

VII. STANDING COMMITTEES

B. Finance, Audit and Facilities Committee

Annual Investment Program Update

This item is for information only.

Attachment

Investment Program Update, A Report to the Board of Regents, May 9, 2013



Investment Program Update

*A Report to the Board of Regents
May 9, 2013*

Treasury Office
University of Washington

Investment Program Update

A Report to the Board of Regents

May 9, 2013

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Executive Summary

- The Consolidated Endowment Fund (CEF) and Invested Funds (IF) are reviewed annually with the Board of Regents. Historically, changes to the asset allocation policy have been presented to the Board for approval every two to five years and reflect the continuing evolution of the investment program and the capital markets.
- The proposed changes (in red) to the CEF policy asset allocation are summarized below:

Investment Strategy	Long-Term Policy Target		Policy Range
	Current	Proposed	
Emerging Markets Equity	17%	17%	
Developed Markets Equity	36%	28%	
Private Equity		15%	
Real Assets	11%	7%	
Opportunistic	6%	3%	
Capital Appreciation Fund	70%		55%–85%
Absolute Return	15%	19%	
Fixed Income	15%	11%	
Capital Preservation Fund	30%		15%–45%

- Over the next 5–7 years, UWINCO, the UW investment team and other market participants anticipate a low return environment. Their forecasts, of 6.5% to 7.0% on average for a diversified fund with the CEF’s asset allocation, are in line with the endowment spending requirement of 5%. This allows an additional cushion of 1.5% to 2.0% for inflation in order to maintain program support at current levels.
- Proposed changes to the Invested Funds include the addition of diversifying investments beyond the CEF in the renamed Diversified Investment Pool (formerly the “CEF Pool”). The Regents’ authority to approve interfund loans to the CEF is clearly delineated in policy.
- CEF and IF performance was solid in calendar year 2012 at 12.2% and 4.4%, respectively. Longer term performance shows continuing improvement.

Roles and Responsibilities

Investment Program Overview

The Board of Regents of the University of Washington is vested by statute with responsibility for the management of the properties of the University, including the Consolidated Endowment Fund (CEF) and other University funds.

Investment program oversight resides with the Finance, Audit and Facilities Committee (FAF), a committee of the Board of Regents. In May 2001, the Board approved the establishment of an advisory committee, the University of Washington Investment Committee (UWINCO), consisting of Board members and external investment professionals. In 2004, the Board approved the appointment of the University's first Chief Investment Officer (CIO) to manage the day to day activities of the investment portfolios.

Source: Statement of Investment Objectives and Policy for the Consolidated Endowment Fund

Governance

Board of Regents

Sets Investment Policy

- Spending rate
- Strategic asset allocation
- Delegations

Appoints Investment Officer/Advisors

- Chief Investment Officer (CIO)
- UWINCO members
- Investment consultants

Reviews Program

- Program oversight/accountability

Investment Committee (UWINCO)

Advises CIO

- Investment planning
- Asset allocation
- Manager identification
- Market trends

Advises the Board of Regents

- Investment program oversight
- CIO oversight

Chief Investment Officer (CIO)

Implements Investment Program

- Day-to-day management
- Tactical asset allocation
- Manager appointments
- Manager terminations
- Risk management
- Research

Monitors Results

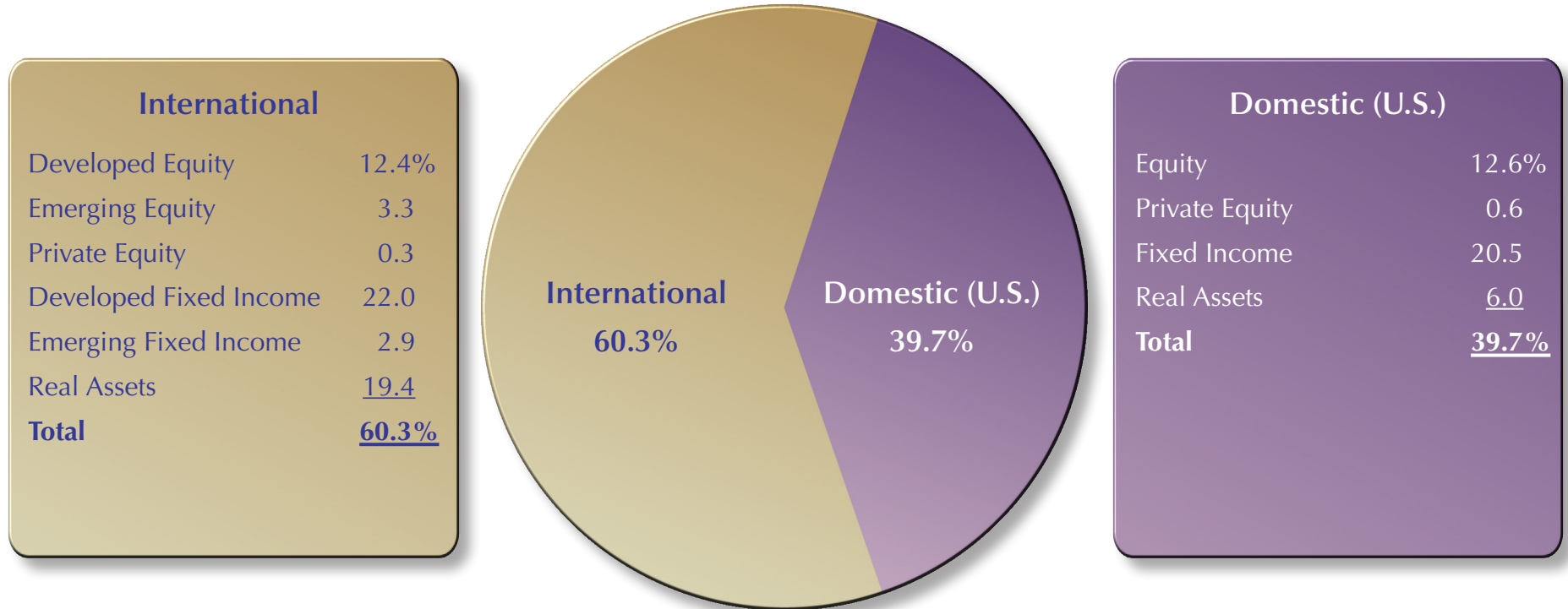
- Performance reporting

Governance of the investment program is defined around clearly established roles and responsibilities.

