

# Water and Power Employees' Retirement Plan (WPERP) Investment Portfolio

# **Quarterly Report Executive Summary**

Creation Date: November 12, 2010

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**EXECUTIVE SUMMARY** 

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#### PERFORMANCE SUMMARY OF MAJOR WPERP INVESTMENT PLANS

As of September 30, 2010, the WPERP Total Retirement Plan had an aggregate value of \$6.7 billion. This represents a \$450.8 million increase in value over the last quarter. During the most recent 1-year period, the WPERP Total Retirement Plan increased by \$439.2 million. US stocks rallied with global equity markets in the third quarter as the S&P 500 Index posted its strongest September since 1939, gaining 8.9% on the prospects of a second round of quantitative easing by the Federal Reserve. Investors continued to balance fears about the direction of the economy and regulatory uncertainty, with a strong corporate earnings season and a rise in M&A activity. Positive economic news was hard to find during the quarter despite the confirmation that the recession that began December 2007 officially ended in June 2009.

As of September 30, 2010, the WPERP Total Health Plan had an aggregate value of \$997.9 million.

## Strategic Allocation Trends

The Retirement Plan strategic allocation targets reflect the allocation targets for the 2009-2010 fiscal year. As of September 30, 2010, the WPERP Total Retirement Plan had a 59% allocation in Equities, 35% in Fixed Income, 3% in Real Return, and 1% each in Private Equity, Real Estate, and Cash. The Health Plan strategic allocation targets reflect the allocation targets for the 2010-2011 fiscal year. The WPERP Total Health Plan had a 53% allocation in Equities, 43% in Fixed Income, 2% in Real Return and Cash, and less than 1% each in Private Equity and Real Estate. Staff restructured both the Retirement and Health Plan portfolios in early October 2010 to bring them into alignment with the new fiscal year interim policy targets.

## **Recent Investment Performance of Major WPERP Investment Plans**

Period ending September 30, 2010

#### **WPERP Total Retirement Plan**

	Quarter	1 Year	3 Year	5 Year	10 Year
Total Portfolio <sup>1</sup>	7.7	8.8	-1.5	3.7	4.2
Policy Benchmark <sup>2</sup>	8.0	9.5	-1.8	3.6	3.5
Excess Return	-0.3	-0.7	0.3	0.1	0.7
Reference: Median Fund <sup>3</sup>	8.9	10.2	-1.6	3.7	4.3
Reference: Net of Fees <sup>4</sup>	7.6	8.6	-1.7	3.5	4.0

#### **WPERP Total Health Plan**

	Quarter	1 Year	3 Year
Total Portfolio <sup>1</sup>	7.7	8.9	0.1
Policy Benchmark <sup>2</sup>	8.2	10.1	-0.8
Excess Return	-0.5	-1.2	0.9

<sup>&</sup>lt;sup>1</sup> Gross of fees.

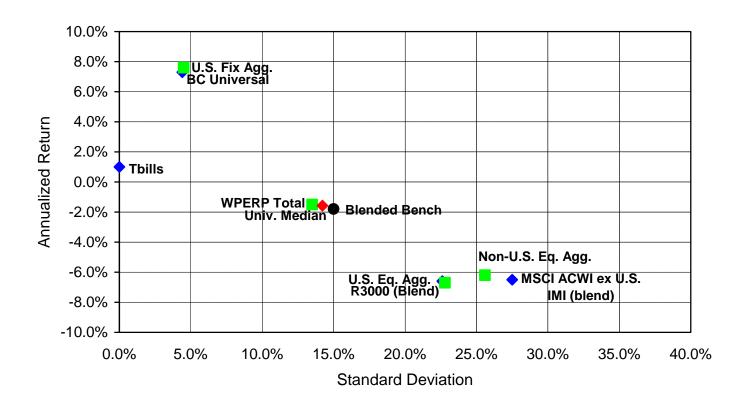
<sup>&</sup>lt;sup>2</sup> See appendix for policy benchmark descriptions.

<sup>&</sup>lt;sup>3</sup> Mellon Total Funds Public Universe

<sup>&</sup>lt;sup>4</sup> Net of Fee returns are estimated based on existing WPERP manager fee schedule.

# WPERP Retirement Plan Risk/Return Analysis - Last 3 Years

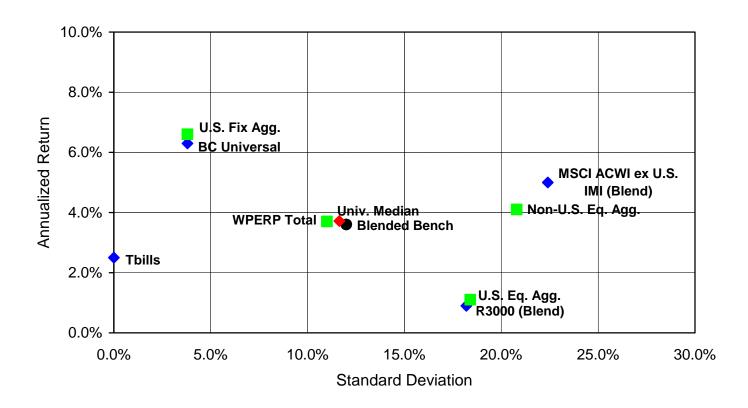
Period ending September 30, 2010



<sup>\*</sup>Median Fund in the Mellon Total Fund Public Universe.

# WPERP Retirement Plan Risk/Return Analysis - Last 5 Years

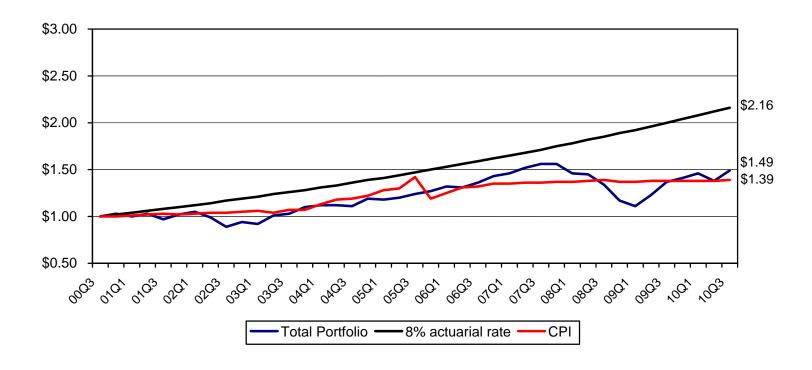
Period ending September 30, 2010



<sup>\*</sup>Median Fund in the Mellon Total Fund Public Universe.

