Endowment Management Review



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Governance

Treasury Assets As of 12/31/07-\$3.4 Billion

Dollars in Millions



Endowment & Similar Funds

Endowment Funds	\$1,760
Operating Funds	432
Consolidated Endowment Fund	2,192
Life Income Trusts	100
Outside Trusts	58
Non-CEF Endowments	24
Permanent Fund ⁶	27
	\$2,401

Operating & Reserve Funds

Invested Funds 2,3	\$944
Bond Retirement Fund ⁴	5
Building Fund ⁴	26
Debt Service Reserve Funds 5	9
Bond Proceeds ⁷	_ 39
	\$1,023

- 1. Includes assets whose management falls under the auspices of the Finance & Audit Committee of the Board of Regents. Excludes Metro Tract and Forest Trust Lands. All dollar amounts are expressed in millions and represent market values.
- 2. The Invested Funds holds Consolidated Endowment Fund units valued at \$432. To avoid double counting, the dollars are included only in the CEF totals.
- 3. In June 2002, the Board of Regents authorized the establishment of a captive insurance company, Portage Bay Insurance(PBI). The previous insurance vehicle, the Self Insurance Revolving Fund(SIRF), will close after existing claims are resolved. Current balances: PBI \$72.6 SIRF \$3.0.
- 4. General obligation bond reserve fund on deposit with the state of Washington.
- 5. Required reserve funds for locally issued bonds (2002 Housing & Dining \$1.6, 2004 Housing & Dining \$0.6, 2004 Parking \$1.6, Roosevelt 1 \$3.3 and Roosevelt 2 \$2.0).
- 6. Proceeds from sale of land grants and subsequent investment returns on deposit with the state of Washington.
- 7. Construction project funds which have not yet been disbursed (IMA \$7.9, Genome/R&T \$13.6, Parking \$6.1, Global Health Labs \$0.02 and 2007 General Revenue Bond \$11.8)

Key Investment Decisions

INVESTMENT POLICY	STRATEGY	INVESTMENT MANAGEMENT	ASSESSMENT
Spending policy Return requirements Long-term asset allocation Risk preference Constraints	Active / passive Internal/external management Diversification Portfolio structure Market timing Rebalancing Derivative usage	Manager identification Manager due diligence Manager appointment Manager guidelines Manager monitoring Manager termination	Performance measurement Risk management Policy evaluation
• Established and approved by the Board of Regents .	 Implemented by the Chief Investment Officer. Advised by UWINCO. 	• Implemented by the Chief Investment Officer.	 Overseen by the <i>Finance, Audit and Facilities Committee of the Board of Regents.</i> Advised by <i>UWINCO</i>.
			 Provided by the Chief Investment Officer.

Key Investment Roles

BOARD OF REGENTS

Sets investment policy

- Spending rate
- Strategic asset allocation
- Delegations

Appoints investment officers/advisors

- Chief Investment Officer
- UWINCO Members
- Investment Consultants (FAF)

Reviews results

• Investment program oversight / accountability

UNIVERSITY OF WASHINGTON INVESTMENT COMMITTEE (UWINCO)

Advises the CIO

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

Advises the Board of Regents

• Investment program oversight

CHIEF INVESTMENT OFFICER (CIO)

Implements investment program

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

Monitors results

• Performance reporting

University of Washington Investment Committee (UWINCO)

Role: Advisory committee established by the Board of Regents in 2001

Purpose: To advise the Board of Regents, the CIO and the administration on matters relating to the manage-

ment of the University's investment portfolios. This includes but is not limited to overall asset allocation, performance goals, new investment strategies, strategy implementation, manager identification

and due diligence.

Membership: Up to ten members of which two will be Regents.

Appointment: Individual members approved by the Board of Regents.

Term: Three years, renewable for two consecutive terms (nine years).

Criteria for Membership: Investment expertise in specialized markets (private equity, hedge funds, real assets, international

markets); access to desirable managers/funds; strategic focus; commitment to the University of Wash-

ington.