Capital Markets

Global Capital Market Composition

\$123.8 Trillion as of December 31, 2012



Sources:

Public Equity: S&P/Citigroup Broad Global Index

Private Equity: Cambridge Associates Venture Capital and Private Equity Universe

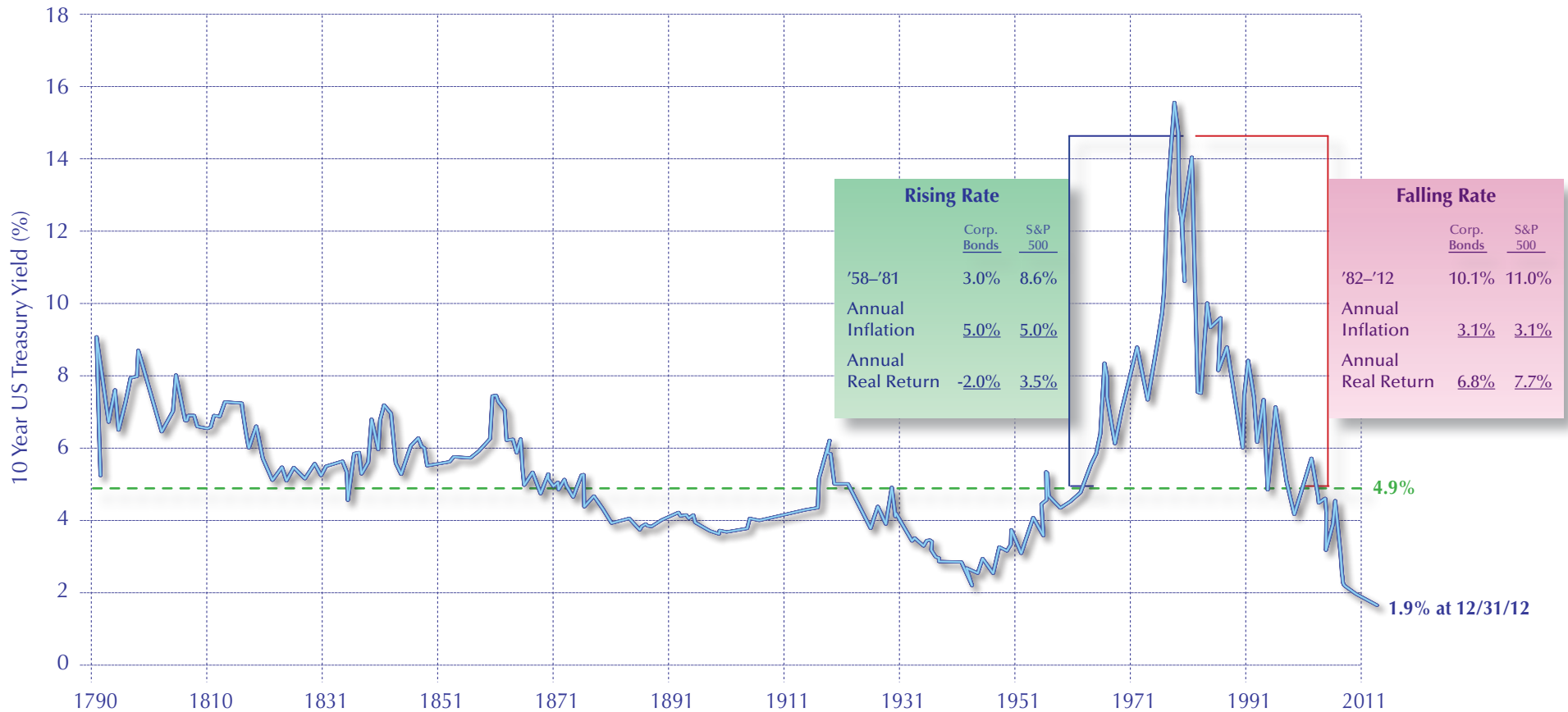
Fixed Income: Merrill Lynch Global Bond Indices, Goldman Sachs Convertible Market Statistics, Ed Altman NYU Salomon Center

Real Assets: CBRE Investor Global Investable Universe, Goldman Sachs Commodity Index (Production Value)

Note: does not include currency or derivatives

Over the last 8 years, global capital markets shifted from 62% domestic/38% international to nearly the reverse.