# WPERP Retirement Plan Growth of a Dollar - Latest 10 Years

Period ending September 30, 2010



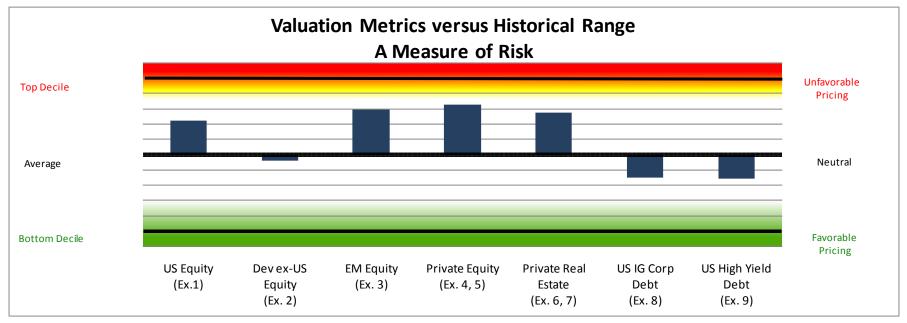
INVESTMENT MARKET RISK METRICS1

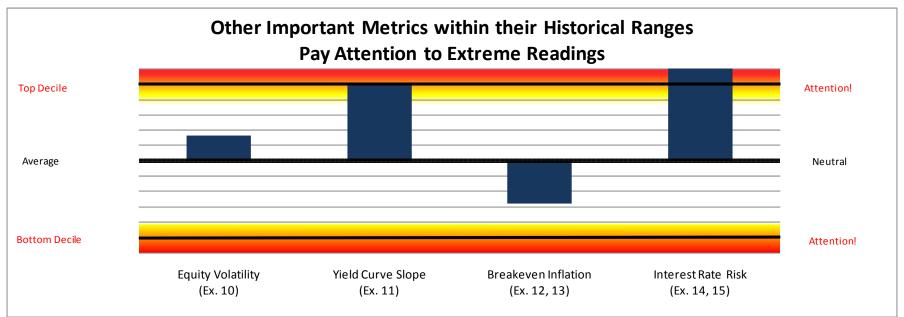
## **Investment Market Risk Metrics**

# **Takeaways**

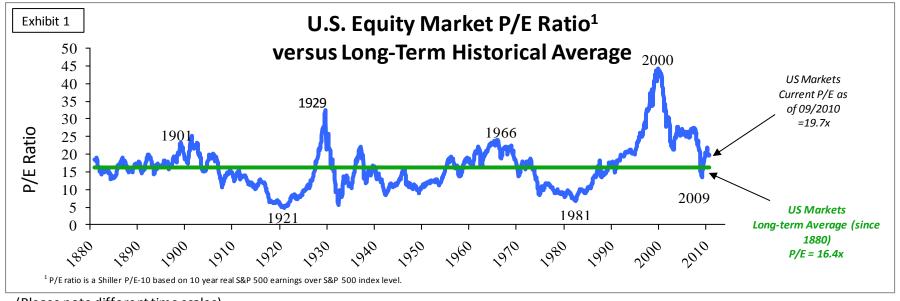
- US public equity market valuations remain above their historical average. International equity valuations are in line with their historical average.
- EM equity valuations have risen relative to developed markets, owing mainly to declines in developed market PE's.
- Private equity and private real estate valuation metrics indicate these sectors never got cheap. Few transactions are occurring.
- Credit spreads have narrowed from summer levels, and are slightly above historical average levels.
- Equity volatility has come down from May highs.
- While still steep, the yield curve pitch has declined relative to earlier this year due to a drop in the 10-year Treasury yield, a sign of pessimism about economic growth.
- In the past, the yield curve slope has declined mainly because short-term rates rise, not because long-term rates decline.
- Market measures of inflation expectations have ticked up as real rates have dropped faster than nominal interest rates, and commodity prices in dollar terms have risen on dollar weakness.
- Treasury yields are historically low, with 10-year expected real yields dropping below 0.35%, a 30 year low.
- Duration of the 10-year Treasury is near a 30 year high.

<sup>&</sup>lt;sup>1</sup> See Appendix for the rationale for selection and calculation methodology used for the risk metrics.

