

#### AGENDA for Meeting of the U. T. System Board of Regents

Friday, October 12, 2007 9<sup>th</sup> Floor, Ashbel Smith Hall Austin, Texas

			Page
A.	CONVENE JOINT MEETING: BOARD OF REGENTS AND UTIMCO BOARD OF DIRECTORS	9:00 a.m. Chairman Huffines Chairman Caven	
1.	Introductions	9:00 a.m. Chairman Huffines Chairman Caven	1
2.	Report on Legislation and Legal Issues	9:05 a.m. <b>Report</b> Mr. Burgdorf Ms. Gonzalez	2
3.	<ul> <li>Reports on UTIMCO Board Operations and Committees Board Officers, Key Employees, Delegation of Authority Standing Committee Reports: <ul> <li>Audit and Ethics Committee</li> <li>Risk Committee</li> <li>Policy Committee</li> <li>Compensation Committee</li> </ul> </li> </ul>	9:25 a.m. <b>Report</b> Chairman Caven Mr. Nye Mr. Tate Mr. Rowling Mr. Ferguson	8
4.	UTIMCO Update: Report on UTIMCO Organization, Performance, and Activities	9:45 a.m. <b>Report</b> Mr. Zimmerman	9
5.	Report on Investment Management Cost Effectiveness	10:00 a.m. <b>Report</b> Dr. Kelley	17
6.	Update regarding Centralization of Operating Funds	10:10 a.m. <b>Report</b> Dr. Kelley	30
7.	Report on Investment Objectives and Performance from UTIMCO Board Investment Consultant	10:15 a.m. <b>Report</b> Mr. Bruce Myers, Cambridge Associates	35
BR	EAK	10:40 a.m.	
8.	U. T. System Board of Regents: Discussion of U. T. System assets managed by The University of Texas Investment Management Company (UTIMCO) in context of U. T. System financial resources	10:55 a.m. <b>Report</b> Dr. Kelley	52

#### Friday, October 12, 2007 (continued)

BU	FFET LUNCH	11:30 a.m.	Page
9.	Report on Investment Strategy (working lunch)	11:45 a.m. <b>Report</b> Mr. Zimmerman	63
В.	ADJOURN JOINT MEETING	1:00 p.m.	
C.	RECONVENE MEETING OF THE BOARD OF REGENTS	1:30 p.m.	
D.	CONSIDER AGENDA ITEMS		
10.	U. T. System Board of Regents: Presentation regarding work of the Brackenridge Tract Task Force	1:30 p.m. <b>Report</b> Mr. Larry Temple	98
11.	U. T. System Board of Regents: Approval of the U. T. System-wide Internal Audit Plan for Fiscal Year 2008	2:45 p.m. <b>Action</b> Regent Estrada Mr. Chaffin	99
12.	U. T. System Board of Regents: Amendment to Regents' <i>Rules and Regulations</i> , Series 60102, related to fees for institutional endowment compliance	2:50 p.m. <b>Action</b> Mr. Burgdorf Dr. Safady	144
13.	U. T. System: Authorization to allow the Texas Campus Compact, a 501(c)(3) nonprofit organization, to occupy approximately 886 sq. ft. of space located at 702 Colorado Street, Austin, Texas; to provide certain services; and finding of public purpose	2:55 p.m. <b>Action</b> Mr. Burgdorf	147
14.	U. T. System: Approval of allocation of Intermediate Term Fund proceeds for System-wide projects	3:00 p.m. <b>Action</b> Dr. Kelley Dr. Prior Dr. Shine	150
15.	U. T. System: Approval to form a Coordinating Committee and provide for funding to advance the Texas Alliance for Nanotechnology (TxAN) initiative with The Texas A&M University System	3:10 p.m. <b>Action</b> Mr. Burgdorf	157

#### Friday, October 12, 2007 (continued)

E.	RECESS TO EXECUTIVE SESSION IN ACCORDANCE	3:15 p.m.
	WITH TEXAS GOVERNMENT CODE, CHAPTER 551	

 Personnel Matters Relating to Appointment, Employment, Evaluation, Assignment, Duties, Discipline, or Dismissal of Officers or Employees – Section 551.074

U. T. System: Discussion and appropriate action regarding individual personnel matters relating to appointment, employment, evaluation, compensation, assignment, and duties of presidents (academic and health institutions), U. T. System Administration officers (Executive Vice Chancellors and Vice Chancellors), other officers reporting directly to the Board (Chancellor, General Counsel to the Board, and Director of Audits and System-wide Compliance Officer), and U. T. System and institutional employees

- Consultation with Attorney Regarding Legal Matters or Pending and/or Contemplated Litigation or Settlement Offers – Section 551.071
  - a. U. T. System: Discussion regarding legal issues related to the Texas Alliance for Nanotechnology (TxAN) initiative
     b. U. T. System Board of Regents: Discussion with Counsel on pending legal issues
- F. RECONVENE IN OPEN SESSION TO CONSIDER ACTION 3:25 p.m. ON EXECUTIVE SESSION ITEMS, IF ANY
- G. ADJOURN

3:30 p.m.

#### 1. U. T. System Board of Regents: Introductions

U. T. Board Chairman Huffines and UTIMCO Board Chairman Caven will introduce:

#### UTIMCO Directors

Chairman H. Scott Caven, Jr. Vice-Chairman Robert B. Rowling Vice-Chairman for Policy Mark G. Yudof Mr. Clint D. Carlson Mr. J. Philip Ferguson Ms. Colleen McHugh Mr. Ardon E. Moore Mr. Erle Nye Mr. Charles W. Tate

#### U. T. System Staff

Mr. Philip Aldridge, Associate Vice Chancellor for Finance
Mr. William Huang, Senior Financial Analyst
Mr. Barry Burgdorf, Vice Chancellor and General Counsel
Mr. James Philips, Senior Attorney, Office of General Counsel
Ms. Karen Lundquist, Attorney, Office of General Counsel
Ms. Francie Frederick, General Counsel to the Board of Regents
Mr. Charles Chaffin, Director of Internal Audit
Ms. Amy Barrett, Assistant Director of Internal Audit

#### UTIMCO Management

Mr. Bruce Zimmerman, Chief Executive Officer and Chief Investment Officer Ms. Cathy Iberg, President and Deputy Chief Investment Officer Ms. Cecilia Gonzalez, General Counsel

#### UTIMCO Board Advisors and Consultants

Dr. Keith Brown, Advisor to the Chairman, Fayez Sarofim Fellow and Professor of Finance, Red McCombs School of Business, U. T. Austin

Mr. Jerry Turner, Counsel, Vinson & Elkins LLP

Mr. Bruce Myers, Investment Consultant, Cambridge Associates LLC

Mr. Tom Wagner, Audit Partner, Deloitte & Touche

Mr. Gifford Fong, President, Gifford Fong Associates (not attending)

#### 2. U. T. System Board of Regents: Report on legislation and legal issues: Uniform Prudent Management of Institutional Funds Act (UPMIFA); Master Investment Management Services Agreement (IMSA); Board of Regents' Expectations of UTIMCO Directors

#### <u>REPORT</u>

Vice Chancellor and General Counsel Barry Burgdorf will discuss the current Master Investment Management Services Agreement (IMSA) and Ms. Cecilia Gonzalez, General Counsel to UTIMCO, will summarize issues related to the Uniform Prudent Management of Institutional Funds Act (UPMIFA). The Board of Regents' Expectations of UTIMCO Directors follows on Pages 3 - 7 as background information for this discussion.

#### U. T. System Board of Regents Expectations for Appointees to the UTIMCO BOARD OF DIRECTORS

#### **Overview of UTIMCO**

The University of Texas Investment Management Company ("UTIMCO"), a Texas nonprofit corporation qualified as a tax-exempt entity under Section 501(c)(3) of the Internal Revenue Code, was created for the sole purpose of managing the investment of funds under the control and management of the Board of Regents of The University of Texas System pursuant to authorization provided in Section 66.08 of the *Texas Education Code* (the "UTIMCO statute"). UTIMCO manages more than \$23.7 billion in total assets, comprised of approximately \$18.4 billion in endowment funds, including the Permanent University Fund (PUF), Permanent Health Fund (PHF), Long Term Fund (LTF), and Separately Invested Funds, and more than \$5.3 billion in centralized operating funds.

The corporate activities of UTIMCO are managed by its Board of Directors (the "UTIMCO Board"), subject to the Master Investment Management Services Agreement ("IMSA") between UTIMCO and the Board of Regents, the applicable provisions of the Board of Regents' *Rules and Regulations*, the UTIMCO statute, UTIMCO's Articles of Incorporation and Bylaws, and other applicable law.

The Chancellor of the U. T. System serves as the Vice Chairman for Policy.

- The Chancellor is charged by the UTIMCO Bylaws with coordination of responsibilities, including the appropriate resolution of policy issues, assigned to UTIMCO and to the U. T. System by the Regents' *Rules* to ensure implementation of UTIMCO's performance of core investment duties.
- The IMSA between the U. T. System Board of Regents and UTIMCO provides that unless otherwise provided in writing by the U. T. Board, "UTIMCO shall look to the Chancellor to provide primary oversight and management concerning relations with the media, legal issues that implicate policies of the U. T. Board other than the Investment Policies, public disclosure of information and intergovernmental relations. Except for the foregoing matters, the UTIMCO Board of Directors and the CEO of UTIMCO shall be responsible for making all decisions necessary to implement the Investment Policies. The CEO of UTIMCO shall confer with the Chancellor on the above-mentioned matters where the Chancellor has primary oversight and management and on other matters that may implicate broader policies of the U. T. Board."
- The Regents' *Rules*, Series 20101 and Series 70401 provide additional detail on these duties.

#### **Qualifications and Terms**

Pursuant to the UTIMCO statute, the UTIMCO Board consists of nine (9) members. The Chancellor of the U. T. System serves as a Director. The other members of the UTIMCO Board are appointed by the Board of Regents and must include at least three (3) current members of the Board of Regents and one person selected by the Board of Regents from a list of candidates with substantial expertise in investments submitted by the Board of Regents of the Texas A&M University System. Pursuant to the UTIMCO bylaws approved by the Board of Regents, the

three (3) Regental Directors serve two-year terms that expire on the first day of April of each odd-numbered year, and the external Directors serve three-year staggered terms that expire on the first day of April of the appropriate year. No external Director may serve more than three (3) full three-year terms. Any UTIMCO Director may be removed as a Director by the Board of Regents with or without cause and at any time.

#### **Operations and Resources**

The UTIMCO Board has delegated primary responsibility for certain functions to key chartered Board Committees:

- 1. Audit and Ethics Committee (Appointments approved by the Board of Regents)
- 2. Compensation Committee
- 3. Policy Committee
- 4. Risk Committee

U. T. System Administration staff provide oversight through the Office of Business Affairs, including the Office of Finance; the Office of General Counsel; Internal Audit; the System-wide Compliance Officer; and the General Counsel to the Board of Regents. UTIMCO Directors also have the benefit of professional independent consultants, including:

- 1. Investment consultants (Cambridge Associates);
- 2. Outside legal counsel (Vinson & Elkins);
- 3. Compensation consultants (Mercer Human Resources Group);
- 4. External auditors (Deloitte & Touche LLP);
- 5. Dr. Keith Brown, Professor of Finance at U. T. Austin, Advisor to the Chairman of the UTIMCO Board; and
- 6. Risk consultant (Gifford Fong Associates).

#### **Duties and Responsibilities**

By statute and charter, as a fiduciary under the IMSA, UTIMCO is dedicated to the sole purpose of investing funds under the management and control of the Board of Regents. In practice, the fiduciary duties of UTIMCO Directors are focused on the fulfillment of the Board of Regents' investment policy directives. As Directors of a nonprofit corporation, UTIMCO Directors' fiduciary duties also include:

- 1. Duty of care in prudently managing the corporation's investment management and other affairs;
- 2. Duty of loyalty, requiring the avoidance of conflicts of interest; and
- 3. Duty to avoid conduct that exceeds the chartered powers of the corporation.

**Investment Management Responsibilities:** The Board of Regents is the ultimate fiduciary responsible for all matters relating to the investment of the funds under its control, in accordance with the "prudent investor" standard of care established by the Texas Constitution, Texas Education Code, and other applicable law. 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.

The Board of Regents delegates to UTIMCO as its fiduciary, under the management of the UTIMCO Board, authority to act for the Board of Regents in the investment of those funds, subject to limitations and restrictions articulated through the IMSA; the Board of Regents' investment policies; and other applicable laws, rules, and agreements. The UTIMCO Board's investment management authority, thus derived, includes the following investment management responsibilities:

- Review of the U. T. Board's current Investment Policies for each Fund at least annually by June 1 of each year. Such review shall include distribution (spending) guidelines, long-term investment return expectations and expected risk levels, asset allocation targets and ranges for each eligible asset class, expected returns for each asset class and fund, designated performance benchmarks for each asset class and such other matters as the U. T. Board or its staff designees may request.
- After UTIMCO completes its assessment, UTIMCO must forward any recommended changes to U. T. System staff for review and appropriate action.
- Oversee the investment management process pursuant to the Investment Policies. Such oversight shall include without limitation the development of an investment outlook based on global economic and capital market forecasts, the rebalancing of allocations to each asset class within ranges in response to changes in the investment outlook, and the selection of a combination of portfolio managers to construct portfolios designed to generate the expected returns of each asset class.
- Monitor and report on investment performance for each of the Funds. With respect to all Funds other than the SIFs, such responsibilities shall include the calculation and evaluation of investment returns for each asset class and individual Fund portfolio against approved benchmarks over various periods of time, and the periodic review of performance benchmarks. With respect to all Funds, such responsibilities shall also include the reporting of investment performance of such specific Funds as may be requested by the U. T. Board, and the reporting to regulatory agencies and others regarding investments under management to the extent required by applicable law.
- Develop and implement a risk management system to measure and monitor overall portfolio derivative exposure, risk levels, liquidity, and leverage.
- Monitor and enforce compliance with all investment and other policies and applicable law.
- Monitor termination of external managers in accordance with Delegation of Authority Policy and investment policies.

Some investment management responsibilities delegated to UTIMCO, including but not limited to the following, are expressly subject to Board of Regents approval:

• Analyze and recommend investment strategies for U. T. System funds managed by UTIMCO, including asset allocation targets, ranges, and performance benchmarks for each asset class (Exhibit A of the Fund Investment Policy Statements).

- Consider and recommend investments not covered by investment policy statements.
- Select one or more Custodians, each of which shall be approved by the U. T. Board, which shall also enter into or approve each agreement with the Custodian(s).
- Select, engage, and evaluate External Auditor(s) for the funds.
- Review and propose amendments to Board of Regents' policies related to the investment management of the U. T. System funds, including (not limited to):
  - 1. Investment Policy Statements for all U. T. System funds.
  - 2. Distribution (spending) guidelines, rates, and amounts as required.
  - 3. Liquidity Policy.
  - 4. Derivative Policy.

**Corporate Governance Responsibilities:** The UTIMCO Board manages the activities of the corporation, providing the primary governance and oversight of the CEO, other professionals employed by UTIMCO, and outside investment managers with whom funds have been invested. Management oversight responsibilities of the UTIMCO Board or UTIMCO Board Committees include the following:

- Monitor actual staffing, operating, and capital expenditures relative to approved budgets.
- Monitor compliance with the Delegation of Authority policy.
- Consider and approve actions outside the authority delegated to the CEO as required.
- Select, engage, and evaluate UTIMCO's outside counsel, custodian(s), external auditor(s) for the corporation, investment consultant(s) and risk consultant(s).
- Ensure compliance with UTIMCO's Code of Ethics, including conflict of interest policies and applicable law.
- Develop and administer a compensation plan, consistent with current regulations for determining reasonable compensation, to attract and retain high caliber investment professionals and support staff. With the exception of changes to the appendices, the Compensation Plan is subject to approval by the Board of Regents.
- Appoint, supervise, evaluate and compensate UTIMCO's CEO.
- Evaluate investment results against incentive compensation plan performance objectives; approve and recommend bonus compensation for UTIMCO's officers.
- Review and approve committee charters.
- Assure establishment and implementation of legally compliant and administratively effective personnel policies.
- Oversee implementation of accounting principles, policies, internal financial controls, and reporting in the spirit of the Sarbanes-Oxley Act.
- Oversee implementation of public disclosures in compliance with the Texas Public Information Act and other applicable law, in collaboration with the Chancellor/Vice Chairman for Policy.

Some corporate management responsibilities of the UTIMCO Board, including but not limited to the following, are expressly subject to approval by the Board of Regents:

- Review and approve the proposed annual UTIMCO operating and capital budgets, including incentive compensation, capital expenditures, and management fee allocations.
- Review, approve, and recommend key governance documents such as the Articles of Incorporation, Bylaws, and Code of Ethics.