Historical 10-Year Treasury Yields

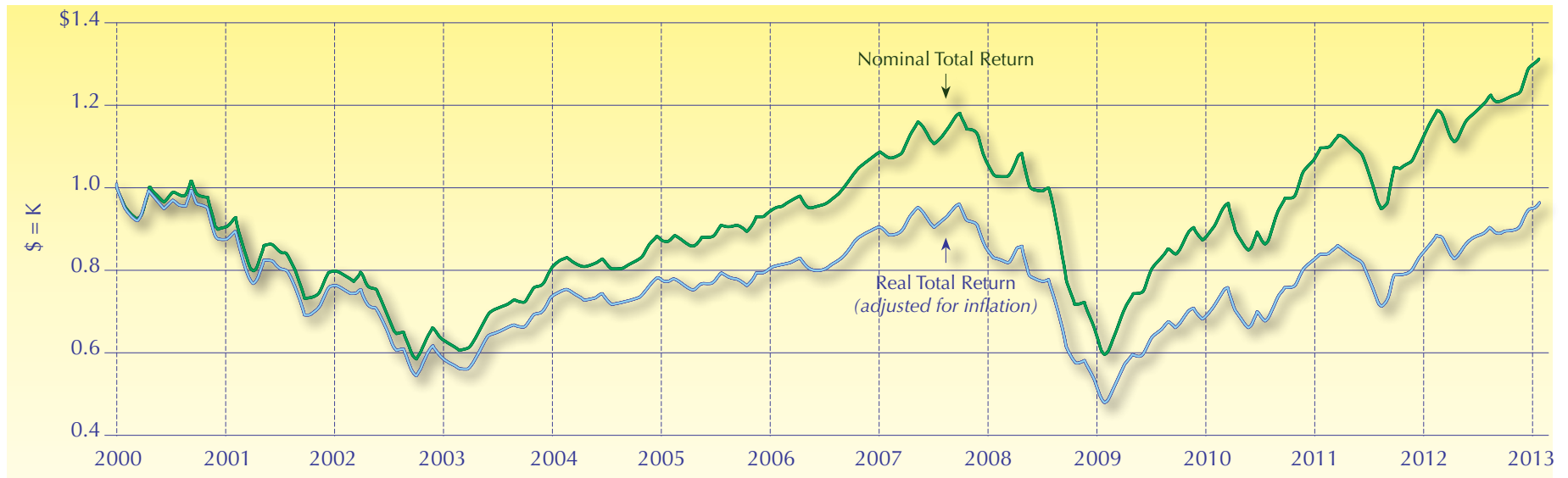


Sources: Goldman Sachs & JP Morgan

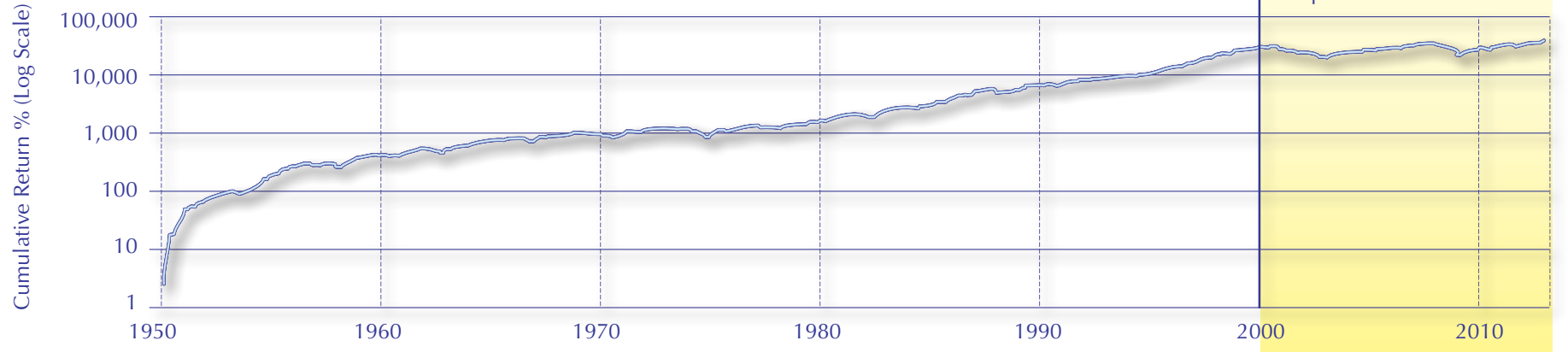
Historically low interest rates present risk of owning longer maturity US Treasuries.

Historical S&P 500 Returns

\$1,000 Invested on January 1, 2000



Cumulative Nominal Return Beginning 1/1/1950 (Dividends Reinvested)



Source: Bloomberg

Although S&P cumulative nominal returns generally trend upwards over time, real returns (adjusted for inflation) have been negative since 2000.

Consolidated Endowment Fund Profile and Positioning

Consolidated Endowment Fund (CEF) Profile

Description: A permanent fund established through private gift funds to support the program specified by the donor.

Size: \$2.2 billion at December 31, 2012 including \$0.4 billion of operating funds.

Composition: Over 3,900 individual endowments which are comingled for investment purposes, similar to a mutual fund.

Primary Objective: To preserve the purchasing power of each endowed gift over time. This objective drives the discussion on spending policy, return requirements, long-term asset allocation and risk tolerance.

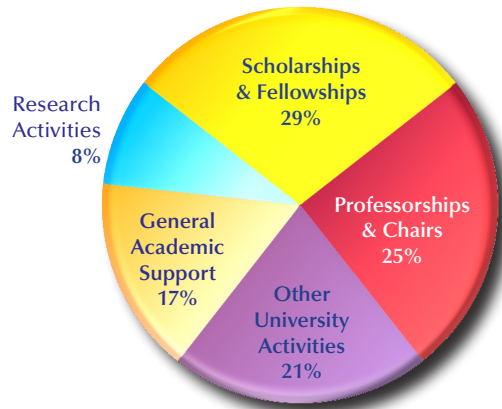
Secondary Objective: To provide a steady stream of income to support individual programs. This objective influences the spending formula used in calculating the income distributions.

CEF Characteristics

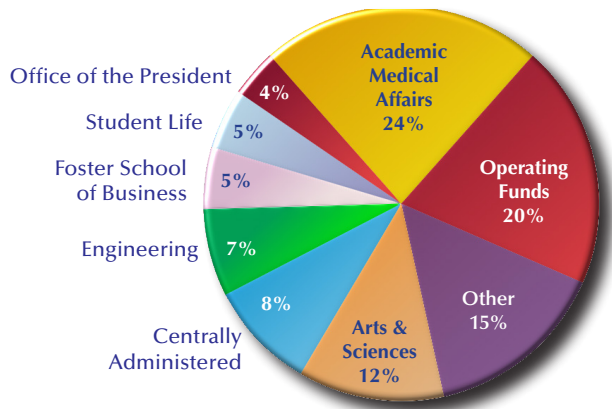
as of December 31, 2012 (\$=M)

Endowed Program Support

Principal by Purpose



Principal by School & College



Endowment Distributions

As a Percentage of Total UW Revenues

Fiscal Years	Total UW Annual Revenues	CEF Distributions	Percent
2005	\$3,025	\$62	2.0%
2006	\$3,250	\$70	2.2%
2007	\$3,666	\$81	2.2%
2008	\$3,427	\$94	2.8%
2009	\$3,054	\$75	2.5%
2010	\$3,923	\$59	1.5%
2011	\$4,304	\$76	1.8%
2012*	\$3,924	\$85	2.2%