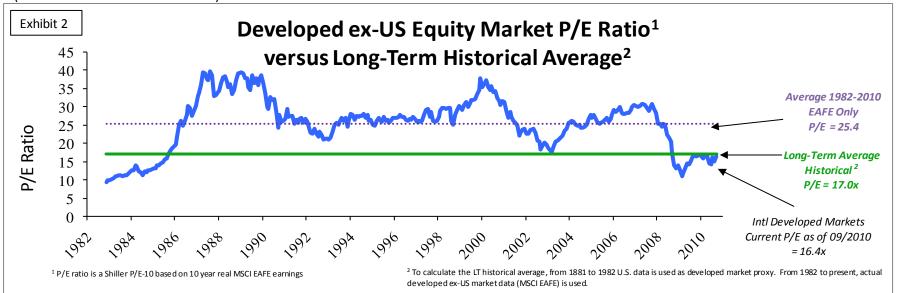




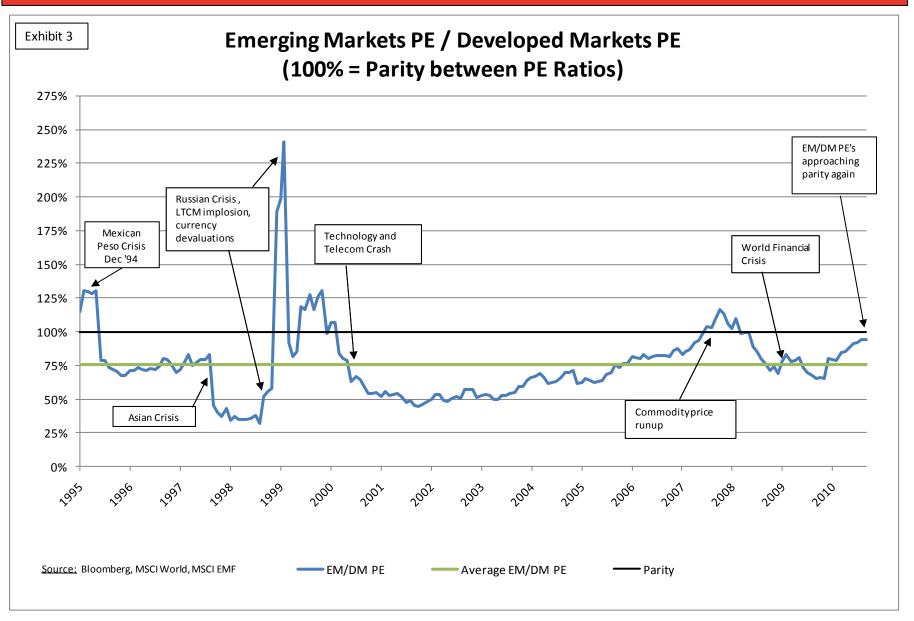
# **Developed Public Equity Markets**



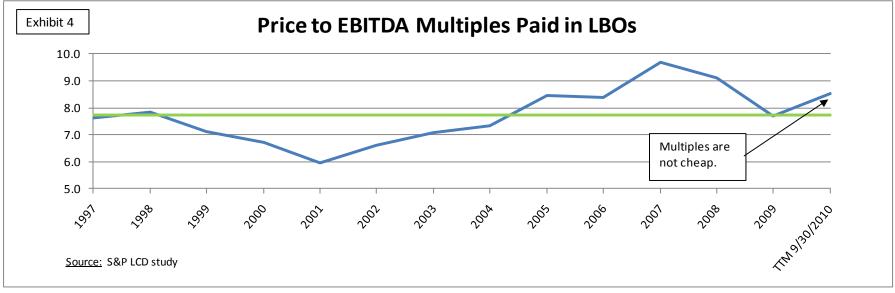
### (Please note different time scales)