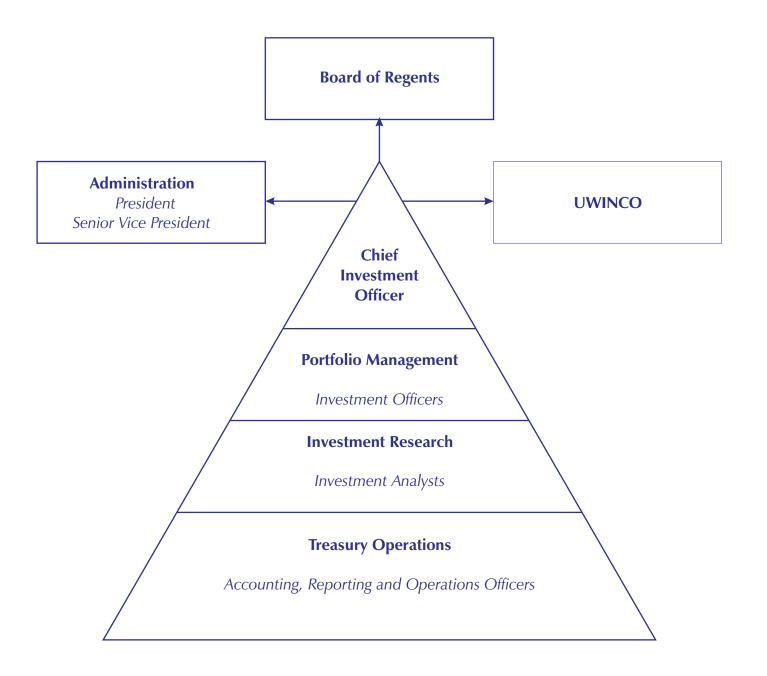
UWINCO Chair: Chair of the Finance, Audit and Facilities Committee or a Regent designee.

Meeting Frequency: Quarterly

Regent Members: Jeff Brotman (chair), Fred Kiga

Non-Regent Members: David Bonderman, Jeff Greenstein, Michael Larson, Mary Pugh

Investment Department Organization

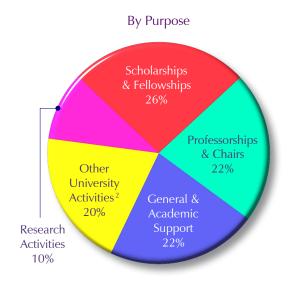


Endowment Goals

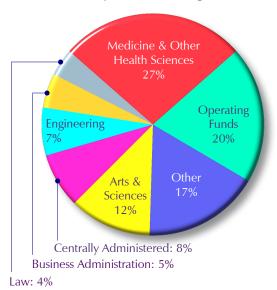
Endowment Overview

Endowed Program Support

as of 6/30/071



By School & College



¹ Total number of endowments was 2,500 at 6/30/07.

Endowed Distributions

\$ = Millions





Fiscal Years	Annual UW Revenues	Endowment Distributions	Percent
2003	\$2,731	\$45	1.6
2004	\$2,841	\$44	1.5
2005	\$3,069	\$46	1.5
2006	\$3,308	\$54	1.6
2007	\$3,714	\$64	1.7

Endowed Composition

\$ = Millions



92% of the Univesity's endowed funds are restricted. In restricted endowments, distributions may be used only for donor specified purposes. Unrestricted endowment funds may be used for any legitimate purpose of the institution, whether it be scholarships or building maintenance.

Funds

6%

² Includes operating funds invested in the CEF.

CEF Spending Policy

Spending Policy: Set by the Board of Regents.

Spending Rate: Spend 5% of the average market value of the CEF for the previous three years*.

Frequency: Distributions are made on a quarterly basis.

Spending Changes: Changes to the spending rate are infrequent and require discussion and approval by

the Board of Regents.

Fees: 1.0% annual administrative fee is charged against the endowment: 0.8% to the Office

of Development, 0.2% to the Treasury Office.

^{*}This is the most commonly used formula by colleges and universities

Total Return Required and Spending Level

Total Nominal Return*
Required to Meet Current Spending

Endowment Distributions	5.0%	Policy Spending Level
Development Office	0.8%	
Treasury Office	0.8%	Administrative Fees
Expected Inflation	3.0%	Consumer Price Index
Total Return Required	9.0%	

^{*} Return is assumed net of investment fees (manager, consulting, custodial and legal) of approximately 50 b.p.