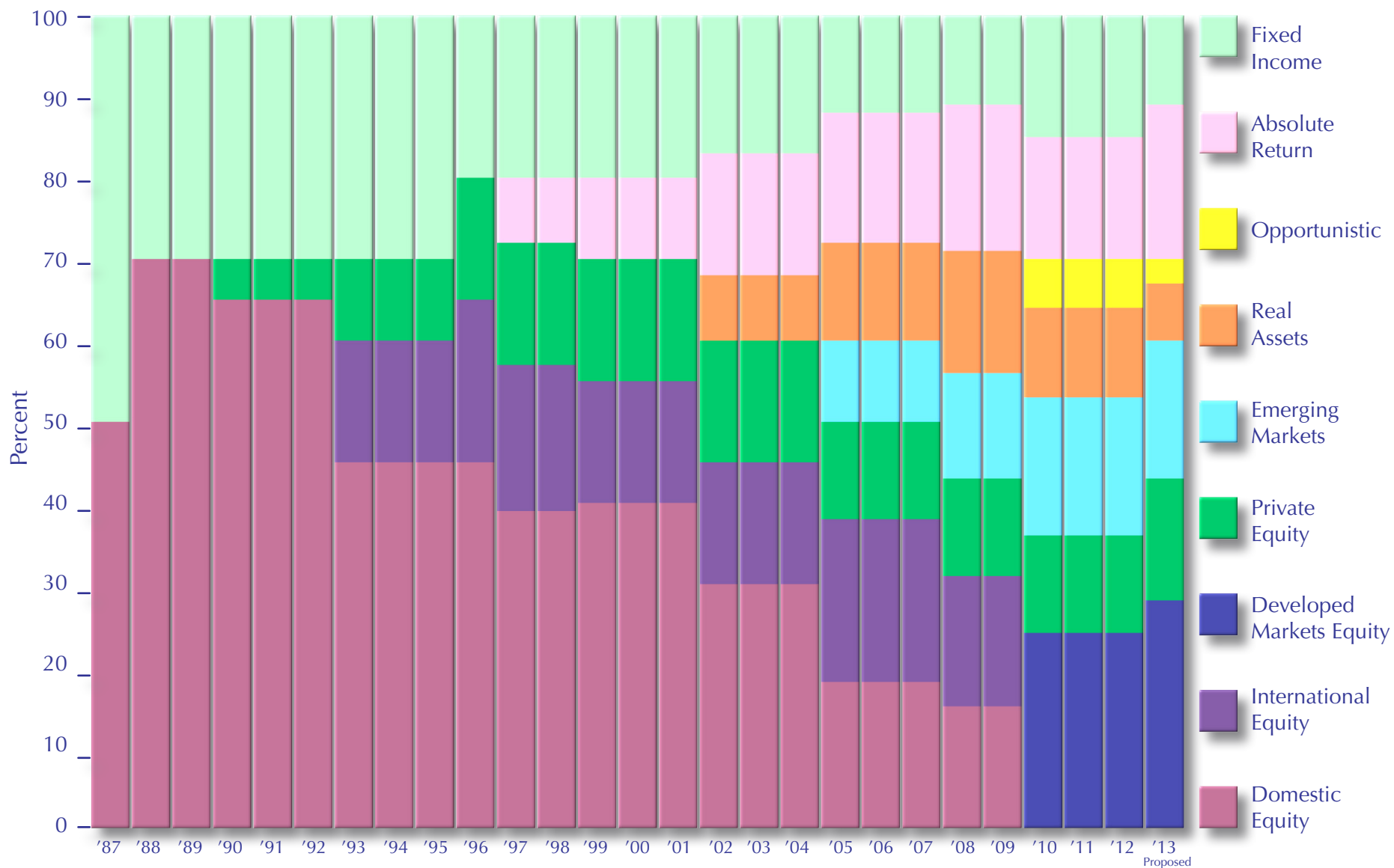
* Excludes discrete component units

Distributions by Fiscal Year



Budget constraints highlight the funding importance of the endowment. In FY 2012, the endowment distributed \$85 million. With the addition of other investment returns disbursed to campus units and central administration, the total distributed was \$110 million—the equivalent of half of state funding for UW in FY 2012.

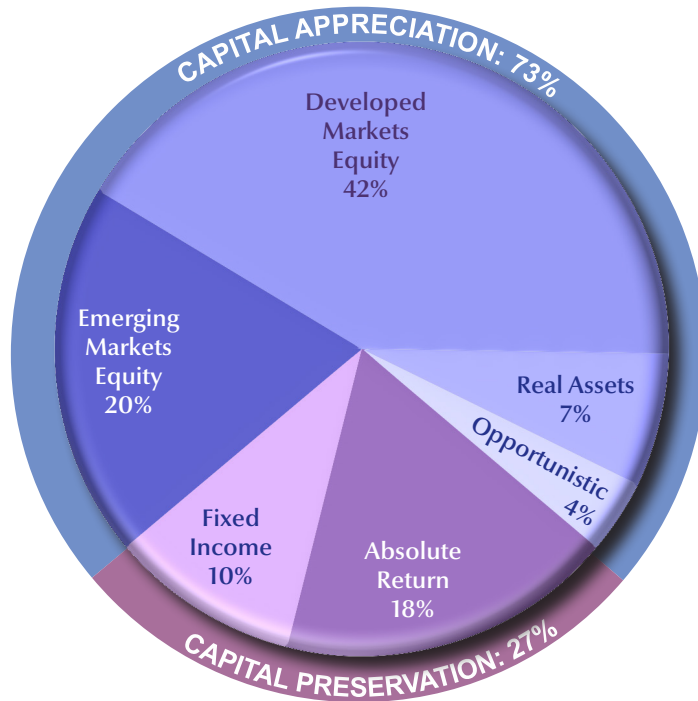
CEF Policy Asset Allocation



Over the past twenty-five years, the CEF grew significantly in size and complexity. The portfolio today is diversified across many dimensions: asset classes, countries, sectors, investment styles and managers.

CEF Portfolio Positioning

As of December 31, 2012



Current Asset Allocation (\$ = millions)			Policy	
			Target	Range
Emerging Markets Equity	\$433	20%	17%	
Developed Markets Equity	\$939	42%	36%	
US Public	\$377	17%		
International Public	\$312	14%		
Private Equity	\$251	11%		
Real Assets	\$164	7%	11%	
Opportunistic	\$87	4%	6%	
Capital Appreciation¹	\$1,623	73%	70%	55%–85%
Absolute Return	\$391	18%	15%	
Fixed Income²	\$212	9%	15%	
Capital Preservation	\$603	27%	30%	15%–45%
Total CEF³	\$2,226	100%		

¹ At 12/31/12 Int'l exposure: 32%, foreign currency exposure: 34%.

² Includes 23% current exposure to private equity investment and 9% uncalled capital commitment.

³ Allocation to cash is included in Fixed Income.

Current tactical positioning favors Capital Appreciation, led by public equities.

Spending and Inflation

Total Nominal Return*
Required to Meet the Long-Term Spending Target

Endowment Distributions	4.0%	Long-Term Policy Rate
Advancement Office	0.8%	} Administrative Fees
Investment Office	0.2%	
Expected Inflation	3.0%	Consumer Price Index
Total Return Required	8.0%	

* Return is assumed net of investment fees (manager, consulting, custodial and legal) of approximately 50 basis points.

Required Nominal Return Matrix

Distribution Rate plus Administrative Fees

	3.0%	4.0%	5.0%	6.0%	7.0%
1.0%	4.0%	5.0%	6.0%	7.0%	8.0%
2.0%	5.0%	6.0%	7.0%	8.0%	9.0%
3.0%	6.0%	7.0%	8.0%	9.0%	10.0%
4.0%	7.0%	8.0%	9.0%	10.0%	11.0%
5.0%	8.0%	9.0%	10.0%	11.0%	12.0%
6.0%	9.0%	10.0%	11.0%	12.0%	13.0%
7.0%	10.0%	11.0%	12.0%	13.0%	14.0%
8.0%	11.0%	12.0%	13.0%	14.0%	15.0%

Inflation

 Long-Term spending plus inflation rate estimate.

Program distributions, administrative fees and inflation are critical factors in defining a sustainable level of program support.