# **Emerging Market Public Equity Markets**



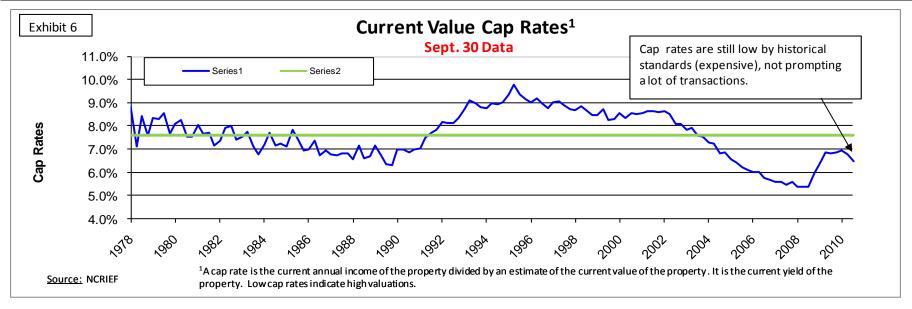
# **US Private Equity Markets**

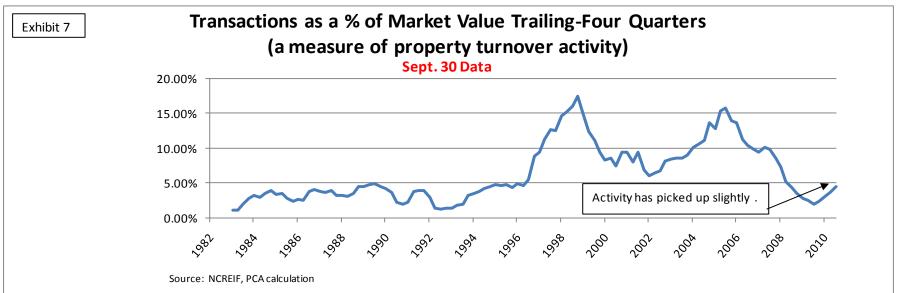




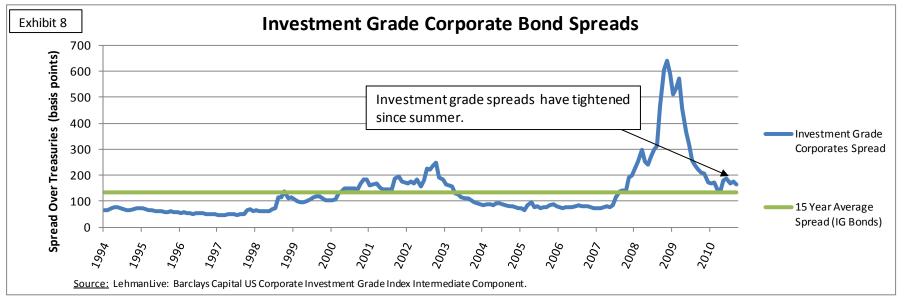


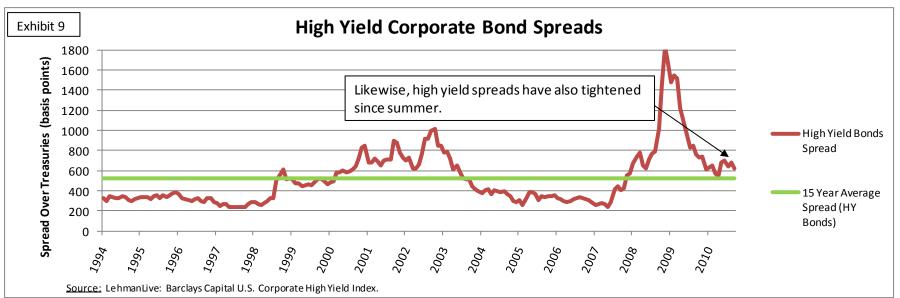
### **Private Real Estate Markets**



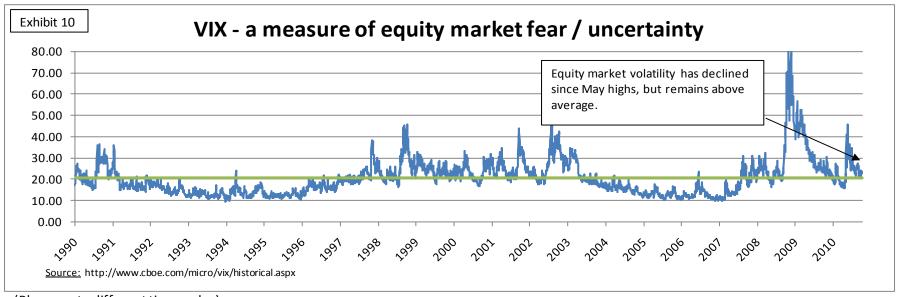


# **Credit Markets US Fixed Income**

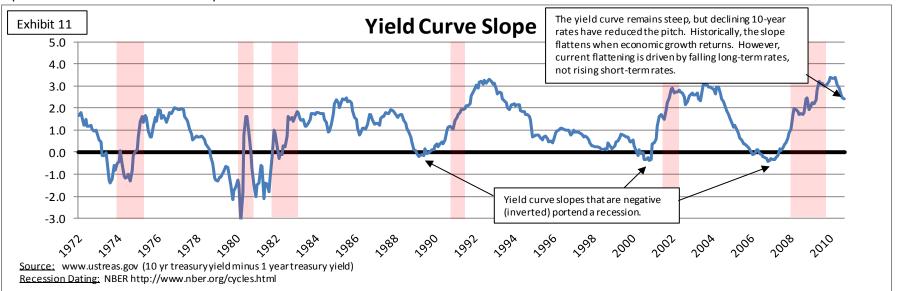




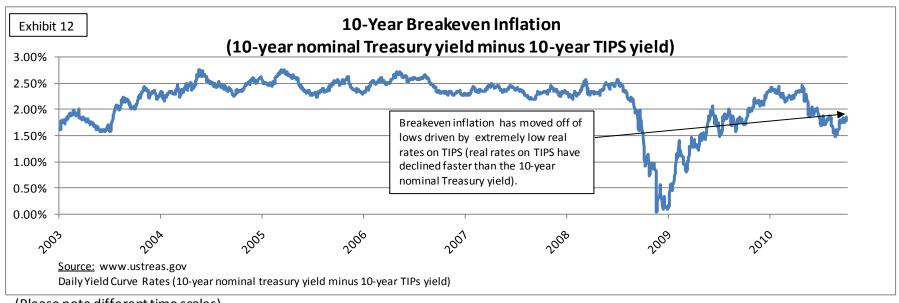
### **Other Market Metrics**



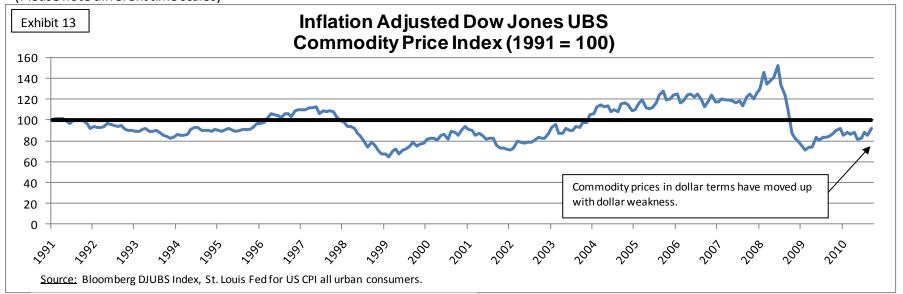
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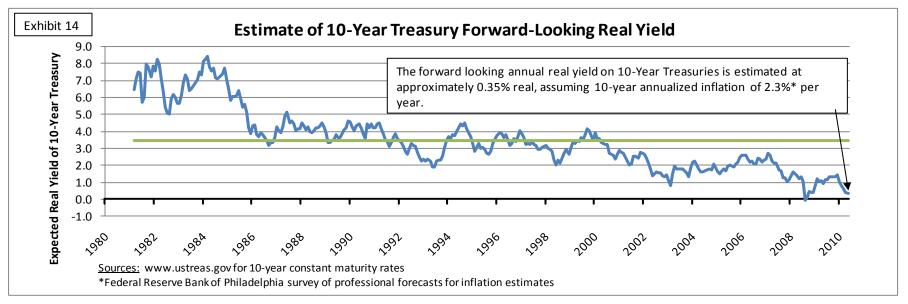
# **Measures of Inflation Expectations**

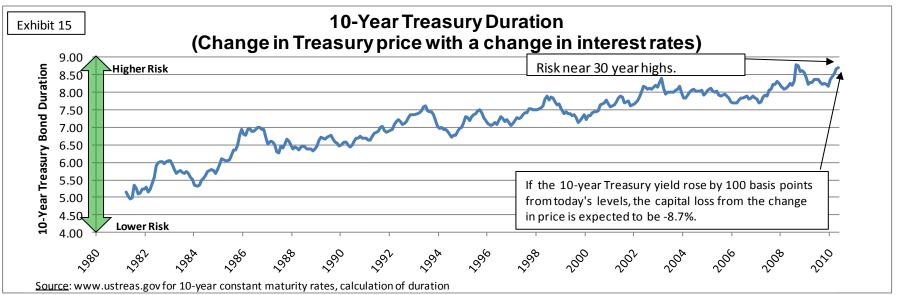


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# Measures of U.S. Treasury Interest Rate Risk



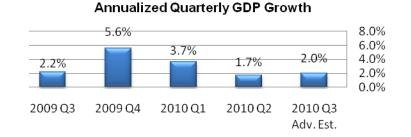


**ECONOMIC OVERVIEW** 

**Overview:** The equity market rebound in the third quarter was primarily investors' reaction to better-than-expected domestic economic data and improved sentiment about the European economies. The Fed held rates steady at 25 basis points since December 2008. Markets are pricing in additional interest rate drops in expectation of the Fed's second round of quantitative easing, or QE2, to help stimulate the economy.

### **Economic Growth**

- The "advance" estimate of real GDP grew at an annualized rate of 2.0 percent in the third quarter of 2010.
- GDP growth reflected positive contributions from inventory investments, consumer spending for services, and a smaller decrease in net exports.
- GDP growth was partially offset by anemic residential housing and business investment in equipment and software.



### Inflation

- The Consumer Price Index for All Urban Consumers (CPI-U) increased by 2.7 percent in the quarter on an annualized basis, after seasonal adjustment.
- Core CPI-U increased 0.7 percent for the quarter.
- Over the last 12 months, CPI-U increased 1.1 percent before seasonal adjustment.

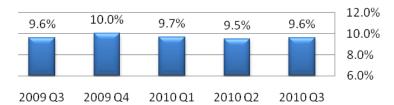
# CPI-U After Seasonal Adjustment



# Unemployment

- The U.S. economy lost 280,000 jobs in the quarter.
- The official unemployment rate slightly increased from 9.5 to 9.6 percent.
- The majority of the jobs lost were temporary Census workers and jobs from local government. Private sector employment gained modestly.