• Approval of Performance Incentive Awards that will result in an increase of 5% or more of the total performance incentive awards calculated to the approved Performance Incentive Plan contained in the UTIMCO Compensation Program.

#### **Prohibited Transactions -- Conflicts of Interest**

The *UTIMCO Code of Ethics* ("Code") details, among other things, prohibitions on transactions between UTIMCO and entities controlled by UTIMCO Directors, as required by the UTIMCO statute and supplementing the general requirements under the Texas Non-Profit Corporation Act. Amendments to the Code are expressly subject to Board of Regents' approval.

The Code prohibits any transaction or agreement between UTIMCO and any investment fund or account managed by a UTIMCO Director as a fiduciary or agent for compensation. The Code prohibits agreements or transactions between UTIMCO and a business entity controlled by a UTIMCO Director or in which a UTIMCO Director owns five percent or more of the fair market value of the assets or of the voting stock or from which the director received more than five percent of his or her gross income for the preceding calendar year.

The Code prohibits a UTIMCO Director from investing in the private investments of a business entity in which UTIMCO contemporaneously owns a private investment. The Code also prohibits UTIMCO from investing in the private investments of a business entity in which a UTIMCO Director contemporaneously owns a private investment; provided, however, that a limited exception is available where the UTIMCO Director's private investment was acquired before the date the director assumed a position on the UTIMCO Board. For this purpose, "private investment" means any debt or equity interest that is not publicly traded, including a private investment in a public company.

#### **Application of the Texas Public Information Act**

UTIMCO and its officers, directors and employees are subject to the provisions of the Texas Public Information Act. Corporate documents, correspondence, and emails are subject to public inspection and duplication, unless specifically excepted from disclosure under the Act.

#### **Meeting Requirements**

UTIMCO Directors are expected to attend all regularly scheduled Board meetings which are typically held approximately every two months. In addition, special Board meetings may be scheduled from time to time with prior notice. The Texas Open Meetings Act applies to the UTIMCO Board, requiring that all deliberations of a quorum of the Board take place in open meetings after advance notice of the meeting is posted as required by the Act. Committee meetings are held as needed to address specific items within the Committee charters.

#### 3. <u>U. T. System Board of Regents: Report on The University of Texas</u> <u>Investment Management Company (UTIMCO) Board operations and</u> <u>committees</u>

#### <u>REPORT</u>

UTIMCO Chairman Caven will outline the UTIMCO Board Committee structure. Four Board committees assume primary responsibility for overseeing certain aspects of UTIMCO operations. The chairmen of the UTIMCO Board committees will describe the roles of their committees as follows:

- Audit and Ethics Committee, Chairman Erle Nye
- Risk Committee, Chairman Charles W. Tate
- Policy Committee, Chairman Robert B. Rowling
- Compensation Committee, Chairman J. Phillip Ferguson

The purposes of these four committees, as set forth in their respective charters, are outlined below.

#### Audit & Ethics Committee Charter Purpose:

The primary purpose of the Committee is to assist the UTIMCO Board in monitoring the financial and compliance functions of the Corporation and the investment funds managed on behalf of The University of Texas System Board of Regents (the "U. T. Board") to assure the balance, transparency, and integrity of published financial information. Specifically, the Committee is to assist the Board in monitoring:

- The integrity of the financial reporting process, the system of internal controls, the audit process, and the process for monitoring compliance with laws and regulations;
- The independence and performance of the Corporation's independent auditors;
- The independence and performance of the independent auditors selected by the U. T. Board to audit the investment funds managed by UTIMCO on their behalf;
- Internal audit functions performed by the U. T. System Audit Office;
- The Corporation's audit policies, ethics programs, and adherence to regulatory requirements; and
- The Corporation's enterprise risk management.

The Committee is responsible for maintaining free and open communication as well as effective working relationships among the Committee members, independent external auditors, U. T. System's internal auditors, and management of the Corporation. To perform his or her role effectively, each committee member will need to develop and maintain his or her skills and knowledge, including an understanding of the Committee's responsibilities and of the Corporation's activities, operations, and risks.

The Committee will take all appropriate actions to set the overall tone at the Corporation for quality financial reporting, sound risk practices, and ethical behavior.

#### **Risk Committee Charter Purpose:**

The primary purpose of the Committee is to provide oversight and monitor

- 1) Investment risk management and compliance;
- 2) The integrity of risk management procedures and controls;
- 3) The integrity of risk models and modeling processes; and
- 4) Liquidity of the Permanent University Fund (PUF), the General Endowment Fund (GEF), and the Intermediate Term Fund (ITF).

#### Policy Committee Charter Purpose:

The primary purpose of the Committee is to provide oversight and to monitor:

- 1. The development and amendment of UTIMCO Board Policies and Corporate Documents;
- Recommendations concerning the development and amendment of investmentrelated policies of The University of Texas System Board of Regents (U. T. Board) related to the management of funds under the control and management of the U. T. Board; and
- 3. Recommendations concerning the amendment of the Investment Management Services Agreement, Code of Ethics, and Bylaws.

#### **Compensation Committee Charter Purpose:**

The primary purpose of the Committee is to provide oversight of the compensation system for officers and employees of the Corporation. The committee has the following duties and responsibilities:

- Recommend to the Board the base salary and performance compensation award of the CEO;
- Approve base salaries of all officers except the CEO;
- Recommend to the Board the Performance Compensation Plan and any amendments thereto and the eligible employees; and
- Approve Performance Compensation awards for eligible employees except the CEO.

#### 4. <u>U. T. System Board of Regents: The University of Texas Investment</u> <u>Management Company (UTIMCO) Update</u>

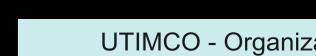
Mr. Bruce Zimmerman, Chief Executive Officer and Chief Investment Officer of The University of Texas Investment Management Company (UTIMCO), will report on the UTIMCO organizational structure, corporate performance, investment performance, control environment, reporting/communication enhancements, and investment focus, using the PowerPoint presentation set forth on Pages 10 - 16.



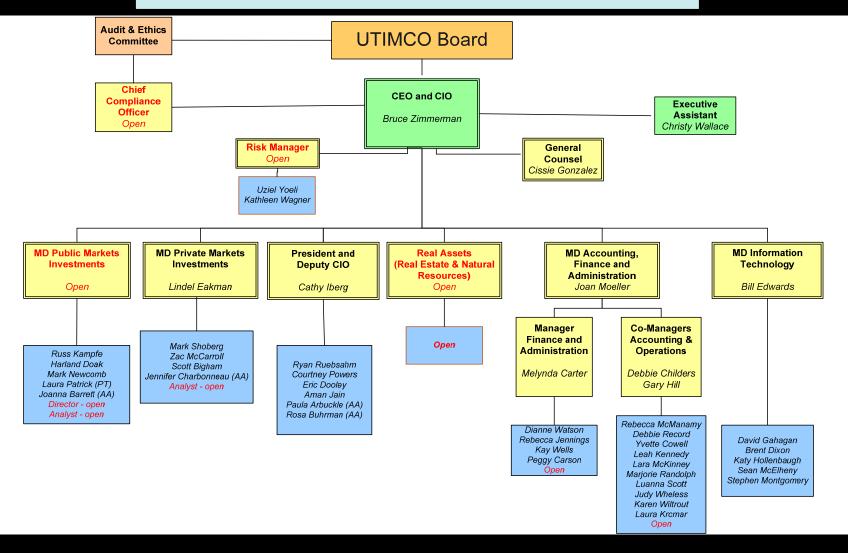
THE UNIVERSITY OF TEXAS INVESTMENT MANAGEMENT COMPANY

### **UTIMCO Update**

Joint Meeting of The University of Texas System Board of Regents and UTIMCO Board of Directors October 12, 2007



#### **UTIMCO - Organizational Structure**



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UTIMCO Services (\$ in thousands) Employee Related Expenses:	2006/07 Budget	2006/2007 Est Actual		2007/08	Rat ve
			2007/08 Budget	2007/08 E	
			5	\$	%
Employee Related Expenses:					
Salaries	\$5,910	\$4,909	\$6,011	\$1,102	22%
Bonus	2,871	2,247	3,258	1,011	45%
Employee Benefits	1,035	750	1,177	427	43 <i>%</i> 57%
	380	302	418	116	38%
Payroll taxes					
Hiring, Recruiting, Relocation Expenses	324	395	440	45	11%
Compensation Consultant	12	13	120	107	823%
Employee Education, Dues, Memberships &	242	114	153	20	34%
Subscriptions				39	
Total Employee Related	10,774	8,730	11,577	2,847	33%
Non - Employee Related Expenses:					
Travel & Meetings	356	184	406	222	121%
On-Line Data & Contract Services	702	-	772	39	5%
Lease Expense	689	735	943	167	22%
	532	566	608	42	7%
Depreciation					
Insurance	262	250	252	2	1%
Legal Expenses	295	567	360	(207)	-37%
Office Expense and Other	331	373	452	79	21%
Total Non-employee Related	3,167	3,449	3,793	344	10%
Total UTIMCO Services	13,941	12,179	15,370	3,191	26%
			^		
Direct Costs to Funds, excludin	g investmen	t manager o	osts		
Custodian Fees and other direct costs	1,260	1,532	1,536	4	0%
Perf Measure, Analytic tools, Risk Measure	1,767	1,471	1,530	59	4%
Custodian and Analytical Costs	3,027	3,003	3,066	63	2%
	2,521	2,200	2,200		270
Consultant Fees	1,356	1,289	1,325	36	3%
Auditing	329	314	754	440	140%
-	985	-	1,100	440 274	33%
Legal Fees		826			
Other	289	203	265	62	31%
Other Directs Total	2,959	2,632	3,444	812	31%
Total Direct Costs to Funds, excluding					
investment manager costs	5,986	5,635	6,510	875	16%
Total	\$19,927	\$17,814	\$21,880	\$4,066	23%



### **Investment Performance**

#### Investment Performance Summary Fiscal Year to Date 2007

Assets (millions)	<b>PUF</b>	<b><u>GEF</u></b>	<b>ITF</b>	<b>STF</b>	TOTAL
	\$ 11,743	\$ 6,433	\$ 3,721	\$ 1,404	\$ 23,512 (1)
<b>Returns</b> %	15.34%	15.90%	10.62%	5.39%	n/a
in millions	\$1,640	\$929	\$ 377	\$70	\$ 3,016
vs. Objectives % in millions	7.24% \$741	7.80% \$439	5.60% \$175	n/a n/a	n/a \$ 1,354
<b>vs. Benchmarks</b> % in millions	1.96% \$ 199	2.52% \$ 141	2.15% \$73	0.10% n/a	n/a \$ 413

(1) Includes \$211 in Separately Invested Assets



# **Control Environment**

- Risk Management
  - Board Risk Committee
  - Risk Budget and Derivatives Policy
  - Risk Dashboard
  - Asset Allocation Ranges
  - Liquidity Policy
  - Enterprise Risk Management
- Compliance
  - Board Audit and Ethics Committee
  - Chief Compliance Officer
  - Internal Ethics and Compliance Committee
  - UT System Institutional Compliance
- Audit
  - Board Audit and Ethics Committee
  - UT System Internal Audit (five audits in 18 months)
  - Deloitte & Touche External Audit (seven audits)

## TIMCO 7996

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# **Reporting/Communication Enhancements**

- Revised Board Reporting Package
- Integrated Return and Risk Reporting
- Tactical Allocation Impact
- Hedge Fund, Private Equity and Public Markets
   Portfolio Transparency
- Derivative Exposure
- UT System Engagement/Dialogue



# **Investment Focus**

- Retain and Attract High Caliber Professionals
- Investment Process and Committee
- Real Assets
  - Global Private Real Estate
  - Natural Resources
- Global and Emerging Markets
- Opportunistic Activities

#### 5. <u>U. T. System Board of Regents: Report on Investment Management Cost</u> <u>Effectiveness</u>

#### <u>REPORT</u>

Dr. Scott C. Kelley, Executive Vice Chancellor for Business Affairs, will report on the cost effectiveness of UTIMCO's investment management of the U. T. System assets. The presentation, set forth on Pages 18 - 23, shows value added and total actual costs for Fiscal Years 2002-2006. The value added by UTIMCO is based on an analysis performed by Cambridge Associates, as set forth on Pages 24 - 29.

UTIMCO's performance added nearly \$1.13 billion in value during the five fiscal years ending August 31, 2006, net of all investment management costs. Value was added despite the fact that total investment management costs increased 21.4% in Fiscal Year 2006 and have more than doubled as a percent of assets managed since Fiscal Year 2002.



#### **Investment Management Cost Effectiveness**

Five-Year Actual Trends through FY2006 FY2007 Budgets and Estimated Costs

> **Cathy Swain, CFA** Director of Investment Oversight

> > February 15, 2007

#### Acknowledgement:

In addition to Cambridge Associates, special thanks for contributions to this report extend to UTIMCO and U. T. System Department of Finance staff, notably to Gary Hill and William Huang, whose relentless pursuit of accuracy and completeness contributed to the integrity of the data and analysis.

#### **Investment Management Cost Effectiveness**

#### I. Executive Summary

This report summarizes the analysis of the cost effectiveness of UTIMCO's investment management of the U. T. System assets, comparing value added and total actual costs<sup>i</sup> for fiscal years 2002-2006 and a forecast for FY07, based on UTIMCO's FY07 budget, estimates provided by UTIMCO, and value added analysis provided by Cambridge Associates. Highlights are:

- 1. **UTIMCO performance added nearly \$1.13 billion in value during the five fiscal years** ending August 31, 2006, net of all investment management costs.
- 2. Cumulative total investment management costs of approximately \$846 million during the past five fiscal years were recovered plus a factor of **1.3 times**.
- 3. Total costs increased 21.4% in one year FY06.
- 4. Over the five-year period total costs more than doubled as a percent of assets managed:a. More than 2.5 times in dollar terms.
  - b. From 0.66% of average annual assets under management in FY02 to 1.35% in FY06.
  - c. From nearly \$91 million in FY02 to **\$261 million in FY06**.
- 5. We recommend updating a peer cost comparison, emphasizing third party manager fees and expenses which dominate our costs.

#### II. Value Added: FY02 - FY06

Cambridge Associates' calculations of UTIMCO's value added performance, net of all fees and expenses, for the PUF and the GEF, for the past five fiscal years ending August 31, 2006, are reported in a memorandum dated February 6, 2007, and appended to this report. The calculations estimate how much value UTIMCO has added by: 1) tactically shifting allocations within approved policy asset class ranges; and 2) selecting active external managers for approved asset classes.

Table 1 below summarizes UTIMCO's value added in dollar terms, and as a multiple of total costs and of performance fees paid to third party managers. There does not appear to be a smooth correlation between value added and performance fees or total costs. (See discussion of "Performance Fees.") Of the total **\$1.13 billion** value added during the five years, 62% was achieved in FY03; total cumulative costs of **\$846 million** were recovered by value added plus **1.3 times**; and total value added equaled a multiple of **3.3 times** total performance fees.

Table 1
UTIMCO Value Added versus Total Costs and Performance Fees
Five-Year Comparison: FY02-FY06

		\$Million	<b>Times Value Added</b>			
	Value	Total	Performance	Total	Performance	
Fiscal Year	Added	Costs	Fees	Costs	Fees	
FY06	(170)	261	111	(0.7) X	(1.5) X	
FY05	458	215	105	2.1 X	4.3 X	
FY04	206	157	66	1.3 X	3.1 X	
FY03	701	123	48	5.7 X	15.5 X	
FY02	(66)	91	16	(0.7) X	(4.1) X	
<b>Five-Year Cumulative</b>	1,129	846	347	1.3 X	3.3 X	

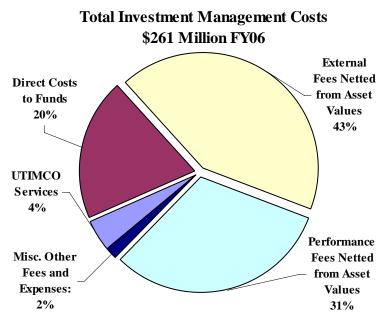
<sup>&</sup>lt;sup>i</sup> Costs do not include transaction and other direct expenses that third party managers deduct from net asset values.

#### III. Total Investment Cost Trends: FY02 - FY06

The chart illustrates that in FY06 management and performance fees and expenses netted from asset values in mutual funds, partnerships, and hedge funds managed by third parties comprised nearly

three-quarters of total investment management costs. UTIMCO does not budget for these expenses, which is typical practice for institutional investors because fees tied to asset values and performance are impossible to predict. UTIMCO staff does track these fees and expenses, however, and has forecast them for FY07, assuming that the policy portfolio target return of 8.34% is achieved.

UTIMCO services represented only 4% of total investment management costs in FY06; budgeted costs (UTIMCO services, direct costs to funds, and other fees and expenses) represented about 26% of total costs.