Capital Markets Forecast

Asset Class/ Fund	Five to Seven Year Capital Market Forecasts ¹			Historical Returns ²
	University of Washington	Investment Managers & Banks	Market Consultants	
Developed Public Equity	7.0	6.8	7.4	9.4
Emerging Equity	10.0	8.6	8.9	12.7
Private Equity	9.0	9.9	9.1	13.4
Real Assets	6.9	6.0	5.4	10.7
Opportunistic	6.0	5.3	4.3	9.6
Capital Appreciation Fund	8.1	7.8	7.8	11.2
Absolute Return	5.0	5.4	5.8	10.2
Fixed Income	1.5	2.1	2.4	5.5
Capital Preservation Fund	3.7	4.2	4.6	8.5
Total	6.8	6.7	6.8	10.4

¹ Composite returns are calculated using the 2013 proposed CEF asset allocation.

² Historical returns represent the longest time series available for each asset class.

A lower return environment is forecast over the next 5–7 years compared with historical returns.

CEF Proposed Policy Asset Allocation and Impact

Proposed Policy Target

	2010 Policy Target	2013 Proposed Policy Target	Change
Emerging Markets Equity	17%	17%	—
Developed Markets Equity	24%	28%	+4%
Private Equity	12%	15%	+3%
Real Assets	11%	7%	-4%
Opportunistic	6%	3%	-3%
Capital Appreciation (range 55%–85%)	70%	70%	—
Absolute Return	15%	19%	+4%
Fixed Income	15%	11%	-4%
Capital Preservation (range 15%–45%)	30%	30%	—
Total Consolidated Fund	100%	100%	

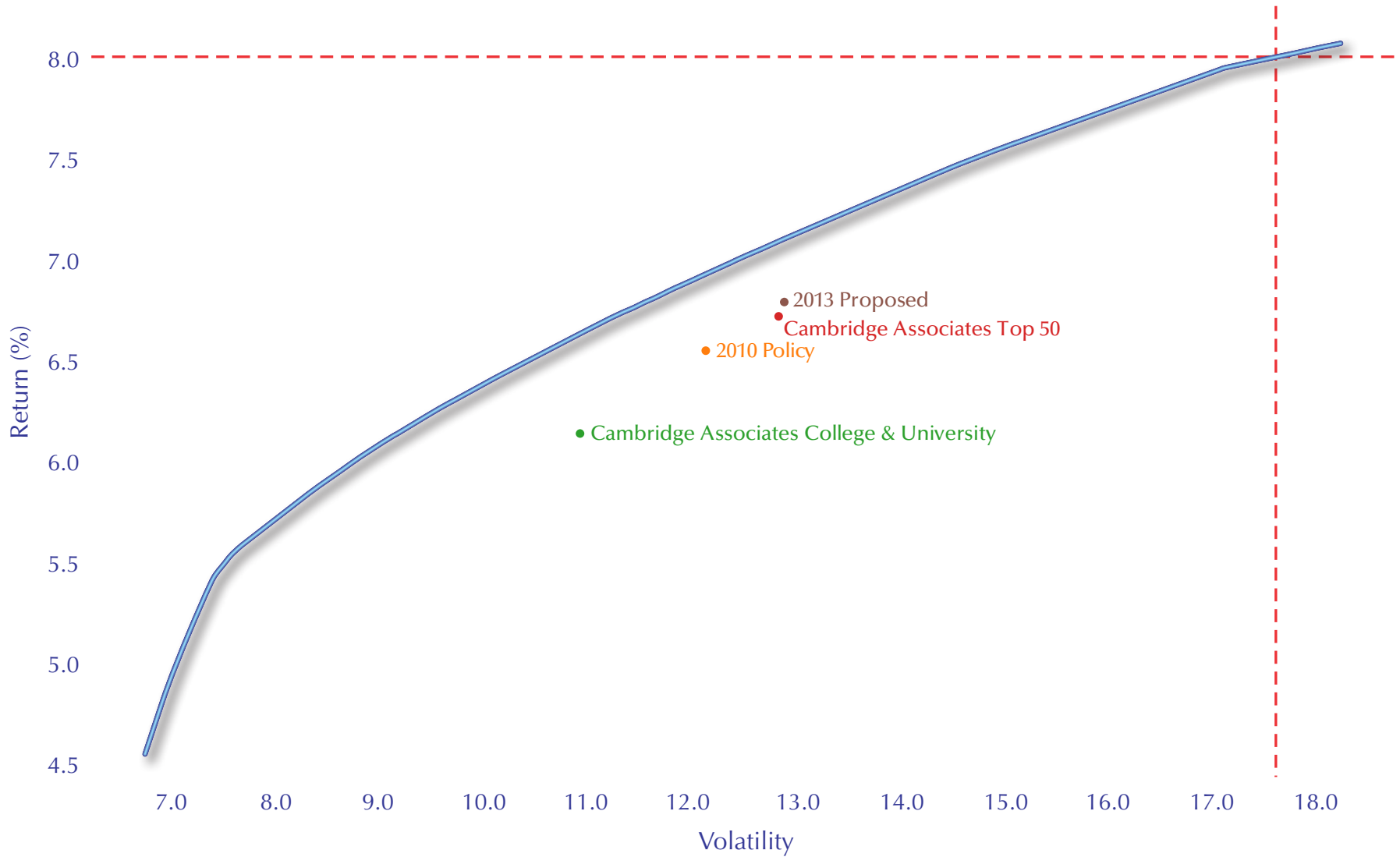
Projected Impact of Proposed Policy Target

Portfolio	2010 Policy Target	2013 Proposed Policy Target	Change
Return	6.6%	6.8%	+0.2%
Volatility	12.2%	12.9%	+0.7%
CVaR	-18.2%	-19.5%	-1.3%
Liability-linked Risk			
Spending Risk	49%	48%	-1%
Impairment Risk	32%	30%	-2%

The proposed CEF policy portfolio balances a slightly higher projected return and short-term volatility, while managing downside risk longer term.

CEF Projected Returns and Risk

Mean Return vs. Volatility Efficient Frontier



UW asset allocation analysis projects returns of nearly 7% per year over the next five to seven years. Increasing prospective returns would require taking significantly more equity risk.

Spending and Impairment Risk

	Spending Level	Impairment Risk	
	6.5%	62%	
	6.0%	51%	
	5.5%	40%	
The spending level includes distributions to endowed programs and administrative fees.	5.0%	30%	Impairment risk is the probability of a real drop in endowment value over a fifty year period.
	4.5%	21%	
	4.0%	14%	
	3.5%	9%	
	3.0%	6%	

An endowed institution balances the competing demands of current and future generations. 2010 policy changes to spending and asset allocation reduced the probability of impairment risk by nearly half.