Required Nominal Return Matrix

Spending Level and Administrative Fees				
	4.0%	5.0%	6.0%	7.0%
1.0%	5.0%	6.0%	7.0%	8.0%
2.0%	6.0%	7.0%	8.0%	9.0%
3.0%	7.0%	8.0%	9.0%	10.0%
4.0%	8.0%	9.0%	10.0%	11.0%
5.0%	9.0%	10.0%	11.0%	12.0%
6.0%	10.0%	11.0%	12.0%	13.0%
7.0%	11.0%	12.0%	13.0%	14.0%
8.0%	12.0%	13.0%	14.0%	15.0%

Current spending and inflation rate estimate

Performance Goals

Return Requirement

Policy Portfolio

Peer Comparison

To attain an average annual inflation-adjusted total rate of return of 6% (net of investment manager fees) over rolling five-year periods.

The 6% target provides for a 5% distribution to endowed programs and a 1% administration fee.

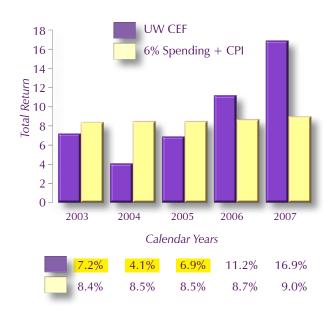
To outperform, on a risk-adjusted basis, a representative blend of market indices which reflect the stratgic asset allocation of the CEF over the long term (rolling five-year periods).

To exceed the median return of the 50 largest colleges and universities in the Cambridge Associates (CA) Universe over rolling five-year periods.

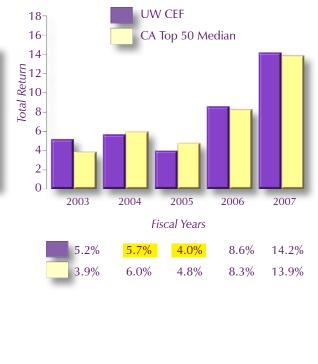
CEF vs. 6% Spending + CPI Rolling 5 Year Annualized Returns

CEF vs. the Policy Portfolio Rolling 5 Year Annualized Returns

CEF vs. CA Top 50 Colleges & Universities Rolling 5 Year Annualized Returns





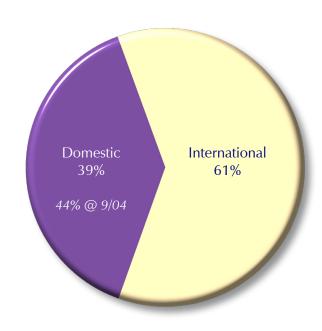


Capital Markets

GLOBAL CAPITAL MARKETS

Total Market Cap as of December 31, 2007—\$90.0 Trillion

Domestic	
Equity)
Private Equity 0.3%	
Fixed Income 16.0%	
Real Assets	
Total	

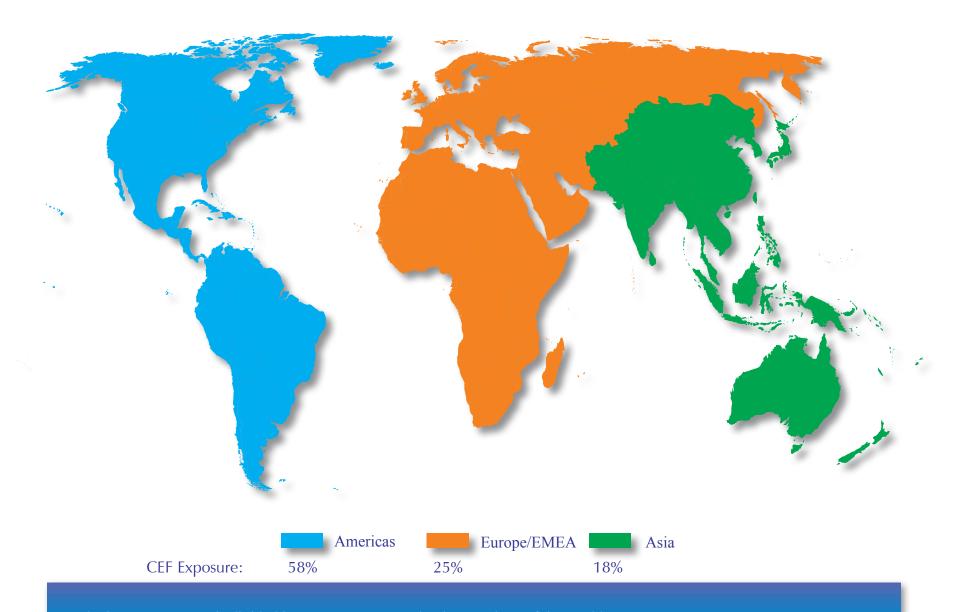


International

Developed Equity 18.5%
Emerging Markets Equity 4.0%
Private Equity 0.3%
Developed Fixed Income 21.2%
Emerging Markets Fixed Income 0.3%
Real Assests 16.3%
Total

- International capital markets are larger than domestic markets.
- Higher growth rates in emerging markets should further increase the size of international markets.