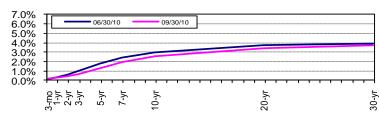
## **Unemployment Rate**



### Interest Rates & U.S. Dollar

- U.S. Treasury rates declined across the maturity spectrum during the most recent quarter.
- Since the December 2008 meeting, the Federal Reserve has maintained a target range for the Federal Funds rate of 0.00% to 0.25%.
- The U.S. dollar depreciated against the Euro, the Sterling, and the Yen by (11.4%), (5.2%), and (5.5%), respectively.

# **Treasury Yield Curve Changes**

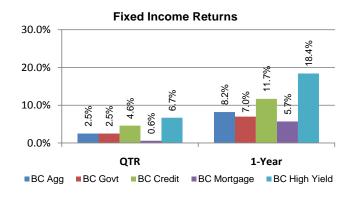


Source: U.S. Treasury Department

### **Fixed Income**

- In the first round of quantitative easing, the Federal Reserve purchased \$1.7 trillion in Treasuries, Agencies, and Mortgage-Backed securities.

  Markets have rallied recently due in part in expectations that the Fed will begin a new round of purchases, aka quantitative easing 2 or QE2, to help boost the economy.
- U.S. Debt posted a gain as interest rates declined.
- High Yield outperformed other sectors during both the current quarter and trailing 1-year period.

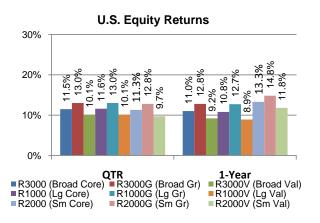


U.S. Fixed Income Sector Performance (BC Aggregate Index)							
Sector	Weight	QTR	1 Year				
Governments*	36.9%	2.5%	7.0%				
Agencies	8.6%	1.8%	5.5%				
MBS	32.5%	0.6%	5.7%				
ABS	0.3%	2.5%	8.9%				
CMBS	3.0%	6.4%	23.2%				
Inv. Grade Credit	18.7%	4.6%	11.7%				

\*U.S. Treasuries and Government Related

### **U.S.** Equities

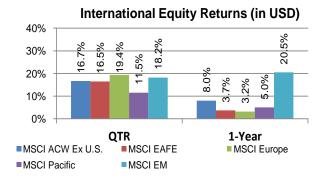
- The U.S. stock market rallied as a whole as investors focused mainly on the macro economic environment, which remains problematic but has shown signs of slow growth, thus helping to build a consensus towards the possibility of dodging a "double dip" recession.
- A majority of U.S. equity indices posted double-digit gains during the current quarter and trailing 1-year period. Within sectors, Financials lagged behind as investors considered the implications of financial regulations on banks' revenue growth.



U.S. Equity Sector Performance (Russell 3000 Index)						
Sector	Weight	QTR	1 Year			
Telecom Svc	3.0%	20.1%	19.1%			
Materials	4.1%	18.3%	13.5%			
Consumer Disc	11.3%	15.3%	23.6%			
Industrials	11.4%	13.7%	18.0%			
Energy	10.2%	13.1%	5.3%			
Information Tech	18.5%	12.3%	11.7%			
Utilities	3.7%	12.0%	12.1%			
Consumer Staples	9.7%	10.8%	12.9%			
Health Care	11.9%	8.6%	9.1%			
Financials	16.3%	5.4%	0.1%			

### **International Equities**

- The international equity market roller coasted through the quarter but ended with an upside bang. Like the U.S. market, investor confidence rose as signs of improving economic growth, the possibility of further quantitative easing by some governments, and subsiding fear of the Greek debt crisis calmed nerves. Depressed interest rates and the Dollar's depreciation against the Euro also pushed investors seeking additional returns to take more risks.
- Emerging Markets continued to outpace Developed Markets. Ten out of the 21 emerging market countries posted quarterly returns in excess of 20%, as did 12 out of 21 during the trailing 1-year period.



International Equity Region Performance (in USD) (MSCI ACW Index ex U.S.)							
Sector	Weight	QTR	1 Year				
United Kingdom	14.8%	19.8%	9.8%				
Europe Ex. UK	29.8%	19.2%	0.3%				
Japan	14.5%	5.9%	0.3%				
Pacific Ex. Japan	9.0%	22.2%	13.7%				
Canada	7.6%	13.4%	13.5%				
Emerging Markets	23.7%	18.2%	20.5%				

# Market Summary – Long-term Performance\*

ndexes	1 Year	3 Year	5 Year	10 Year
Global Equity				
MSCI All Country World	8.9%	-7.0%	2.9%	2.1%
Domestic Equity				
S&P 500	10.2%	-7.2%	0.6%	-0.4%
Russell 3000	11.0%	-6.6%	0.9%	0.1%
Russell 3000 Growth	12.8%	-4.3%	2.1%	-3.2%
Russell 3000 Value	9.2%	-9.0%	-0.4%	3.0%
Russell 1000	10.8%	-6.8%	0.9%	-0.2%
Russell 1000 Growth	12.7%	-4.4%	2.1%	-3.4%
Russell 1000 Value	8.9%	-9.4%	-0.5%	2.6%
Russell 2000	13.3%	-4.3%	1.6%	4.0%
Russell 2000 Growth	14.8%	-3.7%	2.3%	-0.1%
Russell 2000 Value	11.8%	-5.0%	0.7%	7.7%
nternational Equity				
MSCI All Country World ex US	8.0%	-7.0%	4.7%	4.7%
MSCI EAFE	3.7%	-9.1%	2.4%	3.0%
MSCI Pacific	5.0%	-7.4%	1.5%	1.8%
MSCI Europe	3.2%	-9.8%	2.9%	3.5%
MSCI EM (Emerging Markets)	20.5%	-1.2%	13.1%	13.8%
Fixed Income				
BC Aggregate Bond	8.2%	7.4%	6.2%	6.4%
BC Government	7.0%	7.2%	6.1%	6.2%
BC Credit Bond	11.7%	8.3%	6.5%	7.1%
BC Mortgage Backed Securities	5.7%	7.5%	6.4%	6.3%
BC High Yield Corporate Bond	18.4%	8.7%	8.4%	8.0%
Real Estate				
NCREIF (Private RE)	5.8%	-4.6%	3.7%	7.2%
NAREIT (Public RE)	28.3%	-5.9%	1.1%	9.9%
Commodity Index				
DJ-UBS Commodity	10.0%	-6.8%	-2.4%	5.2%

<sup>\*</sup> Performance is annualized for periods greater than one year.

WPERP RETIREMENT PLAN REVIEW

# **Actual vs. Target Allocations**

The strategic allocation targets reflect the allocation targets for the 2009-2010 fiscal year.