**UTIMCO Services** costs support administration and reporting for funds totaling more than \$22 billion, for all donors, and for the benefit of all fifteen U. T. institutions as well as several other related institutions and TAMU; direct investment of about \$5.0 billion in assets (24% of endowments, 20% of operating funds) plus derivative investments totaling nearly \$4.0 billion in gross notional value; and selection and monitoring of third party managers for approximately \$16.6 billion (76% of endowments, 80% of operating funds).

**Direct Costs to Funds** are budgeted expenses paid directly by the funds, including management and performance fees for third party "agents," custody, legal, audit, consulting, and risk management system costs.

**Miscellaneous other fees and expenses** (.02% of total average AUM) are budgeted by and paid to U. T. System Institutions and Administration, and include the education fee, endowment compliance fee, investment oversight fee, and audit expenses.

**Total costs have followed an accelerating upward trend over the past five years**, increasing in dollar terms more than 21% in FY06 alone. This trend reflects the shifting investment strategy to more expensive "alternative" asset classes, active management style, and performance-based fees, with higher fees paid to third party managers. Tables 2 and 3 summarize actual costs for the five fiscal years ending August 31, 2006, with estimates for FY07, in millions of dollars and as a percent of average assets under management (AUM).

AUM includes operating funds for all years. UTIMCO staff estimate that average AUM will increase 10% during FY07. Asset values and expenses (\$5.3 million in FY06) associated with PUF West Texas Lands are not included. Centralization of operating funds contributes to higher costs in FY06 and FY07, and performance of the ITF shows positive value added relative to its policy portfolio during the seven months it was operational in FY06.

Table 2
U. T. System Total Investment Cost Trend Summary

						Five- Year	Budget/ Estimate
(\$ millions)	FY02	FY03	FY04	FY05	FY06	Cum.	FY07
UTIMCO Services	5.0	7.6	8.8	10.2	11.3	43	13.9
Direct Costs to Funds	20.1	16.0	25.5	33.8	52.3	148	43.4
External Fees Netted from Asset Values	50.6	52.7	62.5	76.5	111.3	354	138.0
Performance Fees Netted from Investment Returns	12.0	44.0	56.9	90.5	81.6	285	83.3
Miscellaneous Other Fees and Expenses:	2.9	3.0	3.0	3.8	4.4	17	5.1
TOTAL INVESTMENT MANAGEMENT COSTS	90.6	123.3	156.7	214.8	260.9	846	283.8
TOTAL % OF AVERAGE ASSETS MANAGED	0.66%	0.88%	1.01%	1.25%	1.35%		1.33%

Table 3 U. T. System Total Investment Cost Summary UTIMCO TOTAL INVESTMENT COST SUMMARY

						Five- Year	Budget/ Estimate
(\$ millions)	FY02	FY03	FY04	FY05	FY06	Cum.	FY07
AVERAGE TOTAL ASSETS UNDER MANAGEMENT (AUM)	13,716	14,034	15,470	17,245	19,372		21,311
UTIMCO BUDGETED EXPENSES:							
UTIMCO Services Expenses	4.97	7.61	8.63	10.17	11.34	43	13.94
UTIMCO Services % of AUM	0.04%	0.05%	0.06%	0.06%	0.06%	- 10	0.07%
Direct Costs to Funds	20.10	16.05	25.51	33.84	52.28	148	43.42
Direct Costs to Funds % of AUM	0.15%	0.11%	0.16%	0.20%	0.27%	100	0.20%
Total UTIMCO Budgeted Expenses Paid Directly Total UTIMCO Budgeted Expenses Paid Directly % of AUM	25.07	23.65	34.13	44.00	63.62	190	57.36
	0.18%	0.17%	0.22%	0.26%	0.33%		0.27%
EXTERNAL MANAGEMENT FEES NETTED FROM ASSET VALUES:							
Non-Marketable Alternative Assets - Private Capital <sup>1</sup>	36.00	32.10	36.50	38.60	44.20	187	54.60
Marketable Alternative Assets - Hedge Funds	11.80	16.40	20.30	30.50	48.11	127	57.70
Public Markets Assets	-	-	-	2.90	15.54	18	22.46
Mutual Fund Assets - Management Fees	2.80	4.20	5.70	4.50	3.42	21	3.26
Total External Mgmt. Fees Netted from Asset Values	50.60	52.70	62.50	76.50	111.27	354	138.02
Total External Mgmt. Fees Netted from Asset Values % of AUM	0.37%	0.38%	0.40%	0.44%	0.57%		0.65%
Total Direct Expenses & Netted External Mgmt. Fees w/o Perf. <sup>2</sup>	75.67	76.35	96.63	120.50	174.89	544	195.38
Total Direct Expenses & Netted External Mgmt. Fees w/o Perf. % of AUM	0.55%	0.54%	0.62%	0.70%	0.90%		0.92%
PERFORMANCE FEES NETTED FROM ASSET VALUES:							
Marketable Alternative Assets - Performance Fees	12.00	44.00	56.90	90.50	72.93	276	62.70
Public Markets Assets - Performance Fees	-	-	-	-	8.64	9	20.65
Total Performance Fees Netted from Asset Values	12.00	44.00	56.90	90.50	81.58	285	83.35
Total Performance Fees Netted from Asset Values % of AUM	0.09%	0.31%	0.37%	0.52%	0.42%		0.39%
TOTAL UTIMCO COSTS INCLUDING PERFORMANCE FEES	87.7	120.4	153.5	211.0	256.5	829	278.7
Total UTIMCO Costs including Performance Fees % of AUM	0.64%	0.86%	0.99%	1.22%	1.32%		1.31%
U. T. SYSTEM FEES AND EXPENSES:							
Education Fee (LTF Only)	0.55	0.54	0.67	0.76	0.86	3	0.93
Endowment Compliance Fee (LTF only; paid to U. T. Institutions) <sup>3</sup>	2.38	2.44	2.38	2.53	2.72	12	3.14
U. T. System Internal Audit Fee	-	-	-	0.03	0.03	0	
Investment Oversight Fee U. T. System Finance	-	-	-	0.50	0.78	1	1.01
Total U. T. System Fees and Expenses	2.93	2.98	3.05	3.82	4.39	17	5.08
Total U. T. System Fees and Expenses % of AUM	0.02%	0.02%	0.02%	0.02%	0.02%		0.02%
TOTAL INVESTMENT MANAGEMENT COSTS	90.6	123.3	156.6	214.8	260.8	846	283.8
TOTAL INVESTMENT MANAGEMENT COSTS % OF AUM	0.66%	0.88%	1.01%	1.25%	1.35%		1.33%

Notes:

Private capital partnership expenses that are netted from asset values include management fees and other expenses paid by the partnerships, but do not include carried interests of general partners. The actual number for FY06 (K1's) will not be available until late spring.
 "Total Direct Expenses & Netted External Mgmt. Fees w/o Perf." reported in Table 3 above are comparable to the Cambridge Associates "UTIMCO Cost Study," completed May 5, 2005. (See V. Peer Comparisons.)

3. Endowment compliance fees (the largest component of U. T. System fees and expenses) are for the Long Term Fund only, not the PUF, and are paid directly to the institutions.

<sup>4</sup>. Texas A&M shares fees and expenses indirectly, with reduced net asset value of their one third share of the PUF.

#### **IV.** Performance Fees

Performance fees paid to third party managers have increased from \$16 million in FY02 (0.12% of average AUM) to a high of \$111 million (0.61% of average AUM in FY05, 0.54% of average AUM in FY06). In two of the past five years performance fees were paid when value added was less than zero because some managers exceeded their individual benchmarks, even though the portfolios overall under-performed policy benchmarks. Derivative positions and other fixed income assets managed internally also influenced overall performance.

Table 4 shows performance fees paid directly to managers under external agency contracts and those netted from asset values for marketable alternatives (hedge funds); public markets investments in mutual funds and limited partnerships; and other funds. Performance fees netted from asset values in public markets investments were tracked separately only during FY06. Performance fees (including carried interests) netted from asset values of private capital limited partnerships are not tracked separately.

Table 4										
Performance Fo	Performance Fee Summary FY02-FY07									
(\$ millions)	FY02	FY03	FY04	FY05	FY06	Five- Year Cum.	Budget/ Estimate FY07			
UTIMCO Services	5.0	7.6	8.8	10.2	11.3	43	13.9			
Direct Costs to Funds	20.1	16.0	25.5	33.8	52.3	148	43.4			
External Fees Netted from Asset Values	50.6	52.7	62.5	76.5	111.3	354	138.0			
Performance Fees Netted from Asset Values	12.0	44.0	56.9	90.5	81.6	285	83.3			
Miscellaneous Other Fees and Expenses:	2.9	3.0	3.0	3.8	4.4	17	5.1			
TOTAL INVESTMENT MANAGEMENT COSTS	90.6	123.3	156.7	214.8	260.8	846	283.8			
TOTAL % OF AVERAGE ASSETS MANAGED	0.66%	0.88%	1.01%	1.25%	1.35%		1.33%			

Table 4

#### V. **Peer Comparisons**

Although benchmarking investment management costs with comparable peer data has proven to be quite challenging, we are prepared to discuss ideas to move forward with a recommendation to update peer cost comparisons, with an emphasis on fees and expenses of third party managers that dominate our costs. Selecting a peer group for cost comparisons should seek institutional investors that are comparable to UTIMCO in size and asset mix.

- 1. The investment management business offers tremendous economies of scale: i.e., the larger the commitment of funds, the lower the fees.
- 2. Asset mix has a major impact on overall costs; i.e., "alternative" assets and active management are more costly than traditional indexing.

Cambridge Associates completed a study in 2005 comparing UTIMCO expenses to a privately surveyed group of large public and private endowments for the twelve months ending June 30, 2004. Cost increases as a percent of AUM in FY06 placed UTIMCO above the FY04 median for the both private and public endowments surveyed. The study excluded performance fees for hedge funds, partnerships, and mutual funds because comparable peer data was not available.

The 2006 NACUBO Endowment Study recently released the results of its survey with data as of June 30, 2006, and data related to investment management costs is not comparable to data reported by UTIMCO. Table 5 below summarizes how institutions pay performance fees. None reported paying fees for performance "in excess of inflation;" and nearly half of the public institutions reported that they pay performance-based fees on some basis "other" than relative performance, absolute return, or sharing of profits.

How Institutions Pay Performance-Based Fees (%)								
Investment Pool Assets:	Relative performance	Absolute Return	Sharing of profits	In Excess of Inflation	Other			
Greater than \$1 Billion	32.6	19.6*	36.4		17.4*			
Full Sample	20	26.7	16.9		36.4			
Public	17.9	17.9	16.6		47.7			
Independent	20.9	30.7	17		31.3			

	Table 5
How Institutions Pay	Performance-Based Fees (%)

Source: 2006 NACUBO Endowment Study (NES). 468 institutions provided performance-based fee information. Table data are equal-weighted.

\*Fewer than 10 institutions responding.



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# M E M O R A N D U M TO: Scott Caven, Chairman The University of Texas Investment Management Company

FROM:	Jeanne Rogers
	Bruce Myers
	Hamilton Lee
	Paige Roberts
DATE:	February 12, 2007
RE:	Value Added from UTIMCO Active Management

We have been asked to determine the value added from UTIMCO active management over the last five years as a continuation of the same work done last year on this topic. To that end, we have enclosed three exhibits. All the exhibits have been prepared using performance calculations provided by UTIMCO, and we have independently determined such calculations to be the result of an appropriate methodology consistently applied.

#### **Basis Point Calculation (Exhibits 1 & 2)**

#### Have tactical moves by UTIMCO added value?

The first two exhibits attempt to disaggregate UTIMCO performance for the PUF (Exhibit One) and the GEF (Exhibit Two). The first level of analysis is an attempt to isolate the value added from tactical overweights and underweights made by UTIMCO at the asset class level. To do this, we calculated the performance of the approved target allocation, and that is reflected in column A. The calculation shown in column A was derived by multiplying the approved target allocation for each asset class by the return of the benchmark approved by the Board of Regents for that same asset class. Accordingly, Column B is derived by multiplying the actual asset class weights (as opposed to the target weights) by the return of the benchmarks approved by the Board of Regents. Because the passive benchmarks are used as the return stream for each asset class, no benefit to manager selection or manager alpha is included, but the additions (or subtractions) to return for the tactical asset class overweight or underweight is captured. As shown in the column labeled "B-A Historical Allocation versus Target" the tactical asset class shifts have added 130 basis points and 150 basis points for the PUF and GEF respectively for the five year period and have been positive for each time period except for the most recent year.

#### Has manager selection added value?

Lastly, the effect of manager selection and manager alpha was isolated by taking the actual performance (net of fees and manager expenses) for the PUF and GEF and comparing that to the returns derived in Column B.

#### Scott Caven The University of Texas Investment Management Company

As shown in the column labeled "C-B Manager Selection versus Allocation" the effects of active management and manager selection have added to returns in all periods, with the exception of the last year.

#### **Dollars of Value Added (Exhibit 3)**

Exhibit Three attempts to do two things. The first is to roll up the value added in the PUF and the GEF into a total pool value added calculation and the second is to convert basis points into dollars. As shown in that exhibit, tactical overweights/underweights (Column B-A on the previous exhibits) and the effects of manager selection (Column C-B on the previous exhibits) have added over \$1.1 billion in value over the last five years (net of all fees), though they have detracted from returns in the last year.

#### **Basis Point and Dollars of Value Added for the ITF (Exhibit 4)**

Due to the recent inception of the ITF, we analyzed this fund separately from the others. However, consistent with the methodology used for the other funds, the column labeled "B-A Historical Allocation versus Target" shows that the tactical asset class shifts have added 30 basis points to performance since inception. Additionally, the column labeled "C-B Manager Selection versus Target" demonstrates that active management has added 10 basis points of performance since inception. Finally, the combination of tactical asset class shifts and active management have added approximately \$10.5 million of value since the fund's inception.

We would be happy to answer any questions raised by this report and hope that this analysis was informative.

cc: Cathy Iberg, Interim CEO, UTIMCO Cathy Swain, UT System Office of Investment Oversight

#### UTIMCO - PUF EFFECTS OF ACTIVE PORTFOLIO MANAGEMENT (As of 8/31/06)

	(A) Torrat	(B) Historical	(C)
AACRs	Target Allocation Performance	Allocation Performance	Actual Performance
1 YR	12.5	11.8	11.2
2 YR	13.8	14.1	14.9
3 YR	13.5	14.1	14.9
4 YR	11.8	12.7	14.1
5 YR	7.8	9.0	9.5

#### VALUE ADDED BY (bps):

Time Span	(B-A) Historical Allocation (v. Target)	(C-B) Manager Selection <u>(v. Allocation)</u>
1 YR	-70	-70
2 YR	30	80
3 YR	60	80
4 YR	100	140
5 YR	130	50

*Target Allocation* shows the performance of a portfolio invested in passive index instruments according to the weightings of UTIMCO's target allocation.

*Historical Allocation* shows the performance of a portfolio invested in passive index instruments according to the historical allocation of UTIMCO's portfolio.

Actual Performance is the true historical performance of UTIMCO's portfolio.

#### UTIMCO - GEF EFFECTS OF ACTIVE PORTFOLIO MANAGEMENT (As of 8/31/06)

	(A) Terret	(B) Historical	(C)
AACRs	Target Allocation Performance	Historical Allocation Performance	Actual Performance
1 YR	12.5	12.0	11.1
2 YR	13.8	14.2	14.9
3 YR	13.5	14.2	14.9
4 YR	11.8	12.9	14.3
5 YR	7.8	9.3	9.7

#### VALUE ADDED BY (bps):

Time Span	(B-A) Historical Allocation (v. Target)	(C-B) Manager Selection (v. Allocation)
1 YR	-50	-90
2 YR	40	70
3 YR	70	70
4 YR	120	140
5 YR	150	40

*Target Allocation* shows the performance of a portfolio invested in passive index instruments according to the weightings of UTIMCO's target allocation.

*Historical Allocation* shows the performance of a portfolio invested in passive index instruments according to the historical allocation of UTIMCO's portfolio.

Actual Performance is the true historical performance of UTIMCO's portfolio.