THE WORLD IN THREE REGIONS



• The investment team is divided into groups to cover the three regions of the world.

THE WORLD IN THREE REGIONS

Regional Comparisons¹

	Americas	Europe/EMEA ²	Asia	
Developed Countries	Canada United States	Austria Italy Belgium Netherlands Denmark Norway Finland Portugal France Spain Germany Sweden Greece Switzerland Ireland United Kingdom	Australia Hong Kong Japan New Zealand Singapore	
Emerging Countries	Argentina Brazil Chile Columbia Mexico Peru Venezuela	Czech Republic Morocco Egypt Poland Hungary Russia Israel South Africa Jordon Turkey	China Philippines India Sri Lanka Indonesia Taiwan Korea Thailand Malaysia Vietnam Pakistan	
Population, total (mn)	773	759/1,573 ²	3,263	
GDP (tn US\$)	16	15	10	
GDP (PPP) (tn)	17	16	22	
MarketCap (tn)	19	13	9	
Surface area (mn sq. km)	37	23.7/52 ²	26	
Foreign reserve (bn)	352	955	2,756	
Current account (bn)	(765)	104	359	
GDP growth (annual %)	3.6	2.5	7.0	
Inflation, GDP deflator (annual %)	7.9	3.0	4.5	

Source: World Bank, CIA World Factbook as of 2007

• Asia dominates other regions in terms of population and potential market capitalization growth.

¹ The listed countries are those used in MSCI indexes.

² The right side entries for population and surface area for Europe/EMEA are adjusted for the African countries that are not listed in the detail above.

CEF GLOBAL REGIONAL ALLOCATION AS OF 12/31/07



• Compared to Global Equity market, the UW is underweight developed Europe and Japan and overweight emerging Asia.

Objective and Results

Objective and Results

"Investment performance is our top priority, within the risk constraints of the University."

Objective: Generate strong investment performance

- Outperform the CEF policy benchmark by 125 basis points per annum over rolling 3 year periods.
- Add \$15 million per annum above the policy benchmark or \$90 million over 5 years after compounding.
- Achieve performance that consistently ranks within the second quartile relative to the 50 largest colleges and universities.

Results

	2005	2006	2007
CEF Return	15.1%	16.7%	18.7%
Policy Benchmark	13.3%	16.6%	13.9%
Excess Returns*	180 bp	11 bp	480 bp
Contribution	\$26mm	\$2mm	\$91mm
Peer Quartile Ranking	2nd	2nd	2nd

^{*}bp = basis points

Plan

- Expand global focus
- Increase exposure to diversifying strategies
- Enhance risk controls

HITS AND MISSES 2007–2008

Positives

- Overweight to emerging markets
- Overweight China and took profit in October, 2007
- Underweight to fixed income
- Strong private equity markets fueled by favorable financing environment

Negatives

- Overweight to international Financial and Consumer Discretionary sectors
- US small cap underperformance
- Hedge Fund tail event

2007 Performance by Asset Class



- Asset class exposures changed little in 2007.
- With the exception of international developed, all strategies outperformed their respective benchmarks.

Asset Allocation as of February 29, 2008

Consolidated Endowment Fund 1—\$2,137 MM



Current Allocatio	n		Policy Target	PolicyRange
Domestic Equity	\$253	12%	18%	10%-40%
International Developed Markets	\$390	18%	20%	10%-35%
International Emerging Markets	\$314	15%	10%	5%-15%3
Marketable Alternatives	\$377	18%	16%	5%–25%
Non–Marketable Alternatives	\$266	12%	12%	5%-20%
Equity Fund	\$1,600	75%	76%	60%–90%
Real Assets Fund	\$288	13%	12%	5%-20%
Fixed Income Fund ²	\$249	12%	12%	5%-35%
Total Consolidated Endowment Fund	\$2,137	100%		

¹ At 12/31/07 international exposure: 47%, foreign currency exposure: 44%. ² Includes allocation to cash.