Consolidated Endowment Fund Investment Performance

CEF Activity

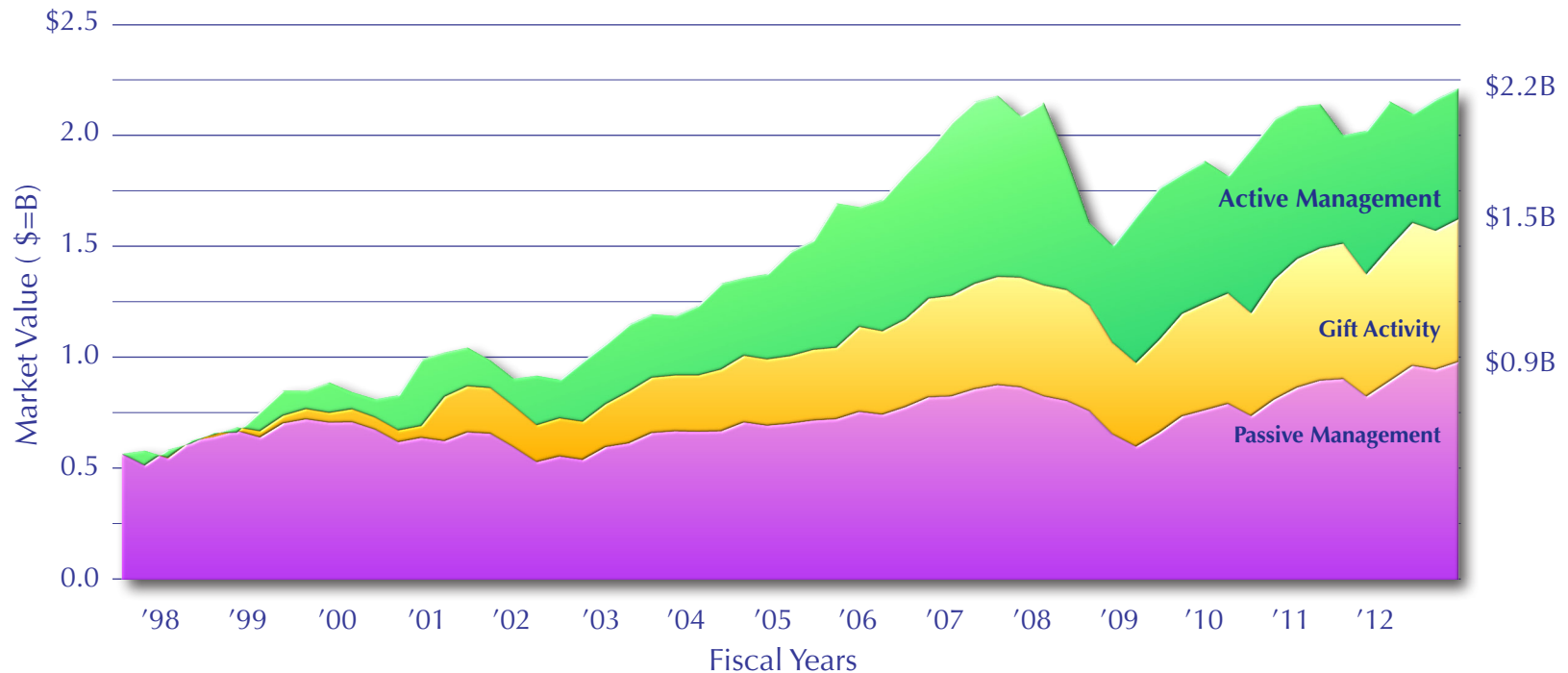
As of December 31, 2012 (\$=M)

	<u>1 Year</u>	<u>3 Year</u>	<u>10 Year</u>	<u>20 Year</u>
Beginning Balance	\$2,035	\$1,840	\$945	\$332
Gifts	53	184	681	976
Transfers	5	18	89	142
Operating Funds Purchases	<u>1</u>	<u>56</u>	<u>209</u>	<u>209</u>
Total Additions	<u>\$59</u>	<u>\$257</u>	<u>\$979</u>	<u>\$1,327</u>
Net Investment Return	\$240	\$424	\$1,218	\$1,755
Distributions	(86)	(234)	(745)	(989)
Administrative Fees	(4)	(12)	(34)	(48)
Advancement Support	(17)	(49)	(137)	(152)
Ending Balance	<u>\$2,226</u>	<u>\$2,226</u>	<u>\$2,226</u>	<u>\$2,226</u>

CEF investment returns support endowment distributions, program management,
and Advancement funding while generating overall CEF growth.

Contributors of Endowment Growth

As of December 31, 2012



• Baseline (Assumptions)

- CEF passively invested 70% MSCI ACWI and 30% U.S. Government bonds
- 25% of actual gift activity
- No administrative fees to advancement or investments
- \$0.9 billion CEF ending market value

• Add: Gift Activity (Assumptions)

- CEF passively invested 70% MSCI ACWI and 30% U.S. Government bonds
- 100% of actual gift activity, invested passively
- 80 bp administrative fee to advancement
- \$1.5 billion CEF ending market value

• Add: Active Management (Assumptions)

- CEF actively managed with actual results shown
- 100% of actual gift activity
- 80 bp administrative fee to advancement & 20 bp administrative fee to investments
- \$2.2 billion CEF ending market value

Successful fundraising efforts coupled with an active approach to investment management resulted in significant growth in the CEF over the past 15 years.

CEF Returns and Risk

As of December 31, 2012

		<u>1 Year</u>	<u>3 Year</u>	<u>10 Year</u>	<u>20 Year</u>
RETURN {	Total CEF Return	12.2%	7.3%	8.3%	9.2%
	Policy Benchmark ¹	11.7%	7.9%	8.4%	9.1%
	Passive Benchmark ²	12.4%	7.1%	7.8%	7.4%
	Peer Quartile Ranking ³	1st	3rd	2nd	2nd
	Return Contribution (\$M)⁴	\$240	\$424	\$1,218	\$1,755
RISK {	CEF Sharpe Ratio⁵	2.1	1.0	0.8	0.7
	Policy Benchmark Sharpe Ratio	1.8	0.9	0.8	0.6

¹ Policy Benchmark is a blend of market indices weighted to reflect the strategic asset allocation of the CEF.

² 70% MSCI ACWI plus 30% BC Government Bonds.

³ Cambridge Associates Public Colleges and Universities with endowments between \$1B & \$5B.

⁴ Represents the cumulative dollars generated by CEF investment returns.

⁵ The higher the Sharpe ratio, the better the fund's historical risk-adjusted performance. The Sharpe ratio is calculated using standard deviation and excess return over the risk-free rate to determine reward per unit of risk.

CEF performance was solid during the past year. Longer-term performance is improving.