#### UTIMCO - COMBINED POOL Value Added By Acitve Management Over Time (As of 8/31/06)

TIME Years	PUF (\$Millions)	GEF (\$Millions)	Combined Pool (\$Millions)
1 year	(\$115.33)	(\$65.28)	(\$180.61)
2 years	\$183.48	\$93.91	\$277.39
3 years	\$318.99	\$164.19	\$483.18
4 years	\$761.42	\$422.88	\$1,184.30
5 years	\$702.55	\$416.00	\$1,118.55
2006	(\$115.33)	(\$65.28)	(\$180.61)
2005	\$298.81	\$159.18	\$458.00
2004	\$135.50	\$70.28	\$205.79
2003	\$442.43	\$258.69	\$701.13
2002	(\$58.86)	(\$6.88)	(\$65.75)

#### UTIMCO - ITF EFFECTS OF ACTIVE PORTFOLIO MANAGEMENT (As of 8/31/06)

AACRs	(A) Target Allocation Performance	_	(B) Historical Allocation Performance	_	(C) Actual Performance
Feb 06-Aug 06	3.1		3.4		3.4
		VALUE ADD	ED BY (bps):		
Time Span	_	(B-A) Historical Allocation (v. Target)		(C-B) Manager Selection Allocation)	
Feb 06-Aug 06		30		10	

#### **DOLLARS VALUE ADDED (\$ millions):**

Feb 06-Aug 06

\$10.55

*Target Allocation* shows the performance of a portfolio invested in passive index instruments according to the weightings of UTIMCO's target allocation.

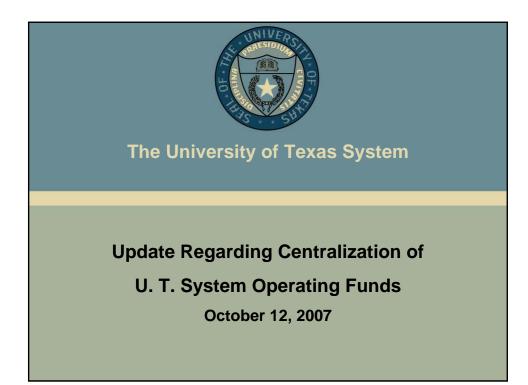
*Historical Allocation* shows the performance of a portfolio invested in passive index instruments according to the historical allocation of UTIMCO's portfolio.

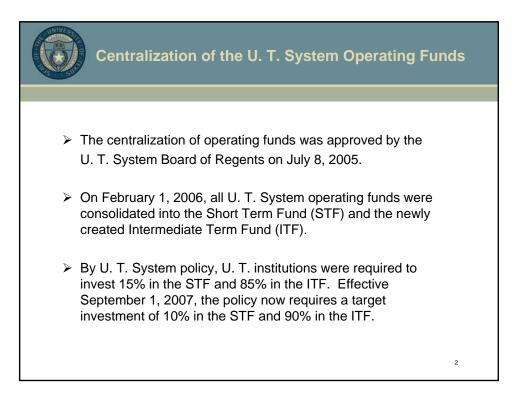
Actual Performance is the true historical performance of UTIMCO's portfolio.

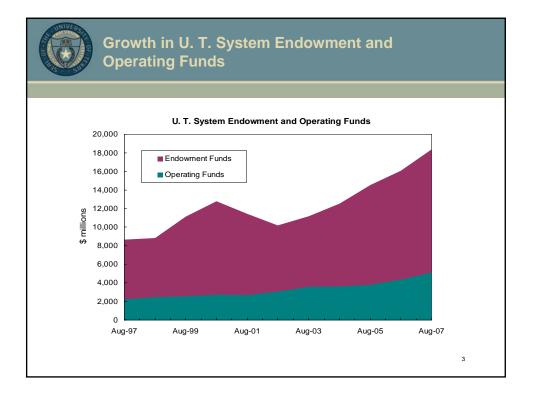
#### 6. U. T. System: Update Regarding Centralization of Operating Funds

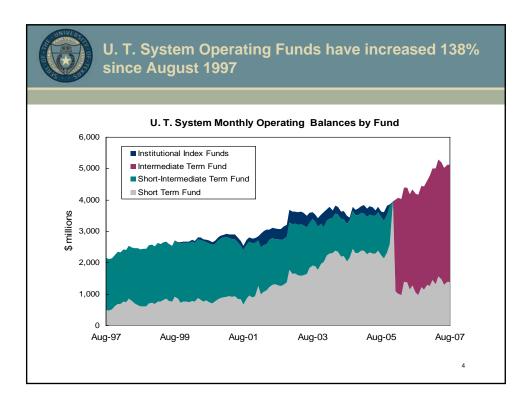
#### <u>REPORT</u>

Dr. Scott C. Kelley, Executive Vice Chancellor for Business Affairs, will provide an update on the centralization of U. T. System operating funds, which was implemented on February 1, 2006. The presentation, as set forth on Pages 31 - 34, will provide a brief overview of centralization and detail the value added from centralization through the fiscal year ended August 31, 2007.









### $\bigcirc$

#### Short Term Fund Liquidity Analysis: February 1, 2006 to August 31, 2007

	Average	e	Low		High	
Institution (\$millions)	STF Balance		STF Balance		STF Balance	
UT Arlington	\$24.4	16%	\$8.1	6%	\$64.6	34%
UT Austin	130.5	14%	62.6	7%	246.7	25%
UT Brownsville	5.8	21%	0.0	0%	23.6	61%
UT Dallas	14.5	12%	2.2	2%	36.8	27%
UT El Paso	13.8	19%	0.4	1%	47.2	53%
UT Pan American	9.2	16%	1.5	3%	24.0	37%
UT Permian Basin	5.2	54%	2.3	27%	9.3	79%
UT San Antonio	23.5	15%	4.0	3%	77.0	45%
UT Tyler	5.5	19%	1.0	3%	14.1	39%
UT Southwestern Medical Center at Dallas	101.2	17%	41.8	9%	167.1	25%
UT Medical Branch at Galveston	111.0	34%	-4.8	-3%	231.6	53%
UT M.D. Anderson Cancer Center	43.5	18%	14.1	6%	86.8	34%
UT Health Science Center at Houston	26.6	14%	8.0	4%	50.6	24%
UT Health Science Center at San Antonio	142.8	18%	37.9	6%	239.5	28%
UT Health Center at Tyler	13.4	76%	1.3	5%	20.6	100%
UT System (Aggregate) <sup>(1)</sup>	\$1,181.5	26%	\$848.1	22%	\$1,558.1	32%
UT System (ex-debt proceeds) <sup>(1)</sup>	\$700.7	17%	\$476.6	14%	\$1,002.2	22%
<sup>(1)</sup> Institutions must maintain a minimum of \$5 millior condition rating of "Watch" or better to invest in the ITF		beginning	of each month	and have a	a current financ	ial
						5

#### Intermediate Term Fund and Short Term Fund Performance

	FY2007 (12 mos.)	Since ITF Inception <sup>(1)</sup> (19 mos.)
Operating Funds		
Short Term Fund	5.40%	5.24%
Intermediate Term Fund	10.63%	8.88%
Benchmarks		
Short Term Fund: 90 Day Treasury Bills Average Yield	5.30%	5.11%
Intermediate Term Fund: Policy Portfolio	8.47%	7.29%
Net Return Above Benchmark <sup>(2)</sup>		
Short Term Fund	0.10%	0.14%
Intermediate Term Fund	2.16%	1.59%

<sup>(1)</sup> Returns for performance since ITF inception (19 months) are annualized.

<sup>(2)</sup> Net Return Above Benchmark is a measure of the difference between actual returns and benchmark or policy portfolio returns for each period shown.

6



# Value Added from Centralization through August 31, 2007

### Summary of Value Added <sup>(1)</sup> for Operating Fund Investments Through August 31, 2007

	FY2007	Since Inception
Institution	(12 months)	(19 Months)
UT Arlington	\$ 6,540,596	\$ 7,372,686
UT Austin	39,583,859	43,834,275
UT Brownsville	985,375	1,175,617
UT Dallas	4,907,393	5,926,406
UT EI Paso	2,787,238	3,052,806
UT Pan American	1,963,583	2,519,759
UT Permian Basin	210,255	257,268
UT San Antonio	6,867,075	7,552,981
UT Tyler	1,193,945	1,347,221
JT Southwestern Medical Center at Dallas	16,686,939	21,006,203
JT Medical Branch at Galveston	9,899,068	11,943,696
UT Health Science Center at Houston	9,166,548	10,917,552
JT Health Science Center at San Antonio	7,697,153	9,398,597
JT M.D. Anderson Cancer Center	17,395,716	20,467,525
UT Health Center at Tyler	(29,701)	7,227
Subtotal Value Added - U.T. System Institutions	\$ 125,855,042	\$ 146,779,819
Value Added U.T. System Administration	13,281,198	16,374,916
Total Value Added	\$ 139,136,240	\$ 163,154,735

<sup>(1)</sup> Value added is the actual dollar return for the operating funds in excess of the proxy returns that would have been earned based on the asset allocations as of August 31, 2005.

### 7. U. T. System Board of Regents: Report on Investment Objectives and <u>Performance from The University of Texas Investment Management</u> <u>Company (UTIMCO) Board Investment Consultant</u>

### <u>REPORT</u>

Mr. Bruce Myers, Cambridge Associates, will report on the investment objectives and performance of funds managed by the University of Texas Management Company (UTIMCO) including objectives, performance, policy portfolios, benchmark, and asset allocation, using the PowerPoint presentation set forth on Pages 36 - 51.

# October 2007



Discussion on Investment Objectives

and Performance

Definitions         PUF: The Permanent University Fund established by the Texas State         Constitution for the benefit of the University of Texas and Texas A&M         GEF: The General Endowment Fund which is composed of:         > LTF: The Long Term Fund, the permanent endowment of the University of Texas         > PHF: The Permanent Health Fund         STF: The Short Term Fund, a money market fund managed for preservation of principal and liquidity         ITF: The Intermediate Term Fund, a broadly diversified portfolio designed to produce a return of at least 3% plus the rate of inflation (CPI-U)
--

# **Current Investment Objectives**

- distributions by earning an average real return over ten-year periods "The primary objective for each fund [the PUF and the GEF] shall or longer at least equal to the target distribution rate of such funds be to preserve the purchasing power of fund assets and annual plus the annual expected expense"
- "The secondary fund objective is to generate a fund return in excess of the Policy Portfolio benchmark and the median return of the universe of the college and university endowments with assets greater than \$1 billion as reported by Cambridge Associates"

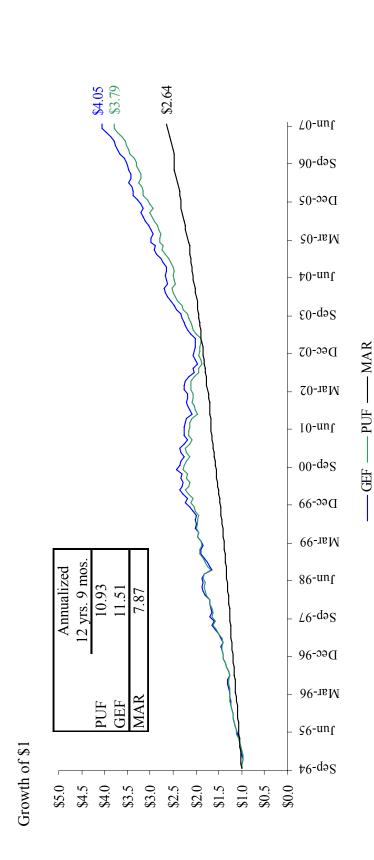
PUF & GEF Asset Allocation Market Exposure as of June 30, 2007

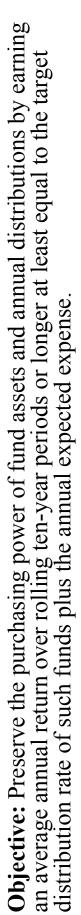
	Actual Weight PUF	Actual Weight GEF	Actual Weight PUF/GEF Policy GEF Target	PUF/GEF Policy Range	In Compliance (Yes/No)
Traditional U.S. Equities	22.73%	22.98%	20.00%	10-30%	Yes
Global ex-U.S. Equity	19.77%	19.74%	17.00%	10-30%	Yes
Non-U.S. Developed Equity	11.39%	10.99%	10.00%	0-30%	Yes
Emerging Markets Equity	8.38%	8.75%	7.00%	0-10%	Yes
Hedge Funds	24.47%	24.51%	25.00%	15-27.5%	Yes
Directional Hedge Funds	%06.6	9.92%	10.00%	5-15%	Yes
Absolute Return Hedge Funds	14.57%	14.59%	15.00%	10-20%	Yes
Private Capital	10.61%	11.08%	15.00%	5-15%	Yes
Inflation Linked	11.36%	11.17%	13.00%	5-20%	Yes
REITS	4.26%	4.20%	5.00%	0-10%	Yes
Commodities	3.59%	3.61%	3.00%	0-6%	Yes
TIPS	3.51%	3.36%	5.00%	0-10%	Yes
Fixed Income	7.02%	6.94%	10.00%	5-15%	Yes
Cash	4.04%	3.58%	0.00%	0-10%	Yes
Total	100.00%	100.00%	100.00%	ł	

PUF & GEF
e Summary:
Performance

- Since 1994 performance of the PUF and the GEF has enhanced purchasing power, outperforming the stated goal of earning the rate of distributions, plus expenses, plus inflation
- While the 10+ year performance of the PUF and the GEF trail their Policy Portfolio Benchmarks, the degree of underperformance has narrowed sharply over the past three years
- Performance (measured on a rolling five-year basis) relative to college and university peers lags the peer universe prior to 2005. Since 2005, the PUF and GEF have modestly outperformed



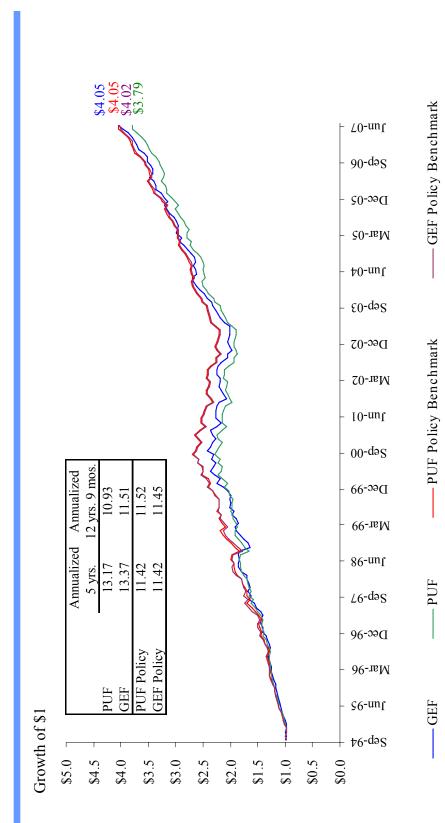




<sup>&</sup>lt;sup>1</sup> The "MAR" as defined by The University of Texas System Investment Policy Statement is 5.1% plus an assumed rate of inflation of 3.0%, for a total of 8.1%. This target was derived by adding the current target distribution rate for the endowment (4.75%) to the annual expected expense (0.35%). 5.1% represents a real annual return target; this report de-annualizes that number to a monthly basis and adds monthly CPI-U data to account for inflation.

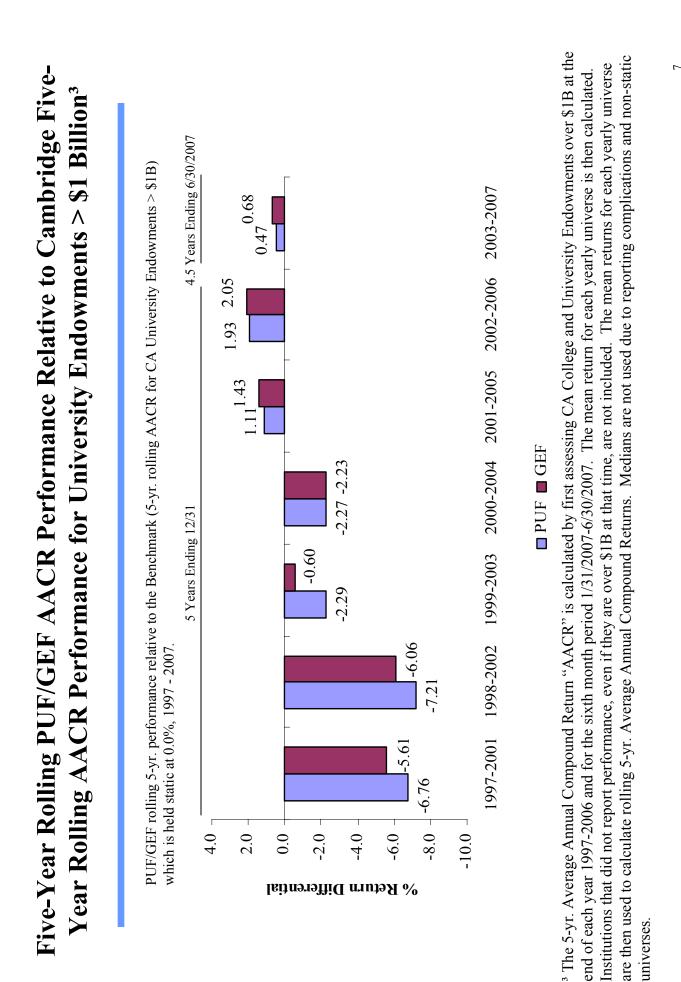
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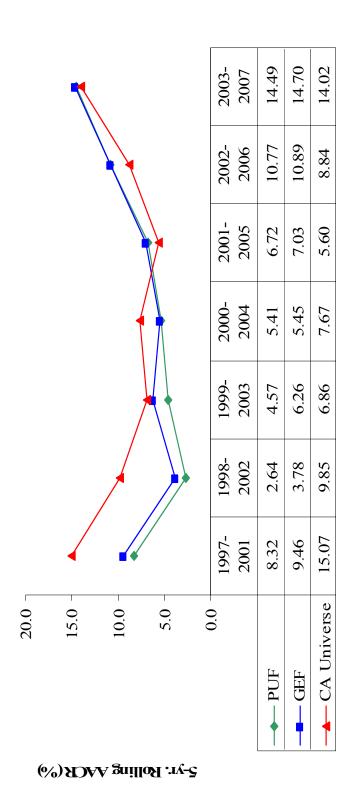


<sup>&</sup>lt;sup>2</sup> The "Policy Portfolio Benchmarks" are the composition of asset class targets in the asset allocation investment policy statement, changed over time with UTIMCO restated historical policy returns based on newly approved policy targets. The Policy Portfolio presented in the report reflects this restatement. approval of the BOR. Policy Portfolio performance is the composite performance of benchmarks for the asset class targets. In January of 2004,



# Five-Year Rolling PUF/GEF AACR Performance Compared to Cambridge Five-Year Rolling AACR Performance for University Endowments > \$1 Billion<sup>3</sup>

PUF/GEF rolling 5-yr. performance compared to the Benchmark (5-yr. rolling AACR for CA University Endowments > \$1B), 1997 – 2007.