With respect to policy targets, the Total Retirement Portfolio ended the latest quarter **overweight Domestic and International Equities**, while **underweight Fixed Income**, **Private Equity**, **Real Estate**, **and Cash**. **Real Return** was right on target. The Total Portfolio will have new targets beginning 10/1/2010, as the portfolio shifts to the next phase of implementing its longer-term policy. The relatively large variance in Domestic Equity and Fixed Income are due to the acts of rebalancing toward the new policy targets<sup>4</sup>.

# As of September 30, 2010

Segment	Actual (\$MM)	Actual %	Target% <sup>1</sup>	Variance	Min.	Max.
Total Portfolio <sup>2</sup>	7,746	100	100			
Total Retirement <sup>3</sup>	6,681	100	100			
Domestic Equity	2,681	40	33	7	32	43
International Equity	1,236	19	17	2	12	18
Fixed Income	2,312	35	40	-5	38	52
Real Return	197	3	3	0		
Private Equity	66	1	2	-1		
Real Estate	94	1	3	-2		
Cash	85	1	2	-1	1	3

<sup>&</sup>lt;sup>1</sup> 2009-2010 strategic allocation policy targets.

<sup>&</sup>lt;sup>2</sup> Total Portfolio includes assets from the Retirement, Health, Disability, and Death Plans.

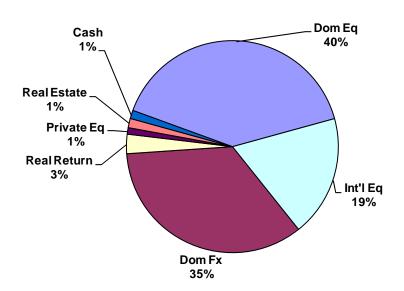
<sup>&</sup>lt;sup>3</sup> Including \$16.5 million in transition assets and a negative balance of (\$6.4) million in securities lending.

<sup>&</sup>lt;sup>4</sup> The 2010-2011 strategy allocation policy targets are: 34% Domestic Equity, 20% International Equity, 33% Fixed Income, 5% Real Return, 3% Private Equity, 4% Real Estate, and 1% Cash.

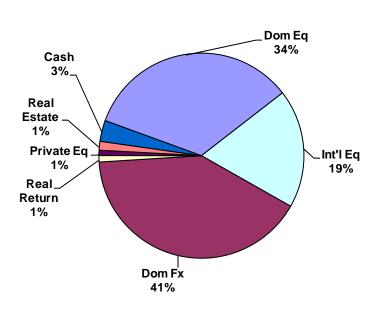
# **Actual Strategic Allocation Comparison**

As of September 30, 2010, the Total Retirement Portfolio had a 59% allocation in Equities, 35% in Fixed Income, 3% in Real Return, and 1% each in Private Equity, Real Estate, and Cash. During the latest 1-year period, the actual weighting of Domestic Equity and Real Return increased by 6% and 2%, respectively, while Fixed Income and Cash decreased (6%) and (2%), respectively. Other asset classes were unchanged. The Total Portfolio will have new targets beginning 10/1/2010, as the portfolio shifts to the next phase of implementing its longer-term policy<sup>1</sup>.

# **September 30, 2010**



# **September 30, 2009**



<sup>&</sup>lt;sup>1</sup> The 2010-2011 strategy allocation policy targets are: 34% Domestic Equity, 20% International Equity, 33% Fixed Income, 5% Real Return, 3% Private Equity, 4% Real Estate, and 1% Cash.

### WPERP RETIREMENT PLAN PERFORMANCE

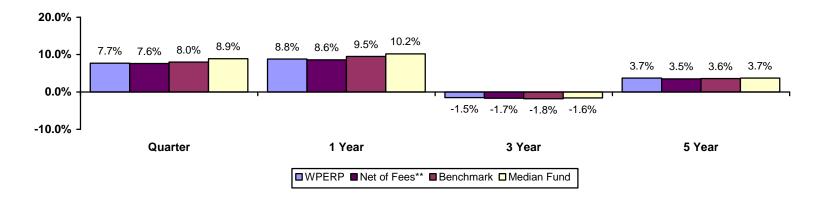
This section includes an overview of the performance of WPERP's Total Retirement Portfolio and a detailed analysis of strategic classes and specific mandates.

#### Portfolio Performance Overview

The Total Retirement Portfolio outperformed its policy benchmark over the trailing 3- and 5-year periods, gross of fees. The Total Retirement Portfolio trailed its policy benchmark over the latest quarter by (30) basis points and over the latest 1-year period by (70) basis points, gross of fees.

The Total Retirement Portfolio closely matched the Median Public Fund over the trailing 3- and 5-year periods, gross of fees. The Total Portfolio trailed the Median Public Fund over the latest quarter by (1.2%) and over the latest 1-year period by (1.4%), gross of fees. Relative underperformance by the Plan's Domestic Equity, International Equity, and Alternative Investments<sup>1</sup> portfolios with respect to the Median Public Fund detracted from performance.

# Periods Ending September 30, 2010 (annualized)\*



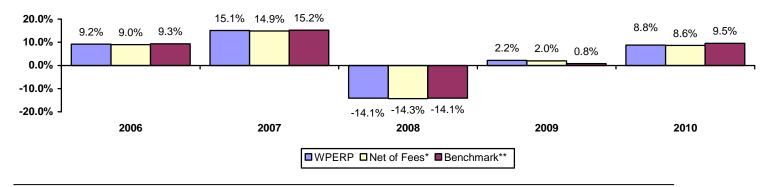
<sup>\*</sup> WPERP performance reported gross of fees.

\*\*Net of Fees Performance estimated based on existing WPERP manager fee schedule.

<sup>&</sup>lt;sup>1</sup> For the Median Public Fund, Alternative Investments include allocations to Private Equity, Hedge Funds, and Other Investments. For WPERP, Alternative Investments include Private Equity and Real Return.

The Total Retirement Portfolio generated positive absolute performance results, gross of fees, over four of the five trailing 12-month periods. The Total Retirement Portfolio outperformed or closely matched its policy benchmark four times over the same time periods, gross of fees.

## 12-month Performance - Periods Ending September 30



<sup>\*</sup>Net of Fees estimated based on existing WPERP manager fee schedule

### **Portfolio Valuation**

As of September 30, 2010, the Total Retirement Portfolio had an aggregate value of \$6.7 billion. This represents a \$450.8 million increase in value over last quarter including minus (\$27.5) million in net withdrawals. During the previous one-year period, the Total Retirement Portfolio increased by \$439.2 million.