³ On 11/14/07 the Board of Regents approved expansion of the International Emerging Markets policy range to 5%–25%, through 6/30/08

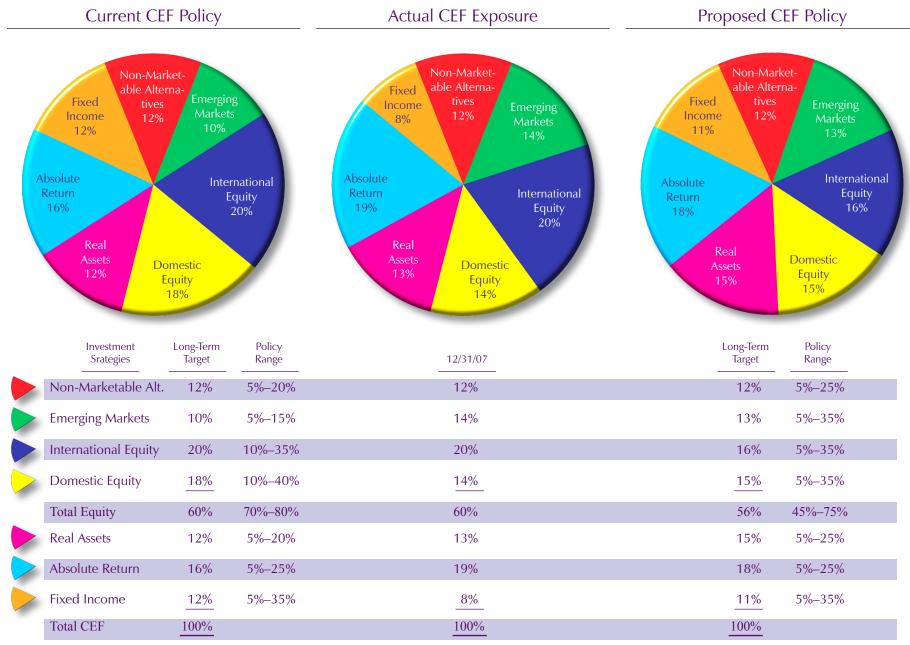
Recommended Policy Changes

Proposed Changes

• Reorder asset strategies by risk (highest to lowest)	
• Make policy asset allocation ranges consistent:	
Public Market Strategies:	
• Change policy asset allocation targets as follows:	
 Non-Marketable Alternatives Emerging Markets International Equity Domestic Equity Real Assets Absolute Return Fixed Income 	+3%4%3%+3%+2%
 Modify the policy benchmark: 	
 Use MSCI All Country World Index for public ma Simplify real assets and absolute return benchmark 	

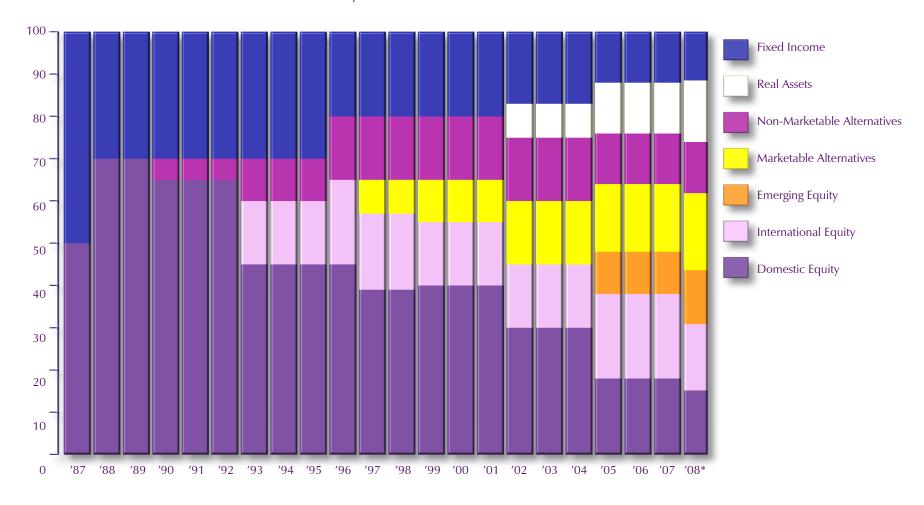
RECOMMENDED ASSET ALLOCATION

\$2.192 bn @ 12/31/07



THE MOVE TOWARDS GREATER DIVERSIFICATION

Policy Asset Allocation FY 1987–2008



*Proposed

• The trend has been towards greater diversification and a higher allocation to equities. Risk adjusted returns, as measured by the Sharpe ratio, increased over time as the CEF became more diversified.