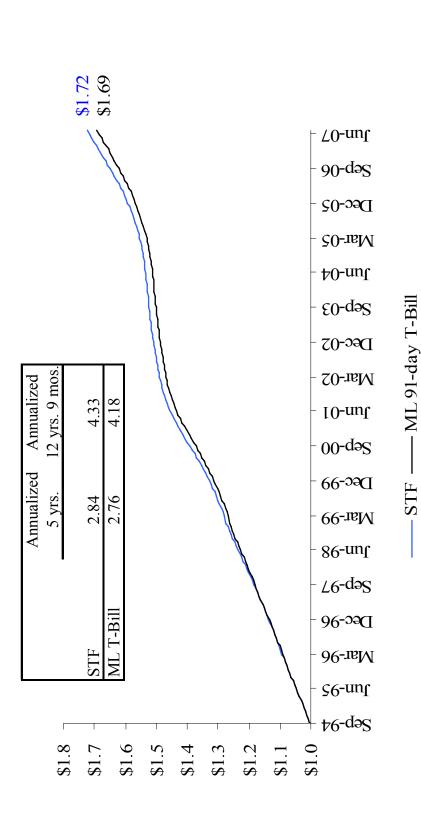
→ PUF → GEF → CA Universe

<sup>3</sup> The 5-yr. Average Annual Compound Return "AACR" is calculated by first assessing CA College and University Endowments over \$1B at the are then used to calculate rolling 5-yr. Average Annual Compound Returns. Medians are not used due to reporting complications and non-static Institutions that did not report performance, even if they are over \$1B at that time, are not included. The mean returns for each yearly universe end of each year 1997-2006 and for the sixth month period 1/31/2007-6/30/2007. The mean return for each yearly universe is then calculated. universes.

- Performance for the STF has modestly exceeded its benchmark
- Last year, the former SITF was replaced by the ITF
- Benchmark and significantly exceeded its primary objective In its first full year, the ITF outperformed its Policy



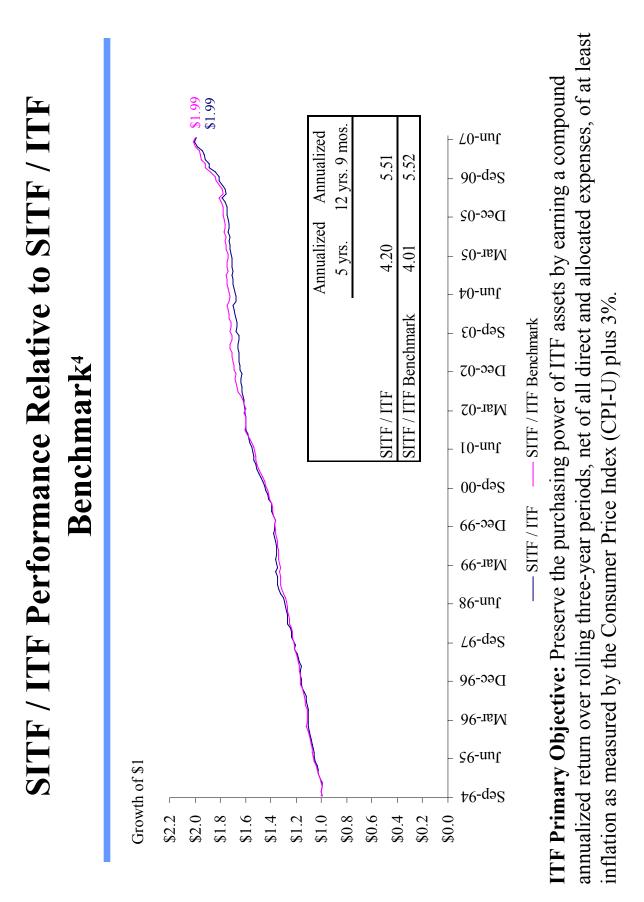
Growth of \$1



maintenance of adequate STF liquidity. The STF shall seek to maintain a new asset value of \$1.00. **Objective:** Maximize current income consistent with the absolute preservation of capital and

# Intermediate Term Fund (ITF) Market Exposure as of June 30, 2007

	Actual Weight ITF	ITF Policy Target	ITF Policy Range
Traditional U.S. Equities	16.13%	15.00%	5-20%
Global ex-U.S. Equity	10.54%	10.00%	0-15%
Non-U.S. Developed Equity	5.47%	5.00%	0-10%
Emerging Markets Equity	5.07%	5.00%	0-10%
Hedge Funds	24.74%	25.00%	10-27.5%
Directional Hedge Funds	11.42%	12.50%	5-20%
Absolute Return Hedge Funds	13.32%	12.50%	5-20%
Private Capital	0.00%	0.00%	0%0
Venture Capital	0.00%	0.00%	1
Private Equity	0.00%	0.00%	1
Inflation Linked	22.77%	25.00%	10-35%
REITS	8.33%	10.00%	0-15%
Commodities	5.15%	5.00%	0-10%
TIPS	9.29%	10.00%	5-15%
Fixed Income	23.70%	25.00%	15-40%
Cash & Equivalents	2.12%	0.00%	0-20%
Total	100.00%	100.00%	1





ITF Performance

	One Month	Three Months	Calendar Year To Date	One Year
Intermediate Term Fund	(0.76)	2.35	5.33	12.99
ITF Policy Portfolio	(0.88)	1.54	3.76	11.43

ITF Primary Objective: Preserve the purchasing power of ITF assets by earning a compound annualized return over rolling three-year periods, net of all direct and allocated expenses, of at least inflation as measured by the Consumer Price Index (CPI-U) plus 3%. ITF Secondary Objective: Generate a return, net of all direct and allocated expenses, in excess of the approved Policy Portfolio benchmark over rolling three-year periods.

<sup>5</sup> The ITF replaced the SITF as of 2/01/2006.

large educational endowments has been less robust, but has improved significantly in recent years

<b>Performance Summary</b>	June 30, 2007
UTIMCO	

			n	a une 20, 2007								
						Periods E	Periods Ended June 30, 2007	30, 2007				
	Net			(Re	turns for P	eriods Long	ger Than C	bne Year ai	(Returns for Periods Longer Than One Year are Annualized)	ed)		
	Asset Value	<u>Ono</u>	Three	Calendar Voar	~!S	Fiscal Voer	0n0	Two	Three	Tour	Divo.	Ton
ENDOWMENT FUNDS	(in Millions)	Month	Months	To Date	Months	To Date	Year	Years	Years	Years	Years	Years
Permanent University Fund	\$ 11,674.8	(0.05)	4.85	9.04	9.04	15.08	17.96	15.39	14.76	16.06	13.17	9.39
General Endowment Fund		(0.04)	4.86	9.25	9.25	15.47	18.36	15.50	14.86	16.14	13.37	N/A
Permanent Health Fund	1,103.1	(0.08)	4.79	9.14	9.14	15.36	18.28	15.42	14.75	16.02	13.25	N/A
Long Term Fund	5,352.9	(0.08)	4.79	9.14	9.14	15.36	18.28	15.43	14.76	16.02	13.27	9.89
Separately Invested Funds	180.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total Endowment Funds	18,311.5											
<b>OPERATING FUNDS</b>												
Short Term Fund	1,474.8	0.43	1.32	2.63	2.63	4.46	5.40	4.81	3.91	3.18	2.84	3.97
Intermediate Term Fund	3,726.0	(0.76)	2.35	5.33	5.33	10.18	12.99	N/A	N/A	N/A	N/A	N/A
Total Operating Funds	5,200.8											
Total Investments	\$ 235173											
BENCHMARKS (1)												
Permanent University Fund: Policy Portfolio		0.17	4.72	7.47	7.47	14.00	16.70	14.94	14.00	14.22	11.42	9.72
General Endowment Fund: Policy Portfolio		0.17	4.72	7.47	7.47	14.00	16.70	14.94	14.00	14.22	11.42	9.30
Short Term Fund: 90 Day Treasury Bills Average Yield	_	0.39	1.27	2.54	2.54	4.30	5.21	4.59	3.77	3.07	2.76	3.79
Intermediate Term Fund: Policy Portfolio		(0.88)	1.54	3.76	3.76	8.80	11.43	N/A	N/A	N/A	N/A	N/A
VALUE ADDED (2)												
Permanent University Fund		(0.22)	0.13	1.57	1.57	1.08	1.26	0.45	0.76	1.84	1.75	(0.33)
General Endowment Fund		(0.21)	0.14	1.78	1.78	1.47	1.66	0.56	0.86	1.92	1.95	N/A
Permanent Health Fund		(0.25)	0.07	1.67	1.67	1.36	1.58	0.48	0.75	1.80	1.83	N/A
Long Term Fund		(0.25)	0.07	1.67	1.67	1.36	1.58	0.49	0.76	1.80	1.85	0.59
Short Term Fund		0.04	0.05	60.0	0.09	0.16	0.19	0.22	0.14	0.11	0.08	0.18
Intermediate Term Fund		0.12	0.81	1.57	1.57	1.38	1.56	N/A	N/A	N/A	N/A	N/A
(1) - Effective May 6, 2004, benchmark returns for the PUF policy portfolio have been restated for prior periods beginning June 1, 1993 through September 30, 2000 and for the GEF/LTF policy portfolio for prior periods beginning June 1, 1993 through September 30, 2000 and for the GEF/LTF policy tortfolio for prior periods beginning June 1, 1993 through September 30, 2000 and for the GEF/LTF policy for the practical matching June 1, 1993 through September 30, 2001 to correct the following technical errors in benchmark construction and calculation: (a) to reflect actual asset class target allocations which were in place, or the practical implementation of changes to those policy allocations, and (b) to distinguish between PUF and GEF/LTF historical investment objectives and distribution policies by accurately representing actual asset class allocations during those periods.	PUF policy port gh September 30 nplementation o set class allocati	folio have b , 2001 to cc f changes tc ons during 1	een restate prrect the fo those polio	olio have been restated for prior periods beginning June 1, 1993 through September 30, 2000 and for the GEF/LTF policy 2001 to correct the following technical errors in benchmark construction and calculation: (a) to reflect actual asset class changes to those policy allocations, and (b) to distinguish between PUF and GEF/LTF historical investment objectives an as during those periods.	eriods begir nnical errors ıs, and (b) to	uning June 1 in benchma distinguish	, 1993 throi urk construc i between P	ugh Septem tion and ca UF and GE	ber 30, 2000 lculation: (a F/LTF histo	) and for the () to reflect rical investn	e GEF/LTF ] actual asset nent objecti	policy class ves and
Benchmark returns for the PUF and GEF/LTF policy portfolios were also restated for all prior periods beginning June 1, 1993 through December 31, 2003 to replace various benchmark returns reported previously for the Private Capital asset class. Specifically, the Wilshire 5000 + 4%, the benchmark used prior to January 1, 2004, was replaced with the Venture Economics Periodic IRR Index a more anononriate benchmark measure for the actual Private Capital portfolio.	rtfolios were als specifically, the <sup>y</sup> ctual Private Can	o restated fo Wilshire 500 ital portfoli	r all prior ] 00 + 4%, th o.	restated for all prior periods beginning June 1, 1993 through December 31, 2003 to replace various benchmark returns ilshire 5000 + 4%, the benchmark used prior to January 1, 2004, was replaced with the Venture Economics Periodic IR al portfolio.	nning June k used prior	l, 1993 thro	ugh Decem] 1, 2004, wa	ber 31, 2003 s replaced v	3 to replace vith the Ven	various bene ture Econon	chmark retu nics Periodi	ms c IRR

Effective August 10, 2006, benchmark returns for the PUF and GEF policy portfolios were also restated for periods beginning January 1, 2006 through April 30, 2006, and for the ITF policy portfolio for periods beginning February 1, 2006 to April 30, 2006, to replace benchmark returns for the Hedge Fund asset class due to integrity concerns regarding existing benchmarks. Specifically, composites of Standard & Poor's investable hedge fund indices were replaced with the MSCI Investable Hedge Fund Index. Index, a more appropriate benchmark measure for the actual Private Capital portfolio.

Complete details of the restatements and previous policy portfolio benchmark history are documented on the UTIMCO website at www.UTIMCO.org or are available upon request.

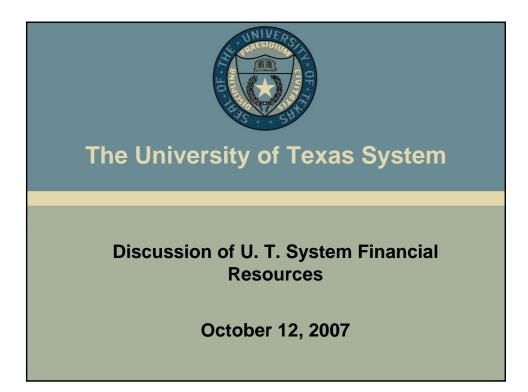
(2) - Value added is a measure of the difference between actual returns and benchmark or policy portfolio returns for each period shown. Value added is a result of the active management decisions made by UTIMCO staff and external managers.

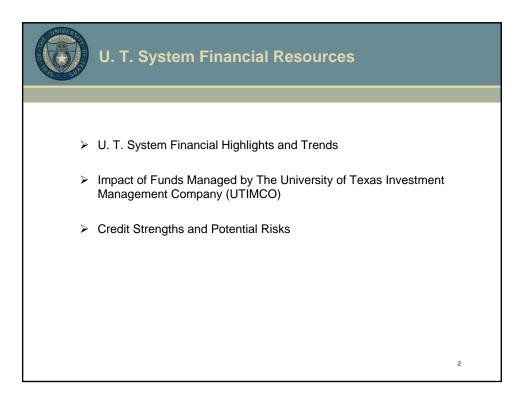
# Note: Sourced from UTIMCO

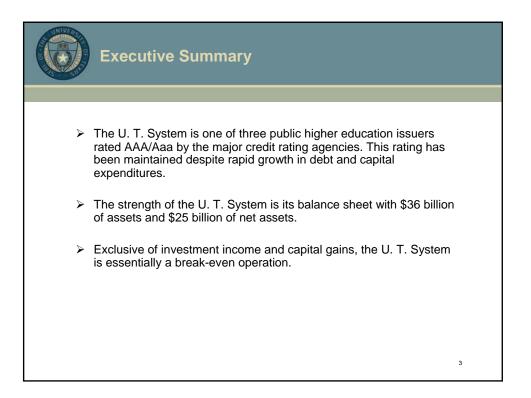
### 8. <u>U. T. System Board of Regents: Discussion of U. T. System assets</u> <u>managed by The University of Texas Investment Management</u> <u>Company (UTIMCO) in context of U. T. System financial resources</u>

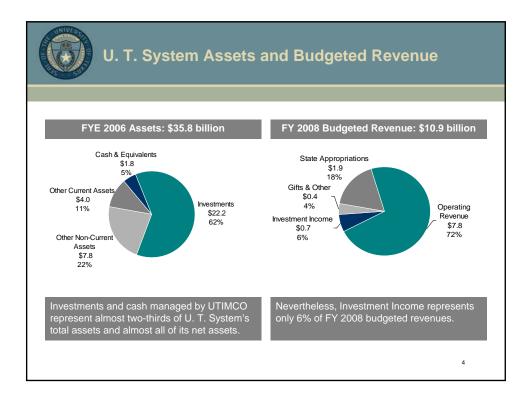
### <u>REPORT</u>

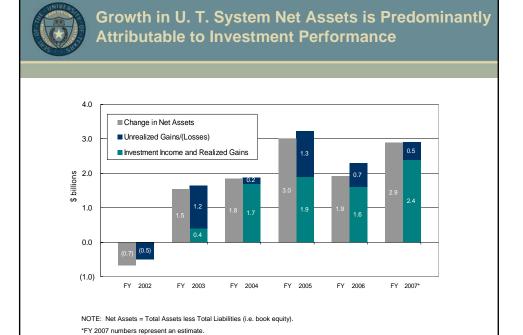
Dr. Scott C. Kelley, Executive Vice Chancellor for Business Affairs, will discuss the importance of investment assets in the context of the U. T. System's overall financial resources. The presentation, set forth on Pages 53 - 62, provides an overview of The U. T. System's assets, liabilities, revenues, and expenditures, and the role that UTIMCO-managed assets play in supporting the financial condition of the U. T. System.