Portfolio Valuation as of September 30, 2010, Gross of Fees

	3Q 2010	<u>1-Year</u>	<u>3-Year</u>	<u>5-Year</u>	
Beginning Market Value	\$6,230.3	\$6,241.9	\$7,557.5	\$6,339.5	
Net Flow	-27.5	-110.1	-541.4	-921.3	
Investment Return in \$ (in%)	<u>478.3</u>	7.7% <u>549.3</u>	8.8% <u>-335.0</u>	-1.5% <u>1,262.9</u>	3.7%
Ending Market Value	\$6,681.1	\$6,681.1	\$6,681.1	\$6,681.1	

<sup>\*</sup>Dollar figures in millions (\$), differences due to rounding

<sup>\*\*</sup>Recent Quarter net flow per Mellon. 1-year, 3-year, 5-year net flows estimated per PCA

### PERFORMANCE ATTRIBUTION - RETIREMENT PLAN

### Performance Attribution - 3Q 2010

	Policy		Portfo	Portfolio		Impact on Return		
	Allocation*	Return	Allocation*	Return	Weighting	Selection	Interaction	Total
Domestic Equity	33.0%	11.5	32.6%	11.2	(0.0)	(0.1)	0.0	(0.1)
International Equity	17.0%	16.8	17.6%	15.1	0.1	(0.3)	(0.0)	(0.2)
Fixed Income	40.0%	2.9	43.3%	3.1	(0.2)	0.1	0.0	(0.1)
Real Return	3.0%	0.8	1.2%	0.8	0.1	0.0	0.0	0.1
Private Equity	2.0%	1.4	1.0%	2.9	0.1	0.0	(0.0)	0.1
Real Estate	3.0%	3.3	1.4%	5.7	0.1	0.1	(0.0)	0.1
Cash	2.0%	0.0	2.9%	0.1	(0.1)	0.0	0.0	(0.1)
Total	100.0%	8.0	100.0%	7.7	0.1	(0.2)	(0.1)	(0.2)

<sup>\*</sup>Policy allocation utilizes beginning-of-the period target allocations; Portfolio allocation utilizes beginning-of-the period market values.

# Performance Attribution - Trailing 12-month

	Polic	СУ	y Portfolio		Impact on Return			
	Allocation*	Return	Allocation*	Return	Weighting	Selection	Interaction	Total
Domestic Equity	33.0%	11.0	35.5%	10.0	(0.1)	(0.3)	(0.0)	(0.4)
International Equity	17.0%	8.5	18.4%	5.8	(0.1)	(0.5)	(0.0)	(0.7)
Fixed Income	40.0%	8.9	39.3%	10.7	(0.2)	0.7	0.0	0.5
Real Return	3.0%	3.1	1.6%	13.4	0.1	0.3	(0.2)	0.2
Private Equity	2.0%	17.1	1.0%	22.9	0.2	(0.1)	0.1	0.1
Real Estate	3.0%	(1.5)	1.3%	(5.5)	(0.1)	0.1	(0.1)	(0.1)
Cash	2.0%	0.1	2.9%	0.4	(0.1)	0.0	0.0	(0.1)
Total	100.0%	9.5	100.0%	8.8	(0.3)	0.2	(0.2)	(0.3)

<sup>\*</sup>Policy allocation utilizes average target allocations over the trailing four quarters; Portfolio allocation utilizes average market values over the trailing four quarters.

- During the most recent quarter, the Total Retirement Portfolio underperformed its policy benchmark, due primarily to security selection from Domestic and International Equities.
- During the trailing 12-month period, The Total Portfolio also underperformed its policy benchmark. Among asset classes, Fixed Income contributed the most (+0.5%) to, while Domestic and International Equities detracted the most (-0.4% and -0.7% respectively) from, overall portfolio performance.

### WPERP RETIREMENT PLAN STRATEGIC CLASS PERFORMANCE

The **Domestic Equity** portfolio underperformed its policy benchmark during the quarter by (30) basis points, with an 11.2% return. Over the latest 1-year period, the portfolio underperformed its policy benchmark by (1.0%), as three of the Plan's five reporting Domestic Equity managers either matched or underperformed their respective benchmarks. Over the latest 3- and 5-year periods, the portfolio closely matched or outperformed its policy benchmark.

The **International Equity** portfolio posted a 15.1% quarterly return underperforming its policy benchmark by (1.7%), as three of the Plan's five reporting International Equity managers underperformed their respective benchmarks. Over the latest 1-year period, the portfolio trailed its policy benchmark by (2.7%), as the same three International Equity managers underperformed their respective benchmarks. Over the latest 3- and 5-year periods, the portfolio outperformed its policy benchmark by 30 basis points and trailed it by (90) basis points, respectively.

The **Fixed Income** portfolio outperformed its policy benchmark by 20 basis points, with a 3.1% quarterly return. Over the latest 1-year period, the portfolio surpassed its policy benchmark by 1.8%, due primarily to relative outperformance by the Plan's core fixed income manager. Over the latest 3- and 5-year periods, the portfolio outperformed its policy benchmark by 30 basis points each time, respectively.

### Periods ending September 30, 2010

Asset Class	Quarter	1 Year	3 Year	5 Year
Total Retirement	7.7	8.8	-1.5	3.7
Policy Benchmark <sup>1</sup>	8.0	<i>9.5</i>	-1.8	3.6
Domestic Equity	11.2	10.0	-6.7	1.1
Russell 3000 (blend) <sup>3</sup>	<i>11.5</i>	11.0	-6.6	<i>0.9</i>
International Equity  MSCI ACWI ex U.S. IMI ND (blend) <sup>4</sup>	15.1	5.8	-6.2	4.1
	<i>16.8</i>	<i>8.5</i>	-6.5	5.0
Fixed Income	3.1	10.7	7.6	6.6
BC Universal	2.9	8.9	7.3	<i>6.3</i>
Real Return <sup>2</sup> Tbill + $3\%^2$	0.8 <i>0.8</i>	13.4 3.1	1.2 <i>4.4</i>	
Private Equity <sup>2</sup> Cambridge USPE/USVC <sup>2,5</sup>	2.9 1.4	22.9 17.1	0.1 -0.9	
Real Estate <sup>2</sup> NCREIF <sup>2</sup>	5.7 3.3	-5.5 -1.5	-11.9 <i>-4.7</i>	
Cash	0.1	0.4	1.4	2.9
Citigroup T-bills	<i>0.0</i>	<i>0.1</i>	1.0	2.5

<sup>&</sup>lt;sup>1</sup> See Appendix for a description of the Retirement Plan policy benchmark.

