.0%	4.0%	0%	50%	20%	

**Appendix D**

**~~Benchmarks for Entity and Asset Class/Investment Type and  
Threshold, Target, and Maximum Performance Standards  
(for Performance Periods beginning on or after September 1, 2013)~~**

C-1D-1

**UPDATED TABLE 2-(beginning 9/1/13)**

**Benchmarks for Entity and Asset Class/Investment Type and  
Threshold and Maximum Performance Standards  
(For Performance Periods beginning on or after September/July 1, 2018)**

Entity	Benchmark	Performance Standards		
		Threshold	Target	Maximum
Total Endowment Funds	Policy Portfolio	+0 bps	+100 bps	+250 bps
Intermediate Term Fund	Policy Portfolio	+0 bps	+50 bps	+150 bps

Entity and Asset Class	Benchmark	Performance Standards	
		Threshold	Maximum
Entity: Peer Group (Total Endowment Funds)	Peer Group (Endowments w/>\$1 B assets)	50th %ile	25th %ile
Entity: Benchmark (Total Endowment Funds)	Policy Portfolio	+0 bps	+250 bps
Entity: Benchmark (Intermediate Term Fund)	Policy Portfolio	+0 bps	+150 bps
Public Equity	(1)	+0 bps	+150 bps
Hedge Funds	(1)	+0 bps	+300 bps
Private Equity	(1)	+0 bps	+250 bps
Fixed Income	(1)	+0 bps	+50 bps
Natural Resources	(1)	+0 bps	+250 bps
Real Estate	(1)	+0 bps	+250 bps

(1) Benchmark will be based on the appropriate benchmark in the respective Investment Policy Statement(s) in effect during each Performance Period.

## **Appendix E**

### **~~Eligible Positions of Affected Participants~~**

**Table 3 (For the Performance Periods beginning September 1, 2017)**  
**Eligible Positions of Affected Participants**  
**(For Performance Periods beginning on or after July 1, 2018)**

Eligible Position
<i>Investment Professionals</i>
CEO & Chief Investment Officer
Deputy Chief Investment Officer
Senior Managing Director - Investments
Managing Director - Investments
Managing Director - Fixed Income
Managing Director - Risk Management
<del>Senior Director - Investments</del>
Director - Investments
Director - Risk Management
Senior Investment Counsel
<i>Support and Control Professionals</i>
Senior Managing Director
Chief Technology Officer
Corporate Counsel & Chief Compliance Officer
Senior Manager
Manager



**Eligible Positions of Affected Participants**

***Investment Professionals***

CEO & Chief Investment Officer  
Deputy Chief Investment Officer  
Senior Managing Director - Investments  
Managing Director - Investments  
Managing Director - Global Asset Allocation  
Managing Director - Risk Management  
Senior Director - Investments  
Senior Director - Risk Management  
Senior Investment Counsel  
Director - Investments  
Director - Risk Management  
Director - Chief of Staff  
Investment Counsel  
Associate Director - Investments  
Associate Director - Risk Management

***Support and Control Professionals***

Senior Managing Director  
Chief Technology Officer  
Corporate Counsel & Chief Compliance Officer  
Senior Director  
Director  
Director - Security; Information Technology

Materials related to the UTIMCO 2018-2019 Budget  
will be distributed later.