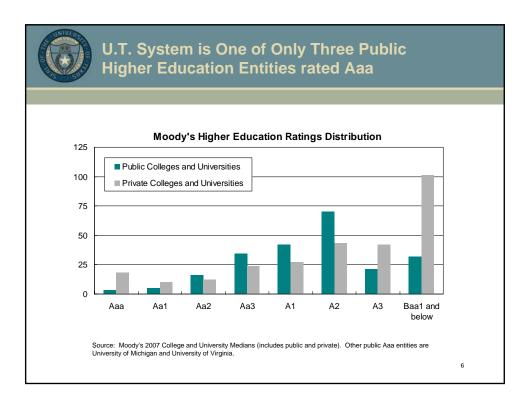


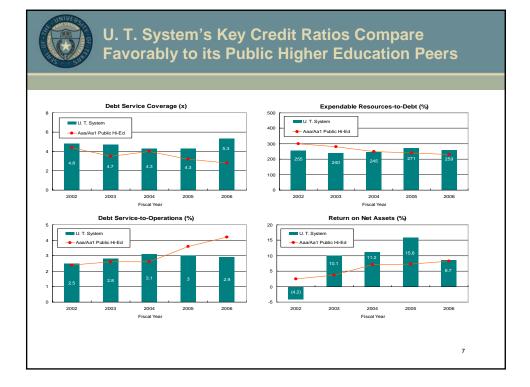




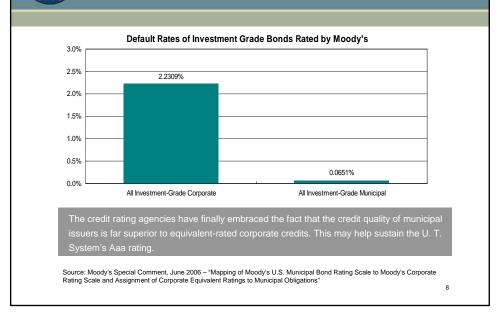


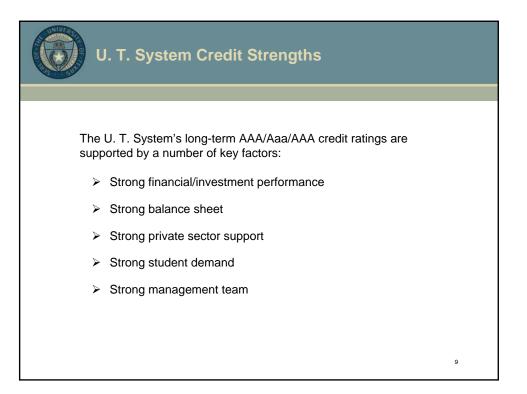


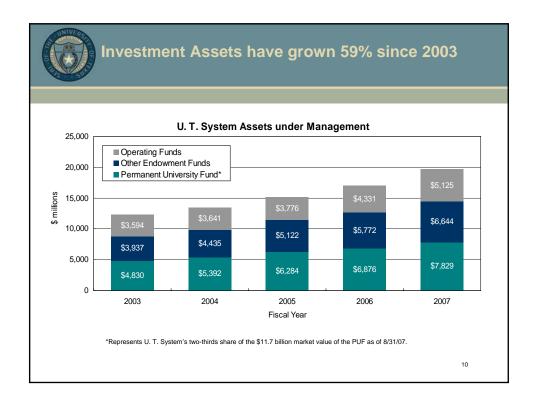




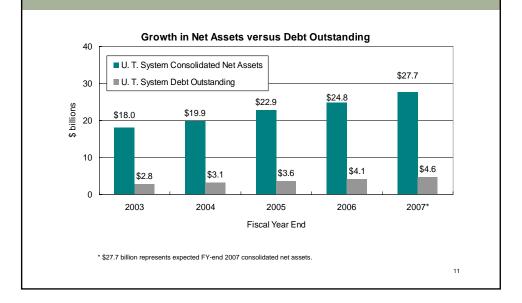
### Default Rates of Investment Grade Municipal Bonds are far below Corporate Default Rates

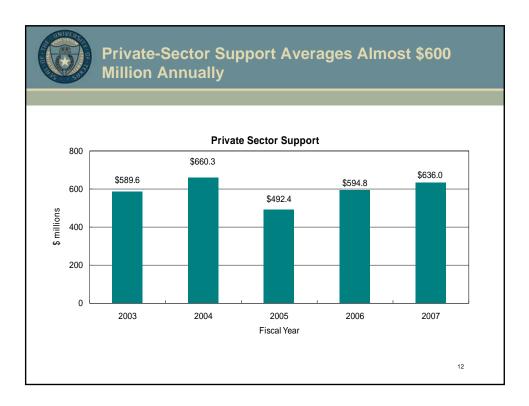


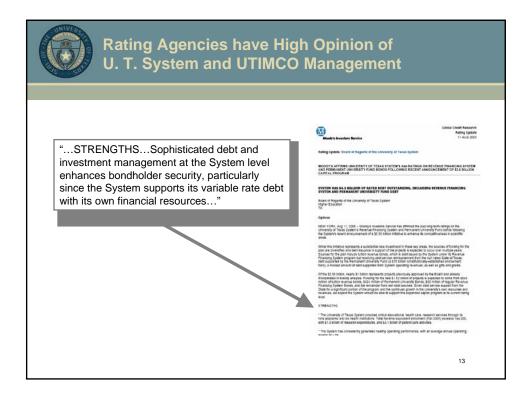


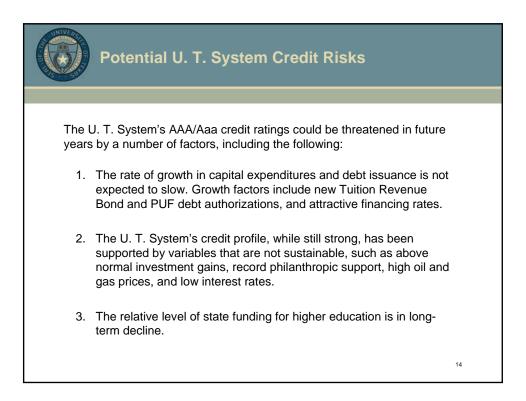


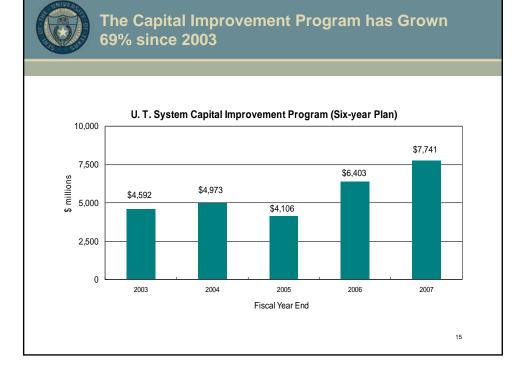


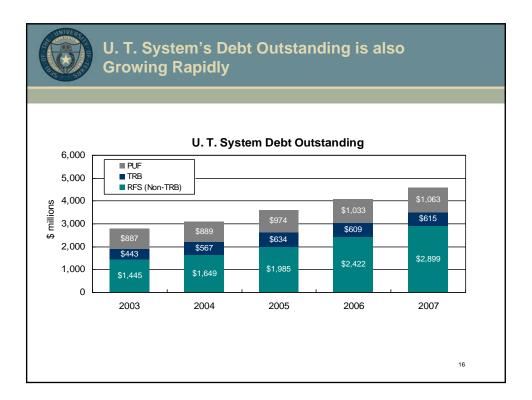








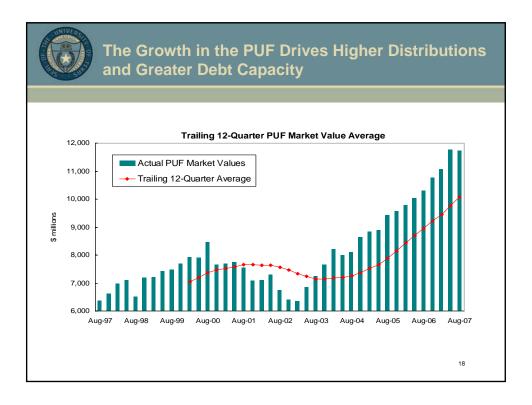


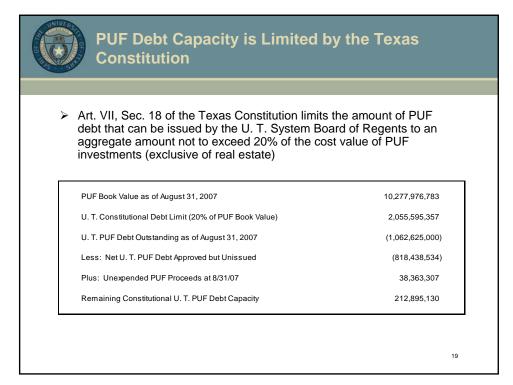


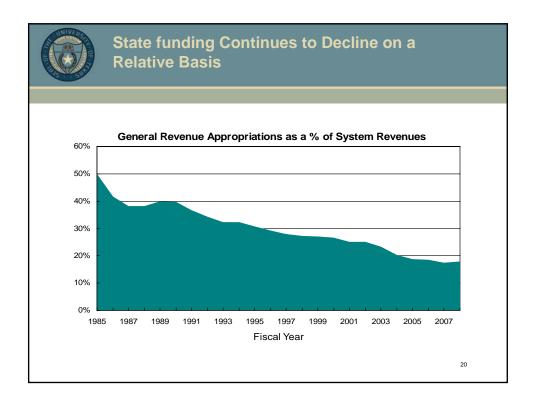
PUF Growth is Due to Capital Gains, Royalty Income, and a Conservative Distribution Policy

### The Permanent University Fund Analysis of Change in the Value of the PUF

(\$ millions)	FY2003	FY2004	FY2005	FY2006	FY2007
Beg. Market Value of Investment Assets	6,738.3	7,244.8	8,087.9	9,426.7	10,313.4
Contribution from PUF Lands	102.0	146.7	193.1	214.9	272.8
Realized Gains on Sales of Securities	(40.0)	731.8	811.3	522.5	614.4
Unrealized Gains on Securities Held	678.8	168.1	487.3	322.9	754.6
Investment Income, Net of Expenses	128.7	144.5	188.3	183.7	188.3
Distributions to the AUF	(363.0)	(348.0)	(341.2)	(357.3)	(400.7
End. Market Value of Investment Assets	7,244.8	8,087.9	9,426.7	10,313.4	11,742.8







### 9. U. T. System Board of Regents: Report on Investment Strategy

Mr. Bruce Zimmerman, Chief Executive Officer and Chief Investment Officer of The University of Texas Investment Management Company (UTIMCO), will report on investment strategy in anticipation of bringing potential changes to the investment policies to the U. T. System Board of Regents at the December 2007 meeting, using the PowerPoint presentation set forth on Pages 64 - 97.



THE UNIVERSITY OF TEXAS INVESTMENT MANAGEMENT COMPANY

## **Investment Strategy**

Joint Meeting of The University of Texas System Board of Regents and UTIMCO Board of Directors October 12, 2007



# Context

- UTIMCO manages investment funds on behalf of The University of Texas System Board of Regents (BoR) according to the Investment Management Services Agreement (IMSA) and certain Investment and other Policies (Policies) that the BoR approves.
- The Policies and IMSA are reviewed annually although no changes are required.
- The Policies document the investment strategies, tactical ranges, controls and risk management practices that UTIMCO pursues and adheres to.
- The purpose of today's discussion is to begin to familiarize the BoR with potential recommended changes to the Policies, which may be brought to the BoR at the December meeting.
- Following today's discussion, the process will entail the UTIMCO staff making specific recommendations as documented in "marked-up" Policies to be presented to UTIMCO's Policy Committee and Board for review, potential revision and approval prior to their presentment to the BoR for its review, potential revision and approval in December.



# **Investment Objectives**

- Investment Objectives dictate Investment Strategies
- Board of Regents Sets Objectives
- Current Objectives:

### Endowments (8.10% Return)

- Distribution (4.75%)
- Preserve Purchasing Power (CPI=3.00%)
- Expenses (.35%)

### ITF (6.35% Return)

- Preserve Purchasing Power (CPI=3.00%)
- Return Target in excess of CPI (3.00)%
- Expenses (.35%)

Risk Taken and Probability of Meeting Objective



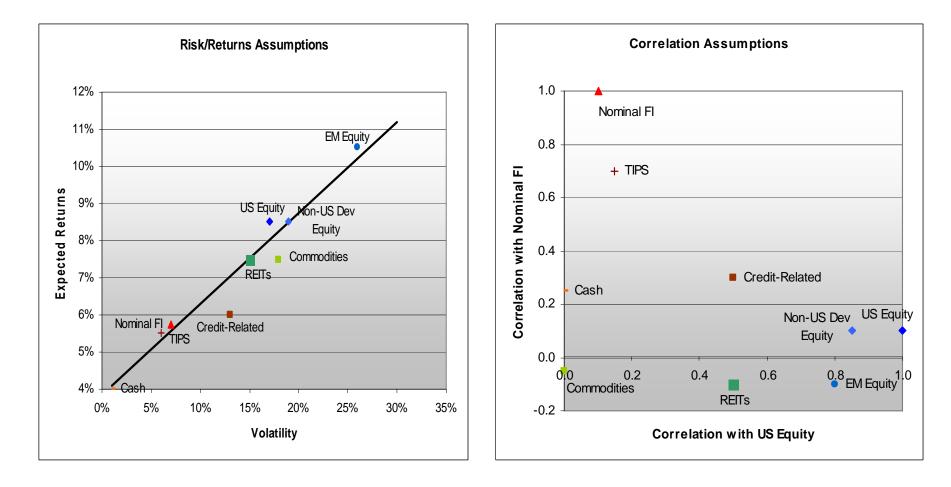


# **Investment Strategy**

- Asset Allocation
  - Strategic
  - Tactical
- Active and Passive Management: Risk Budget
- Illiquidity
- Derivatives/Leverage
- Other Portfolio Management Aspects