Annual Returns by CEF Asset Class

	For Calendar Years Ending December 31										10 Years '03-'12 (Annualized)
Best Performing	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	
	Emerging Markets 51.8%	Emerging Markets 22.0%	Emerging Markets 30.7%	Emerging Markets 36.0%	Emerging Markets 57.4%	Fixed Income -2.9%	Emerging Markets 71.4%	Emerging Markets 26.5%	Real Assets 10.7%	Emerging Markets 21.1%	Emerging Markets 18.7%
	Developed Markets: Public Equity 31.6%	Real Assets 20.5%	Developed Markets: Private Equity 26.0%	Developed Markets: Private Equity 17.4%	Developed Markets: Private Equity 28.8%	Developed Markets: Private Equity -4.4%	Developed Markets: Public Equity 25.9%	Developed Markets: Public Equity 12.9%	Developed Markets: Private Equity 9.4%	Opportunistic ¹ 18.9%	Developed Markets: Private Equity 10.7%
	Absolute Return ¹ 21.0%	Developed Markets: Public Equity 15.0%	Real Assets 21.4%	Developed Markets: Public Equity 16.0%	Real Assets 16.2%	Real Assets -22.9%	Absolute Return ² 24.2%	Absolute Return ² 10.7%	Fixed Income 1.6%	Developed Markets: Public Equity 16.1%	Absolute Return ² 8.6%
	Developed Markets: Private Equity 4.7%	Absolute Return ² 12.5%	Developed Markets: Public Equity 13.5%	Absolute Return ² 15.2%	Absolute Return ² 15.3%	Absolute Return ² -23.0%	Fixed Income 2.2%	Developed Markets: Private Equity 10.1%	Absolute Return ² 1.5%	Developed Markets: Private Equity 15.9%	Developed Markets: Public Equity 7.8%
	Fixed Income 3.1%	Developed Markets: Private Equity 11.9%	Absolute Return ² 10.0%	Real Assets 14.9%	Developed Markets: Public Equity 9.0%	Developed Markets: Public Equity -38.3%	Developed Markets: Private Equity -7.2%	Fixed Income 2.5%	Opportunistic ¹ -0.6%	Absolute Return ² 6.8%	Real Assets 4.3%
	Real Assets 0.0%	Fixed Income 3.4%	Fixed Income 4.0%	Fixed Income 5.8%	Fixed Income 8.9%	Emerging Markets -52.0%	Real Assets -13.2%	Real Assets 0.1%	Developed Markets: Public Equity -4.6%	Real Assets 4.9%	Fixed Income 3.0%
Worst Performing									Emerging Markets -15.3%	Fixed Income 1.4%	

¹ Opportunistic investment strategy added 7/1/2010

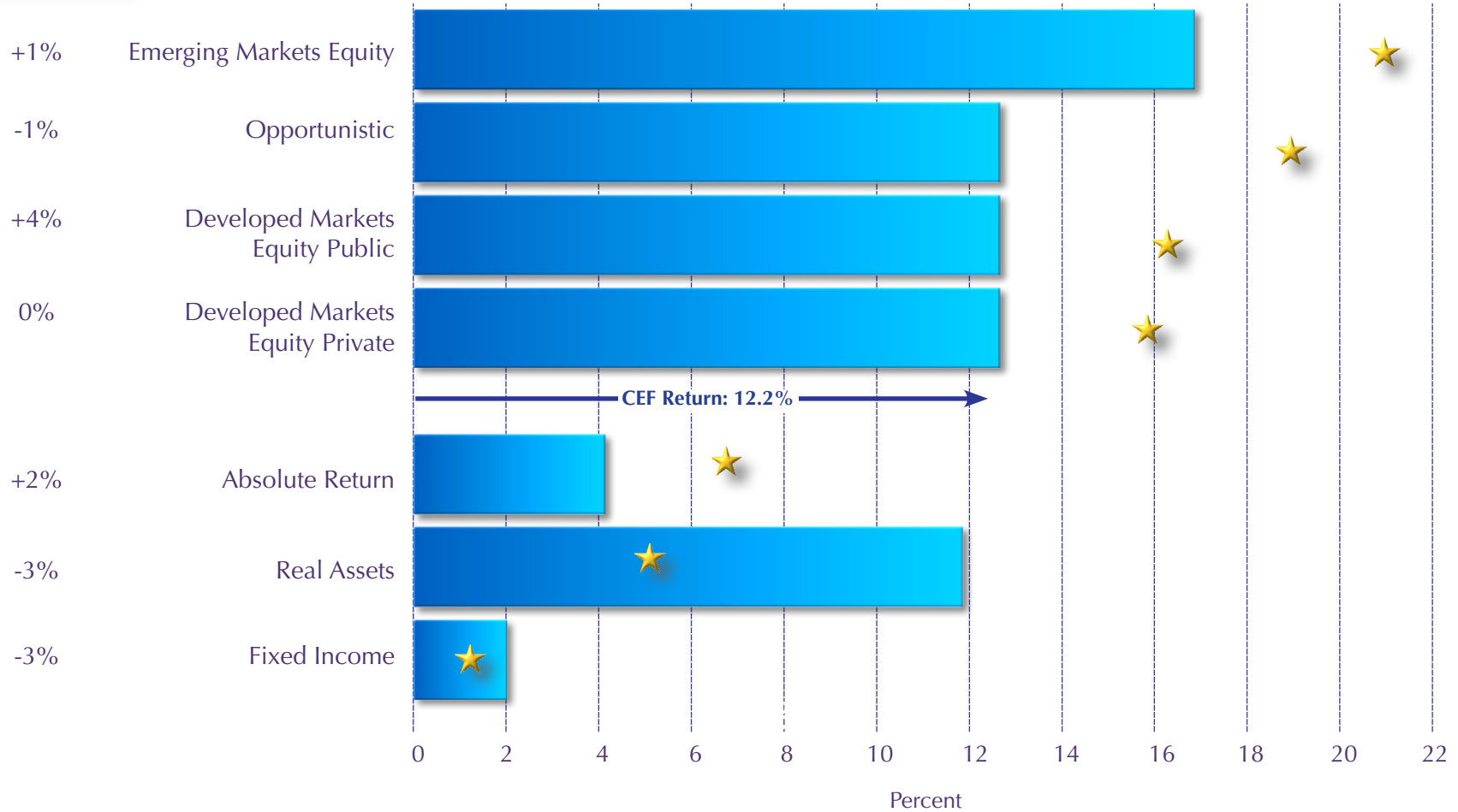
² Prior to 2008 absolute return included long / short equity investments

Emerging Markets' strategies drove CEF performance over the past ten years.

2012 Performance by CEF Asset Class

Average Annual
Over/Under
Weight

 Benchmark  2012 return



Strong performance by UW equity managers drove CEF outperformance in 2012.