Asset Class Structure

	Current	Proposed (ranked by risk)
	1. Equity Fund	1. Equity Fund
Total Equity	 Domestic Equity International Equity Emerging Markets Equity Marketable Alternatives Non-Marketable Equity 	Non-Marketable EquityEmerging Markets EquityInternational EquityDomestic Equity
	2. Real Assets Fund3. Fixed Income Fund	 Real Assets Fund Absolute Return Fund Fixed Income Fund

Asset Strategy Roles (Ranked by Risk)

Non-Marketable Alternatives	Enhanced Returns
Emerging Markets	High Returns
International Equity	High Returns
Domestic Equity	High Returns
Real Assets	High Returns/Inflation Hedge
Absolute Return	Downside Protection
Fixed Income	Deflation Protection

Proposed Policy Benchmark

Investment Strategy	Proposed Long-Term Target	Current Policy Benchmark	Proposed Policy Benchmark
Non-Marketable Alternatives	12%	50% CA Private Equity 50% CA Venture Capital	60% CA Private Equity 40% CA Venture Capital
Emerging Markets	13%	MSCI Emerging Markets	MSCI ACWI
International Equity	16%	MSCI EAFE	MSCI ACWI
Domestic Equity	15%	Russell 3000	MSCI ACWI
Real Assets	15%	Private: .65 NCREIF + .20 CA Oil & Gas + .15 NCREIF Timberland	50% NCREIF + 30% CA Oil & Gas
		Public: .33 NAREIT + .33 GSCI Commodities Index + .33 Lehman US TIPS Index	10% NAREIT + 10% GSCI
Absolute Return	18%	60% Hedged Equity: 0.5 * 3-Month T-Bill + 0.5 * Russell 3000 + 2%	20% MSCI ACWI +
		40% Absolute Return: 3-month T-Bill + 4%	80% (3-Month T-Bill + 4%)
Fixed Income	11%	Lehman Brothers Government Bond	Lehman Brothers Government Bond

Portfolio Modeling

Modeling Constraints

Proposed Policy Range Constraints

Non-Marketable Alternatives	5%-25%
Emerging Markets	5%-35%
International Equity	5%-35%
Domestic Equity	5%-35%
Real Assets	5%-25%
Absolute Return	5%-25%
Fixed Income	5%-35%

Liquidity Constraint

ABS + RAS + NAS < 60%

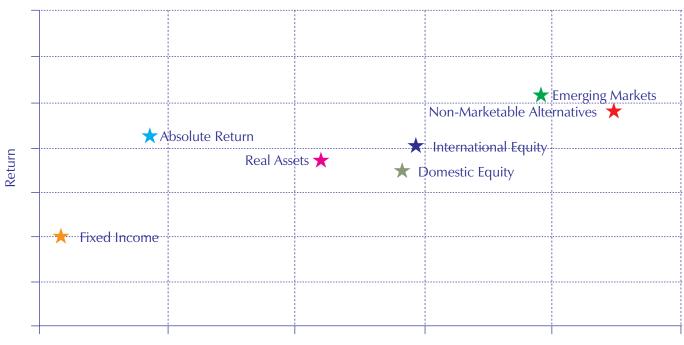
Rationale for Constraints

- 1. Ability to implement
- 2. Sufficient liquidity for spending
- 3. Forecasting error

• Policy ranges were widened in 2008 allowing more flexibility in the asset allocation, minimizing transaction costs and building a more efficient portfolio.