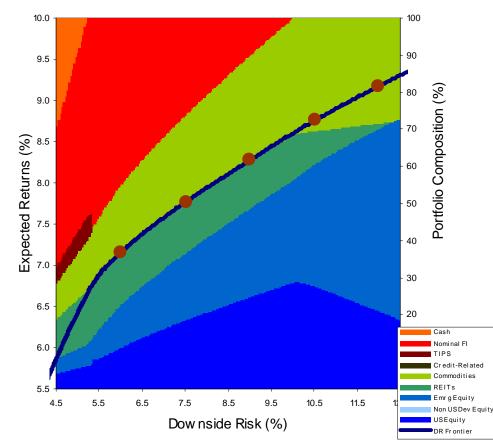


## Passive Asset Classes Assumptions



# Passive Asset Classes - Efficient Frontier and Portfolios

**Passive Asset Classes - Efficient Frontier** 



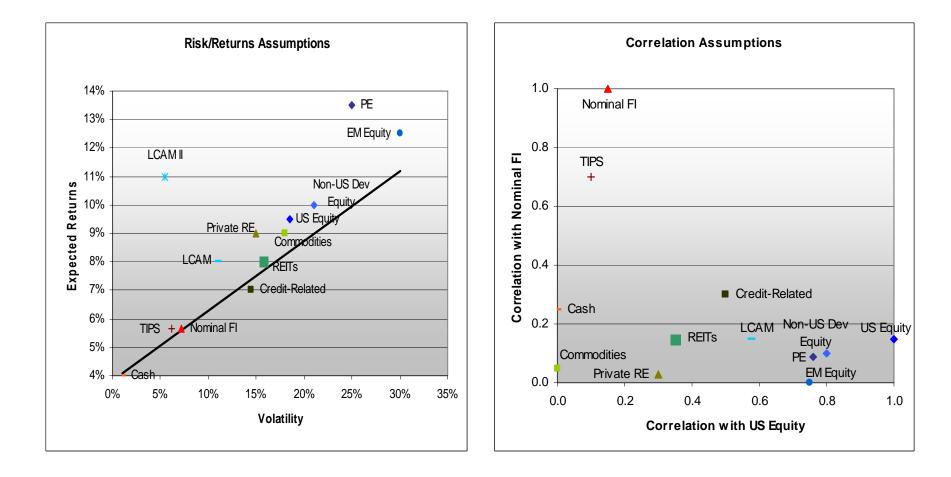
	Passiv	e Asset	Classes	6	
Portfolio	Low (6% DR)	Low/Med (7.5% DR)	Medium (9.0% DR)	Med/High (10.5% DR)	High (12.0% DR)
Cash	0%	0%	0%	0%	0%
Nominal FI	46%	27%	11%	0%	0%
TIPS	0%	0%	0%	0%	0%
Credit-Related	0%	0%	0%	0%	0%
FI	4 <mark>6</mark> %	27%	11%	0%	0%
Commodities	18%	24%	27%	31%	29%
REITS	14%	13%	13%	9%	2%
Real Assets	32%	37%	40%	40%	31%
US Equity	11%	18%	25%	28%	21%
Non-US Dev Eq	0%	0%	0%	0%	0%
EM Equity	11%	18%	24%	32%	48%
Equity	22%	36%	<b>49%</b>	60%	<b>69</b> %
Returns	7.2%	7.8%	8.3%	8.8%	9.2%
Downside Risk	6.0%	7.5%	9.0%	10.5%	12.0%
Sortino Ratio	-0.16	-0.04	0.03	0.06	0.09

69

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#### **Active Asset Classes Assumptions**

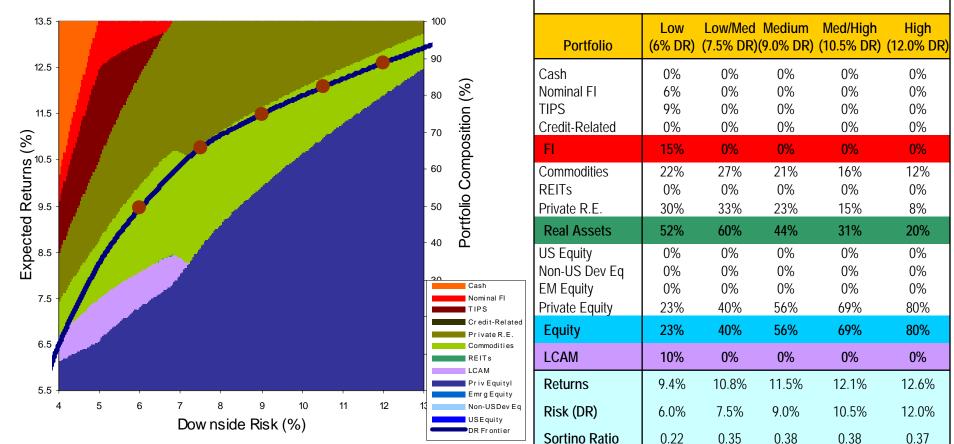




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#### Active Asset Classes – Efficient Frontier and Portfolios

Active Asset Class- Efficient Frontier



Active Asset Class



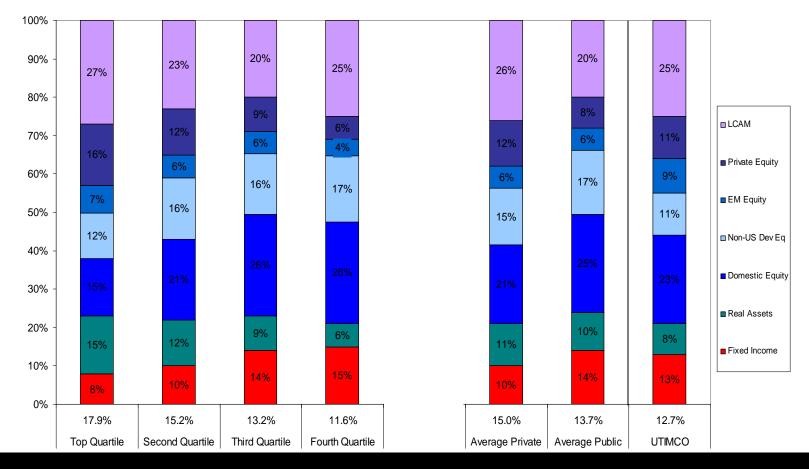
# Efficient Frontier Summary (8.5% DR)

Results	Current Policy Portfolio	Passive	Active	Cambridge Assumptions	LCAM II 11% returns 5.5% vol
Returns	9.3%	8.2%	11.3%	11.4%	12.4%
Downside Risk	8.5%	8.5%	8.5%	8.5%	8.5%
Sortino Ratio	0.14	0.01	0.37	0.39	0.5
Chances of Meeting Return Target (over a ten year period)	62%	51%	76%	77%	81%
Asset Allocation					
Fixed Income	15%	16%	0%	0%	0%
Commodities	3%	27%	23%	20%	0%
REITS	5%	13%	0%	0%	0%
Private Real Estate	0%	0%	26%	11%	0%
Developed Economies	19%	22%	0%	0%	0%
Developing Economies	18%	22%	0%	20%	0%
Private Equity	15%	0%	51%	39%	55%
LCAM	25%	0%	0%	0%	45%



# **Peer Comparisons**

Top Performing Endowments have higher asset allocations to Real Assets, Emerging Markets, Private Equity and Less-Correlated Active Managers and lower allocations to Fixed Income and Developed Economy Equities





#### Asset Classes and Investment Vehicles

#### **Current Portfolio**

		More Constrained, Primarily Long-Only, No Leverage	Less Constrained, Long/Short, Levered <sup>1</sup>	Private Investments	Total
Fixed Income	Investment Grade	13.0%	3.0%	0.0%	16.0%
Fixed income	Credit Related	0.0%	1.0%	1.2%	2.2%
Real Assets	Natural Resources	6.0%	1.0%	0.8%	7.8%
	Real Estate	4.0%	0.0%	0.0%	4.0%
Faultu	Developed Economies	31.5%	22.0%	6.4%	59.9%
Equity	Developing Economies	9.0%	1.0%	0.1%	10.1%
Total		63.5%	28.0%	8.5%	100.0%

<sup>1</sup> Multi-Strategy Managers generally categorized as Developed Economies Equity



#### Less-Correlated Active Managers (NAV in millions)

						Ехро	sure		
Category	N	AV	%	# of Managers	Gross	Net	Long	Short	Large Mandates
L/S – General	\$	1,330	22	7	323%	-17%	153%	-170%	Maverick, Blue Ridge
L/S – Geography	\$	723	12	7	194%	44%	119%	-75%	OZ Eur/Asia, Indus Jap/Asia
L/S – Sector	\$	<u>465</u>	<u>8</u>	<u>7</u>	<u>170%</u>	<u>57%</u>	<u>114%</u>	<u>-57%</u>	Steadfast Financial
Total L/S	\$	2,519	42%	21	258%	14%	136%	-122%	
Multi-Strat - L/S Bias	\$	2,003	34	8	228%	55%	141%	-87%	Farallon, Perry, Protégé
Multi-Strat - General	\$	489	<u>8</u>	<u>4</u>	<u>264%</u>	<u>115%</u>	<u>190%</u>	<u>-74%</u>	Satellite
Total Multi-Strat	\$	2,492	42%	12	235%	67%	151%	-84%	
Arbitrage/Rel Value	\$	786	13%	5	840%	-32%	404%	-436%	Bridgewater, BGI
High Yield/Distressed	\$	<u> 193</u>	<u>3%</u>	<u>4</u>	<u>171%</u>	<u>84%</u>	<u>128%</u>	<u>-43%</u>	Silverpoint
Total	\$	5,991	100%	42	322%	32%	177%	-145%	



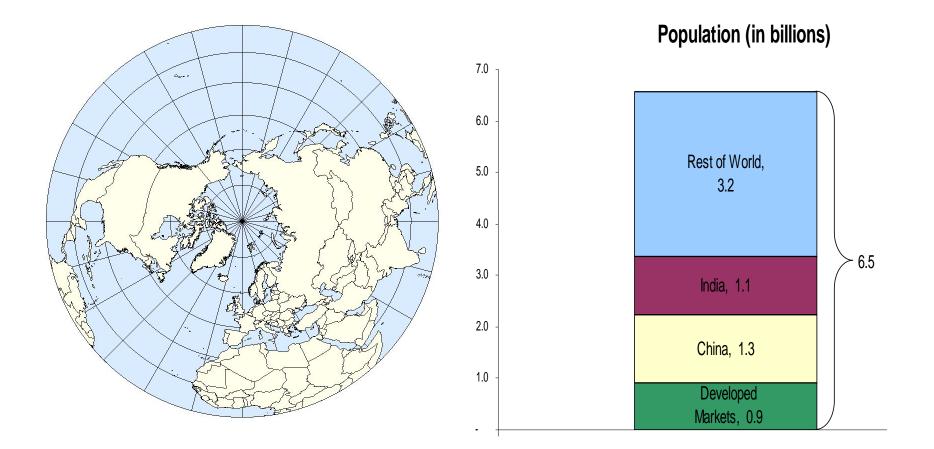
# **Private Equity**

			Exi	Existing Portfolio* (%)			Existing Portfolio (\$)				
	No. of Managers	No. of Funds	Invested	Unfunded Comm.	Economic Exposure	Inve	sted		unded mm.		nomic osure
<u>Category</u>											
US Buyout Euro Buyout EM/Asia Pacific Buyout Global Buyout <b>Total Buyout</b>	17 8 2 <u>3</u> <b>30</b>	32 19 2 <u>6</u> <b>59</b>	20% 15% 1% <u>12%</u> <b>48%</b>	24% 19% 1% <u>6%</u> 51%	23% 17% <u>9%</u> <b>50%</b>	\$	317 239 16 <u>182</u> <b>754</b>	\$	502 394 28 <u>131</u> <b>1,055</b>	\$ \$ \$ \$ \$	819 633 44 <u>313</u> <b>1,809</b>
Venture Capital	21	39	22%	17%	19%		336		362		698
Opportunistic/Other	6	10	6%	11%	9%		95		226		321
Distressed/Mezz	8	18	14%	14%	14%		221		284		505
Energy	8	16	10%	7%	8%		154		143		297
Total	73	142	100%	100%	100%	\$	1,560	\$	2,070	\$	3,630

\* Excludes secondary sale and includes pending commitments



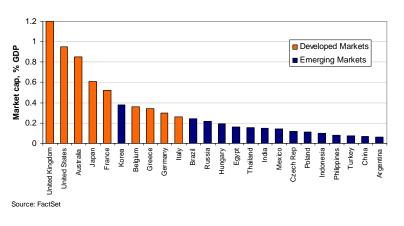
#### Strategic Investment Themes: Global Growth and Emerging Markets



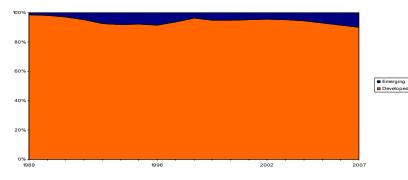


### Emerging Market Economic and Capitalization Trends

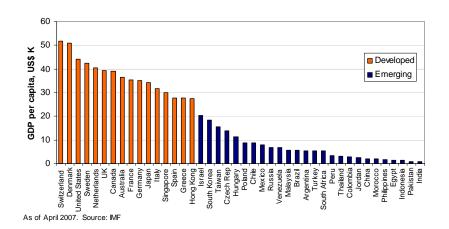
#### Market Cap as % of GDP



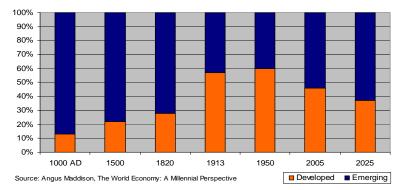
#### Equity Market Capitalization



GDP per Capita











## Emerging Market Risks and Investment Approach

#### <u>Risks</u>

- Political
  - Trade
  - Rule of Law
  - Terrorism/War
- Cycles/Inflation/Volatility
- Corporate Quality
  - Governance
  - Regulation

Local Knowledge/Relationships

Investment Strategy (20% of Total Portfolio, 30% of Total Equity)	<b>Allocation</b>	<u>Range</u>
Primarily Long Only, No Leverage	80%	25-100%
Long/Short, Leverage	10%	0-40%
Private Investments	10%	0-50%

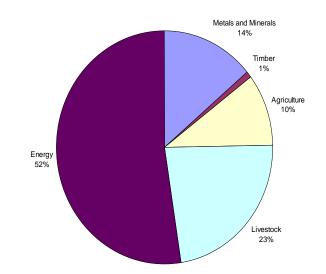


# Natural Resources: How to Invest

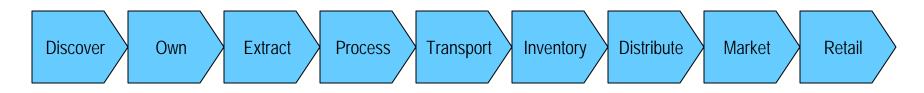
Natural Resources Financial Markets

Market	(trillions)
Futures	\$16.5
Options	2.5
Public Equity	3.0

Capital Market by Type of Resource



#### Natural Resources Supply Chain





#### Impact of China Growth: Global Demand for Resources

					Per Capita Consumption					
	Starting Year	Start Year GDP/Cap*	20 Yr GDP Inc	2006 GDP/Cap	Oil (bbls)	Steel (kg)	Copper (kg)	Alum (kg)	Zinc (kg)	Nickel (kg)
China	2006	\$1,840	TBD	\$1,840	2	250	3	6	2	0.2
Taiwan	1972	\$1,980	8.30%	\$4,810	15	975	15	20	9	2
Korea	1975	\$1,802	8.10%	\$3,849	15	850	25	19	12	4
Japan	1963	\$3,848	6.00%	\$13,901	13	600	10	17	4	2

	Impact of China's Estimated Demand on World Demand							
	Historical Annlzd. Demand Growth 1960-2006	Chinese Demand % World	Estimated Chinese Demand Growth	Estimated World (with China) Demand Growth (if rest of world has avg growth)	Growth Relative to History	% Increase in Avg Growth		
Copper	2.8%	20%	9.3%	4.9%	2.0%	71.0%		
Aluminum	4.6%	24%	4.9%	4.7%	0.1%	2.0%		
Oil	3.1%	8%	10.5%	4.2%	1.2%	39.0%		
Nickel	3.4%	15%	10.0%	5.1%	1.7%	50.0%		
Zinc	2.8%	30%	5.4%	3.7%	1.0%	36.0%		
Lead	2.5%	27%	5.8%	3.6%	1.1%	44.0%		
Tin	1.4%	34%	6.2%	3.6%	2.1%	140.0%		



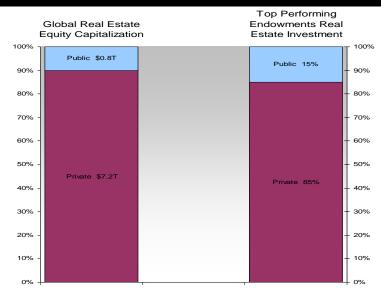
#### Natural Resources Investment Strategy

#### Natural Resources as a Separate Asset Class with a 10% Allocation

	Energy	Metals/Minerals	Ag/Livestock & Timber	Alloc	ations
	(Oil, Gas, Elec, Wind, Water)			Target	Range
Allocations by Typ of Natural Resourc					
Target	55%	25%	20%		
Range	0-70%	0-50%	0-40%		
Investment Vehicle	2S				
Primarily Long Only,	, No Leverage			40%	0-70%
Long/Short, Leverag	ged			30%	0-50%
Private Investments				30%	0-70%



## Strategic Investment Thesis: Real Estate Private Equity



Other, 24% US, 37% China, 4% France, 4% UK, 7% Germany, 8% Japan, 16%

Market Size by Geography

	Public Real Estate Equity		Private Real		
	Target	Range	Target	Range	Total
US	20%	0-50%	20%	0-40%	40%
Europe	20	0-40	10	0-30	30
Asia	<u>20</u>	<u>0-40</u>	<u>10</u>	<u>0-30</u>	<u>30</u>
Total	60%	10-70%	40%	0-60%	100%



#### **Private Investment Commitment Model**

Given a desired "investment level" and capital call/distribution assumptions, annual commitment 'budgets' can be modeled.