Invested Funds

Invested Funds (IF) Profile

Description: Locally generated operating and capital reserves of the University.

Size: \$1.5 billion at December 31, 2012 plus \$0.4 billion invested in CEF units.

Composition: Institutional funds (57%) and funds on deposit by campus departments (43%).

Financial Objective: To meet the day-to-day financial obligations of the University as they come due.

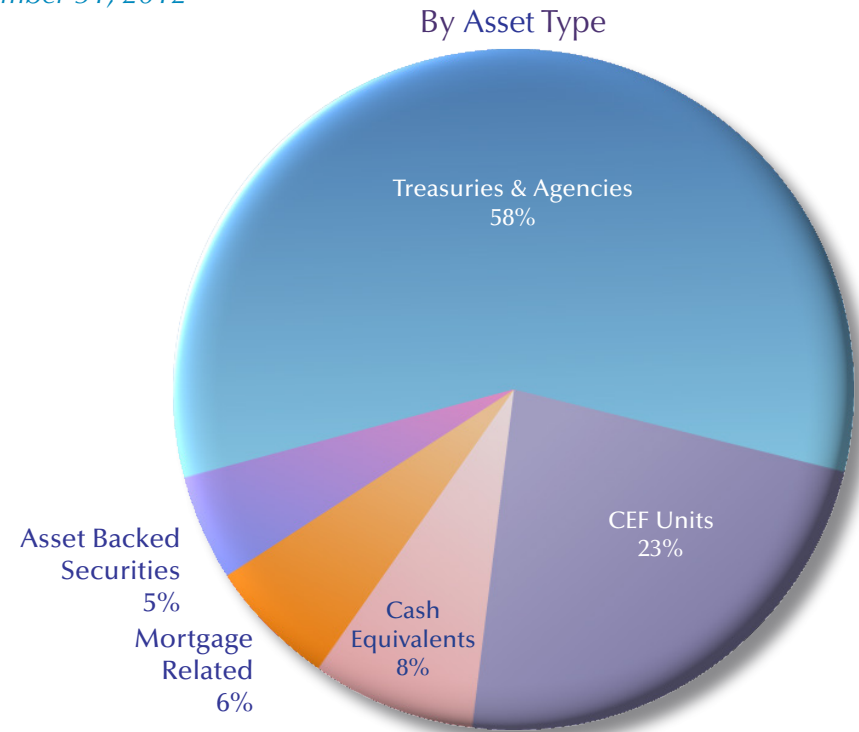
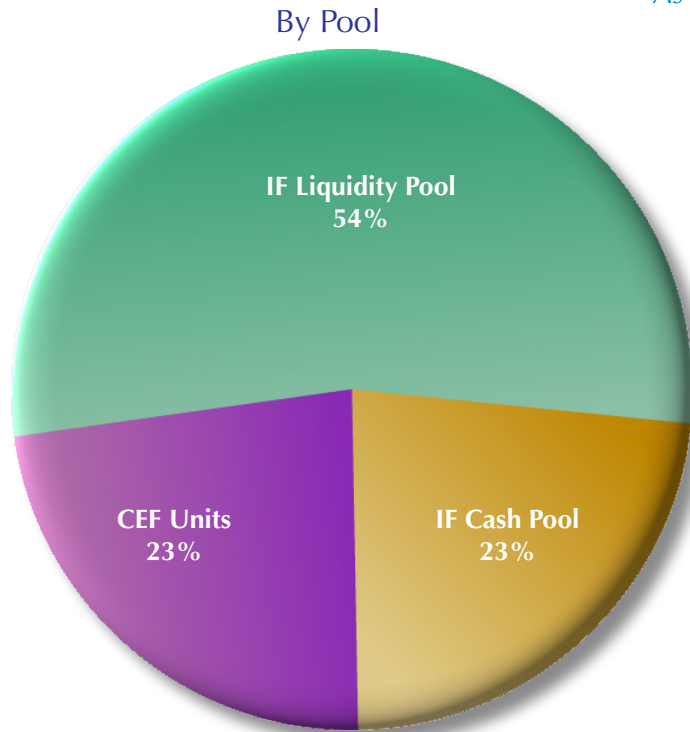
University Guarantees: Campus departments cost basis guaranteed; access to funds on demand under normal conditions.

Investment Objective: To achieve predictable, stable returns in excess of money market instruments.

Liquidity Objective: Continue strong liquidity levels to maintain flexibility and permit cost effective issuance of debt.

IF Asset Allocation

As of December 31, 2012



	Fund Allocation (\$M)		Range	Duration in Years		Guidelines
				Actual	Maximum	
Cash Pool	\$435	23%	10%–40%	1.0	3.0	Average quality of “AA”
Liquidity Pool	\$1,018	54%	30%–60%	2.6	4.5	Average quality of “A” ¹
Total Cash & Liquidity Pool	\$1,453	77%				
CEF Units held by IF	\$442	23%	15%–40%			¹ And at least 25% in US Gov’t and its agencies
Total Invested Funds	\$1,895	100%				

Invested Funds are highly liquid with CEF units providing enhanced returns. Proposed changes to the IF include the addition of diversifying investments beyond the CEF in the renamed Diversified Investment Pool (formerly the “CEF Pool”).

IF Returns and Risk

As of December 31, 2012

		<u>1 Year</u>	<u>5 Year</u>	<u>10 Year</u>	<u>20 Year</u>
RETURN	Total IF Return including CEF units	4.4%	4.1%	4.7%	6.3%
	Policy Benchmark ¹	3.6%	4.1%	4.9%	6.3%
	Total IF Return excluding CEF units	2.0%	3.1%	3.4%	5.2%
	Policy Benchmark ¹	1.1%	2.7%	3.4%	5.0%
	CEF Return Contribution (\$M)²	\$48	\$85	\$266	\$412
MARKET	Three Month T-Bill	0.1%	0.1%	1.7%	3.1%
RISK	IF Sharpe Ratio³	3.11	2.56	1.11	1.08
	Policy Benchmark Sharpe Ratio	2.53	2.26	1.25	1.07

¹ Policy Benchmark is a blend of market indices weighted to reflect the asset allocation of the IF.

² Represents the cumulative dollars generated by the CEF investment return to the IF.

³ The higher the Sharpe ratio (including CEF units), the better the fund's historical risk-adjusted performance. The Sharpe ratio is calculated using standard deviation and excess return over the risk-free rate to determine reward per unit of risk.

Performance improved in recent years. Over the long term, CEF exposure in the IF improved the absolute performance of the IF by over 1% per annum. This is equivalent to a benefit of \$266M over the last ten years.