Risk/Return Analysis

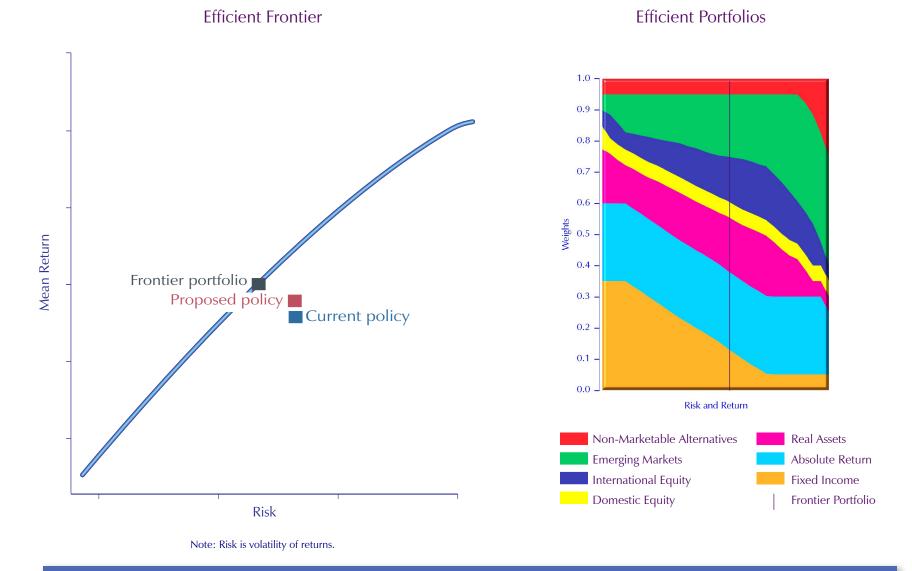
Risk and Return Expectations



Marginal Contribution To Risk

- Fixed Income, Absolute Return and Reqal Assets provide best diversification benefit.
- Marginal contribution to risk includes volatility in addition to correlation.

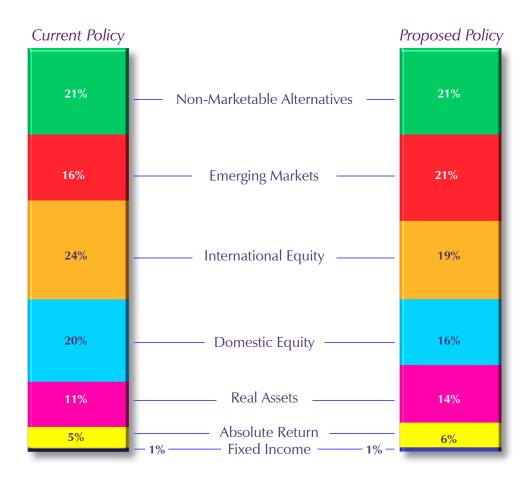
Efficient Frontier



• Efficient frontier portfolio favors absolute return, real assets and emerging markets.

RISK ALLOCATION

Percentage Contribution to Risk



- Proposed portfolio creates more balanced risk profile
- This measure takes into account both volatility and correlations.

Investment Team

Investment Team Performance Objective

Objective: Generate Strong Investment Performance

• Outperform the CEF policy benchmark by 125 basis points per annum over rolling three year periods

"Investment performance is our top priority within the risk constraints of the University."

Investment Program Evolution

	7 Years Ago	<u>Today</u>
GOVERNANCE	 Decision-making committee of the Board of Regents with broad oversight of the University's finances 	 Advisory committee (UWINCO) focused solely on the invested programs of the University.
	Diverse range of asset classes—domestic focus	Diverse range of asset classes—global focus
	Active participation in alternative asset investments	Active participation in alternative asset investments
	Focus on asset allocation	Focus on market opportunity
STRATEGY	External investment managers	External investment managers
	Outsourced risk management and asset allocation modeling	 Proprietary risk and asset allocation models (Partnership with UW's Computational Finance)
	Outsourced manager research and due diligence	 Extensive internal manager research and due diligence—domestically and abroad
STAFFING	Treasurer with broad fiscal and administrative responsibilities	Dedicated Chief Investment Officer with delegated decision-making authority
	• Small staff (3-4) of generalist finance professionals with responsibilities extending beyond investments	 Moderate sized staff (8–9) of investment professionals focused solely on investments
	Compensation within the University's structure	Competitive performance based compensation
	Reliance on consultants as an extension of staff	Targeted use of consultants

Investment Team Focus

Portfolio

- Focus on global opportunities
- Position portfolio defensively
- Address need to protect sensitive data

Risk

- Enhance portfolio construction and attribution
- Evaluate portfolio tools for managing risk
- Implement comprehensive risk monitoring

Research

- Expand proprietary research function
- Enhance systems for managing performance and research information
- Extend interaction with the academic / industry community

Organization

- Research best practices in endowment management
- Investigate alternative governance structures
- Initiate graduate internship program