Private Equity								
	Capital calls	Unfunded Capital calls commitments Distributions						
Present		100%						
Year 1	18%	82%	0%					
Year 2	21%	61%	6%					
Year 3	19%	42%	10%					
Year 4	15%	27%	12%					
Year 5	11%	16%	14%					
Year 6	9%	7%	16%					
Year 7	4%	3%	19%					
Year 8	3%	-	23%					
Year 9		-	23%					
Year 10		-	18%					
Year 11		-	13%					
Year 12		-	7%					

	Private Re	al Estate	
	Capital calls	Unfunded commitments	Distributions
Present		100%	
Year 1	21%	79%	
Year 2	32%	47%	
Year 3	32%	15%	
Year 4	15%	-	26%
Year 5		-	25%
Year 6		-	43%
Year 7		-	34%
Year 8		-	4%

Drivata Doal Estata



## **Commitment Plan**

	2007	2008	2009	2010	2011	2012
Credit Related						
% of portfolio Unfunded commitment	1.2% 1.6%	1.4%	1.7%	2.1%	2.5%	2.9%
Annual commitment	\$200m	2.5% \$250m	3.0% \$225m	3.1% \$200m	3.0% \$200m	2.9% \$200m
	\$20011	\$Z0011	\$ZZ0111	\$200III	\$20011	\$200111
Natural Resources % of portfolio	0.9%	0.8%	1.0%	1.5%	2.2%	3.0%
Unfunded commitment	0.8%	1.8%	3.1%	4.2%	4.7%	4.6%
Annual commitment	\$40m	\$250m	\$350m	\$400m	\$370m	\$300m
Developed PE						
% of portfolio	6.5%	7.4%	8.2%	8.9%	9.5%	9.7%
Unfunded commitment	9.6%	9.4%	8.5%	7.7%	6.9%	6.9%
Annual commitment	\$740m	\$500m	\$400m	\$400m	\$400m	\$550m
Emerging PE						
% of portfolio	0.1%	0.1%	0.3%	0.8%	1.4%	2.1%
Unfunded commitment	0.2%	1.2%	2.4%	3.3%	3.7%	3.3%
Annual commitment	\$30m	\$210m	\$300m	\$300m	\$300m	\$150m
Total % of portfolio	8.6%	9.7%	11.3%	13.3%	15.6%	17.7%
Total commitments	\$1010m	\$1210m	\$1275m	\$1300m	\$1270m	\$1200m
Real Estate	2007	2008	2009	2010	2011	2012
% of portfolio		0.0%	0.3%	1.1%	2.6%	4.2%
Unfunded commitment		1.3%	2.0%	2.1%	2.3%	1.3%
Annual commitment		\$250m	\$400m	\$500m	\$500m	\$500m
Total Illiquid	8.6%	9.7%	11.5%	14.4%	18.1%	22.0%



### PUF and GEF Strategic Asset Allocation FY 2012 Recommendation vs Current

		More Constrained Primarily Long-Only, No Leverage		Less Constrained Long/Short, Levered		Private Investments		Total	
Fixed	Investment Grade	5.5%	13.0%	2.0%	3.0%	0.0%	0.0%	7.5%	16.0%
Income	Credit Related	1.5%	0.0%	3.0%	1.0%	3.0%	1.2%	7.5%	2.2%
Real	Natural Resources	4.0%	6.0%	3.0%	1.0%	3.0%	0.8%	10.0%	7.8%
Assets	Real Estate	5.0%	4.0%	1.0%	0.0%	4.0%	0.0%	10.0%	4.0%
Equity	Developed Economies	16.0%	31.5%	19.0%	22.0%	10.0%	6.4%	45.0%	59.9%
Equity	Developing Economies	16.0%	9.0%	2.0%	1.0%	2.0%	0.1%	20.0%	10.1%
Total		48.0%	63.5%	30.0%	28.0%	22.0%	8.5%	100.0%	100.0%

Black = Recommended Portfolio Red = Current Portfolio



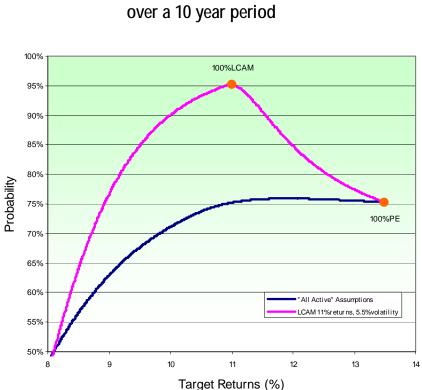
#### **Recommended Strategy in Existing Format**

	Actual Allocation	Current Policy	Recommended Policy
Cash	3.0	0.0	N/S
Nominal Bonds	7.0	10.0	N/S
TIPs	3.0	5.0	N/S
Investment Grade	N/S	N/S	5.5
Credit Related (Primarily Long Only)	<u>N/S</u>	<u>N/S</u>	<u>1.5</u>
Total Fixed Income	13.0	15.0	7.0
Public Real Estate	4.0	5.0	5.0
Private Real Estate	<u>N/A</u>	<u>N/A</u>	<u>4.0</u>
Total Real Estate	4.0	5.0	9.0
Natural Resources (Primarily Long Only)	4.0	3.0	4.0
US Public Equity	23.0	20.0	8.0
Non-US Dev Pub Equity	<u>11.0</u>	<u>10.0</u>	<u>8.0</u>
Total Developed Equity	34.0	30.0	16.0
Developing Equity	9.0	7.0	16.0
Buy out	9.0	11.0	N/S
VC	<u>2.0</u>	<u>4.0</u>	<u>N/S</u>
Private Equity (Including Natural Resources and Credit Related)	11.0	15.0	18.0
Abs Ret	15.0	15.0	N/S
Directional	<u>10.0</u>	<u>10.0</u>	<u>N/S</u>
LCAM (Including Natural Resources and Credit Related)	25.0	25.0	30.0
Total Assets	100.0%	100.0%	100.0%



## PUF and GEF Recommendation – Projected Results

- Expected Returns: 9.9%
- Downside Risk: 9.1%
- Sortino Ratio .20
- Probability of meeting 66%
   10 year return target
- Less attractive risk/return profile than unconstrained portfolio
  - 15% FI (vs 0% in unconstrained portfolio)
  - 4% Private Real Estate (vs 18-33%)
  - 18% Private Equity (vs 32-40%)



Probability of Achieving 8.1% returns over a 10 year period



## **Asset Allocation Tactical Ranges**

	Primarily Long, Non-Levered		Long/	Long/Short, Levered		Private Investments		Total				
	<u>Min</u>	<u>Target</u>	<u>Max</u>	<u>Min</u>	Target	<u>Max</u>	<u>Min</u>	Target	<u>Max</u>	<u>Min</u>	<u>Target</u>	<u>Max</u>
Investment Grade	5.0%	5.5%	15.0%	0.0%	2.0%	5.0%	0.0%	0.0%	5.0%	5.0%	7.5%	20.0%
Credit-Related	<u>0.0%</u>	<u>1.5%</u>	<u>5.0%</u>	<u>1.0%</u>	<u>3.0%</u>	<u>5.0%</u>	<u>0.0%</u>	<u>3.0%</u>	<u>5.0%</u>	<u>2.5%</u>	<u>7.5%</u>	<u>10.0%</u>
Total Fixed Income	5.0%	7.0%	20.0%	1.0%	5.0%	10.0%	0.0%	3.0%	7.5%	7.5%	15.0%	25.0%
Natural Resources	2.0%	4.0%	6.0%	1.0%	3.0%	5.0%	1.0%	3.0%	6.0%	5.0%	10.0%	15.0%
Real Estate	<u>2.5%</u>	<u>5.0%</u>	<u>7.5%</u>	<u>0.0%</u>	<u>1.0%</u>	<u>3.0%</u>	<u>2.0%</u>	<u>4.0%</u>	<u>8.0%</u>	<u>5.0%</u>	<u>10.0%</u>	<u>15.0%</u>
Total Real Assets	4.5%	9.0%	13.5%	1.0%	4.0%	8.0%	3.0%	7.0%	12.0%	8.5%	20.0%	30.0%
Developed Economies	12.0%	16.0%	25.0%	15.0%	19.0%	25.0%	7.5%	10.0%	15.0%	32.5%	45.0%	55.0%
Developing Economies	<u>10.0%</u>	<u>16.0%</u>	<u>25.0%</u>	<u>0.0%</u>	<u>2.0%</u>	<u>5.0%</u>	<u>0.0%</u>	<u>2.0%</u>	<u>5.0%</u>	<u>10.0%</u>	<u>20.0%</u>	<u>25.0%</u>
Total Equity	25.0%	32.0%	40.0%	15.0%	21.0%	30.0%	7.5%	12.0%	20.0%	47.5%	65.0%	65.0%
Total	42.0%	48.0%	60.0%	25.0%	30.0%	33.0%	15.0%	22.0%	25.0%	100.0%	100.0%	105.0%



# **Implementation Timetable**

Asset Class target reached in 3 years, Investment Vehicle reached in 5 years

Asset Class	Adjusted Current	FY 08 Target	FY 09 Target	FY 10 Target	FY 11 Target	FY 12 Target
Investment Grade	16.0%	12.0%	10.0%	7.5%	7.5%	7.5%
Credit Related	2.2	5.0	7.0	7.5	7.5	7.5
Natural Resources	7.8	9.0	10.0	10.0	10.0	10.0
Real Estate	4.0	6.0	8.0	10.0	10.0	10.0
Developed Economies	59.9	56.5	50.0	45.0	45.0	45.0
Developing Economies	<u>10.1</u>	<u>12.5</u>	<u>15.0</u>	<u>20.0</u>	<u>20.0</u>	<u>20.0</u>
Total Assets	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Investment Vehicle						
LCAM	28.0%	30.0%	30.0%	30.0%	30.0%	30.0%
Private Equity	8.6%	9.7%	11.5%	14.4%	18.1%	22.0%



## Benchmarks

		More Constrained, Primarily Long-Only, No Leverage	Less Constrained, Long/Short, Levered	Private Investments
Fixed Income	Investment Grade	Lehman Brothers Global Aggregate		
Fixed income	Credit Related	Citigroup High Yield		
Deel Acceto	Natural Resources	DJ-AIG		
Real Assets	Real Estate	60% DJ Wilshire	RESI + 40% NCREIF	
Fruitz	Developed Economies	MSCI World Index ex EM		
Equity	Developing Economies	MSCI EM Index with Net Dividends		

Long/Short, Levered: MSCI Investable HF Index

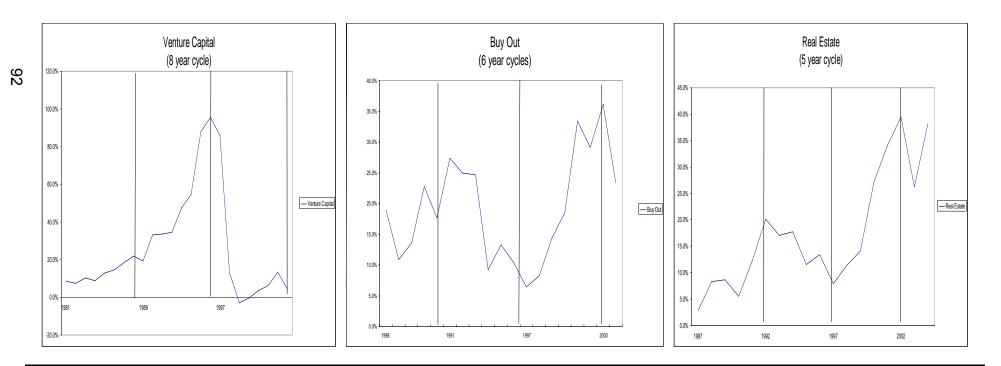
Private Investments: Venture Economics Periodic IRR Index

9



# Illiquidity: Cash Needs and Cycles

- While the PUF and GEF's cash needs are only 5% per year, the need to liquidate "illiquid" investments at inopportune times during a cycle pose a significant risk.
- 10 year cycles and 5% annual distribution result in a "simplistic" illiquidity cap of 50%





#### Illiquidity and Unfunded Commitment Limits

#### Current Portfolio

Asset Class	% of Portfolio	Illic	luid	Semi-liquid <sup>2</sup>	
		% of Asset Class	% of Total Portfolio	% of Asset Class	% of Total Portfolio
Investment Grade	16%	10%	2%	4%	1%
Credit Related	2%	80%	2%	64%	1%
Natural Resources	8%	56%	4%	47%	4%
Real Estate	4%	0%	0%	0%	0%
Developed Economies	60%	33%	20%	20%	12%
Developing Economies	<u>10%</u>	1%	<u>0%</u>	1%	<u>0%</u>
Total	100%		28%		18%

#### **Recommended Portfolio**

Asset Class	% of Portfolio	Illic	1 Juid	Semi-liquid		
		% of Asset Class	% of Total Portfolio	% of Asset Class	% of Total Portfolio	
Investment Grade	7.5%	0%	0%	0%	0%	
Credit Related	7.5%	62%	4%	48%	3%	
Nat Resources	10.0%	56%	5%	46%	4%	
Real Estate	10.0%	75%	7%	72%	7%	
Developed Economies	45.0%	42%	21%	28%	14%	
Developing Economies	<u>20.0%</u>	27%	<u>4%</u>	22%	<u>3%</u>	
Total	100.0%		43%		33%	

<sup>1</sup> Liquidity = 3 months  $^2$  Liquidity = 1 year



## Recommended Unfunded Commitment Constraints

Asset Class	Recommended Portfolio						
	Invested	Target Unfunded Commitment	Max Unfunded Commitment				
Investment Grade	0%	0%	2%				
Credit Related	3%	4%	5%				
Natural Resources	3%	5%	7%				
Real Estate	4%	6%	8%				
Developed Economies	10%	12%	14%				
Developing Economies	<u>2%</u>	<u>4%</u>	<u>6%</u>				
Total	22%	31%	42%				



## **Derivative Policy**

- In October, 2002 the Board approved the Derivative Investment Policy which details the
  - 1) Applications for,
  - 2) Documentation of, and
  - 3) Limitations on and monitoring of

the use of derivatives by UTIMCO staff and its External Managers operating under Agency Agreements

- Permitted Applications involve:
  - Assist with portfolio risk management
  - Alter systemic (market) exposure
  - Construction of risk/return portfolios which can't be created using the cash market
  - Provide for efficiency in strategic implementation
  - Facilitate mandate transitions

Derivatives are not permitted in asset classes inconsistent with Investment Policies

- Required Documentation includes:
  - Purpose
  - Justification
  - Baseline Portfolio
  - Derivative Application Portfolio

- Risks (including at a minimum: Modeling, Pricing, Liquidity and Legal)
- Expected change in systematic and specific risk
- Procedures in place to monitor and manage
- Contracts/procedures to account for value

- Limitations include:
  - Downside Risk vs Baseline must be within ± 20%
  - "Global" exposure must be within Strategic Asset Allocation
  - Counterparty must be A-/A3 or better and no more than 1% of total fund net exposure to a single counterparty
- Monitoring includes daily mark-to-market and review by Risk Management and CIO



# **Approved Derivatives and Leverage**

- In June 2003, the Board approved UTIMCO Staff to use derivatives in three applications:
  - US Equity: Market Cap and Sector "Shifts"
  - Non-US Equity: Country/Geography "Shifts"
  - GSCI: Gain commodity exposure
- In September 2003, the Board approved UTIMCO Staff to use derivatives in a "Structured Active Management" application:
  - Maintain US equity market exposure
  - Obtain active return via hedge fund mandates/risk

A limit of 5% of the Total Fund was placed on this application

- The CIO recommend three changes/enhancements to the risk management/reporting of the use of derivatives
  - The Structured Active Management application will be disaggregated for reporting purposes into the US
    equity and hedge fund elements of the application
  - The Notional Delta Equivalent associated with the use of options will be used to calculate the "Global" exposure vis-à-vis the Strategic Asset Allocation
  - Each element of the derivative application will be reported in its respective asset allocation for the purposes of calculating the "Global" exposure vis-à-vis the Strategic Asset Allocation



# **Current ITF Strategic Asset Allocation**

#### No change recommended for ITF at this time

As of June 30, 2007		More Constrained, Primarily Long-Only, No Leverage	Less Constrained, Long/Short, Levered	Private Investments	Total
Fixed Income	Investment Grade	35.0%	2.7%	0.0%	37.7%
	Credit Related	0.0%	0.9%	0.0%	0.9%
Real Assets	Natural Resources	5.0%	0.9%	0.0%	5.9%
	Real Estate	8.0%	0.0%	0.0%	8.0%
Equity	Developed Economies	22.0%	19.6%	0.0%	41.6%
Equity	Developing Economies	5.0%	0.9%	0.0%	5.9%
Total		75.0%	25.0%	0.0%	100.0%