<sup>&</sup>lt;sup>2</sup> Returns are lagged one quarter.

<sup>&</sup>lt;sup>3</sup> The policy benchmark for the Domestic Equity asset class is S&P 500 thru 3/31/03, and Russell 3000 from 4/1/03 to the present.

<sup>&</sup>lt;sup>4</sup> The policy benchmark for the International Equity asset class is MSCI ACWI ex US thru 12/31/08, and MSCI ACWI ex US IMI ND from 1/1/09 to the present.

<sup>&</sup>lt;sup>5</sup> The policy benchmark for the Private Equity asset class is a blended benchmark composed of Cambridge US Private Equity Index and the Cambridge US Venture Capital Index.

#### WPERP RETIREMENT PLAN MANAGER PERFORMANCE

### Domestic Equity – Periods ending September 30, 2010

Manager	Mkt Value (\$000)	Asset Class	Quarter	1 YR	3 YR	5 YR	Since Inception*	Inception Date**
BlackRock	569,971	Large Cap Core	11.6	10.8	-6.8	0.9	4.3	8/2003
Russell 1000 Index			11.6	10.8	-6.8	0.9	4.3	
MFS	355,792	Large Cap Value	9.9	7.5	-5.5	3.0	4.9	2/2004
Russell 1000 Value Index			10.1	8.9	-9.4	-0.5	2.2	
T. Rowe Price	364,217	Large Cap Value	9.8	9.2	-6.3	1.9	3.7	9/2004
Russell 1000 Value Index			10.1	8.9	-9.4	-0.5	2.2	
Fred Alger	352,695	Large Cap Growth	14.6	12.2	-5.2	3.2	4.5	2/2004
Russell 1000 Growth Index			13.0	12.7	-4.4	2.1	2.4	
T. Rowe Price	340,434	Large Cap Growth	13.2					4/2010
Russell 1000 Growth Index			13.0					
Earnest Partners	95,094	Small Cap Value	8.7	13.5	-4.0	-0.2	2.4	11/2004
Russell 2000 Value Index			9.7	11.8	-5.0	0.7	1.7	
Frontier	96,075	Small Cap Growth	10.6					4/2010
Russell 2000 Growth Index			12.8					

<sup>\*</sup> Performance is calculated based on the first full month of performance since funding.

#### Latest Quarter

During the third quarter of 2010, three of WPERP's seven reporting domestic equity managers either matched or outperformed their respective benchmarks.

**BlackRock**, WPERP's passive large cap core manager, matched the Russell 1000 Index return of 11.6% during the quarter. **MFS**, one of the Plan's large cap value managers, generated a 9.9% quarterly return underperforming the Russell 1000 Value Index return by (20) basis points. **T. Rowe Price LCV**, the Plan's other large cap value manager, trailed the Russell 1000 Value Index by (30) basis points with a 9.8% quarterly return. **Fred Alger**, the Plan's active large cap growth manager, completed the quarter with a 14.6% return outperforming the Russell 1000 Growth Index by 1.6%. Stock selection in Information Technology and Energy accounted for the bulk of excess returns. **T. Rowe Price LCG**, the Plan's newly hired large cap growth manager, posted its first quarterly return of 13.2% and outperformed the Russell 1000 Growth Index by 20 basis points. **Earnest Partners**, WPERP's small cap value manager, ended the quarter with an 8.7% return underperforming the Russell 2000 Value Index by (1.0%). The portfolio's higher quality issues lagged in performance as the market rally during the quarter rewarded lower quality, higher-beta stocks. **Frontier**, the Plan's newly hired small cap growth manager, posted its first quarterly return of 10.6% and underperformed the Russell 2000 Growth Index by (2.2%). Portfolio performance was hurt by stock selection, primarily in Health Care, Technology, and Producer Durables.

<sup>\*\*</sup> Inception date reflect the month when portfolio received initial funding. Since-inception returns are not shown for managers with less than one year of performance.

### **Latest Year**

During the latest 1-year period, **BlackRock** matched its benchmark with a 10.8% return. **MFS** posted a 7.5% return and underperformed its benchmark by (1.4%). Stock selection in Financials, Consumer Discretionary, and Industrials detracted from relative performance. **MFS** was placed on watch status in August 2010 due to short-term performance. **T. Rowe Price LCV** generated a 9.2% return outperforming its benchmark by 30 basis points. **Fred Alger** posted a 12.2% return underperforming its benchmark by (50) basis points. **Earnest Partners** completed the latest 1-year period with a 13.5% return outperformed its benchmark by 1.7%. The portfolio's underweight position in Financials, and stock selection in Industrials, Energy, and Utilities benefited relative performance.

### **Latest Three Years**

During the latest 3-year period, **BlackRock** matched its benchmark with a minus (6.8%) return. **MFS** surpassed its benchmark by 3.9% with a minus (5.5%) return. Allocation differences and stock selection in Financials, Information Technology, and Industrials benefited relative performance. **T. Rowe Price LCV** posted a minus (6.3%) return outperforming its benchmark by 3.1%. The portfolio's underweight position and stock selection in Financials, as well as stock selection in Consumer Staples and Industrials, drove the relative outperformance. **Fred Alger** posted a minus (5.2%) return underperforming its benchmark by (80) basis points. **Earnest Partners**' latest 3-year return of minus (4.0%) beat its benchmark by 1.0%. Allocation differences and stock selection in Industrials and Financials added to relative performance.

### **Latest Five Years**

During the latest 5-year period, **BlackRock** matched its benchmark return of 0.9%. **MFS** finished the period surpassing the Russell 1000 Value Index return by 3.5%, with a 3.0% return. Allocation differences and stock selection in Financials, Information Technology, and Industrials benefited relative performance. **T. Rowe Price LCV** outperformed its benchmark by 2.4% with a 1.9% return, due primarily to an underweight and stock selection in Financials. **Fred Alger** posted a 3.2% return outperforming its benchmark by 1.1%. Stock selection in Energy and Information Technology contributed the most to relative performance. **Earnest Partners** generated a minus (0.2%) return underperforming its benchmark by (90) basis points.

## International Equity – Periods ending September 30, 2010

Manager	Mkt Value (\$000)	Asset Class	Quarter	1 YR	3 YR	5 YR	Since Inception*	Inception Date**
Invesco	356,850	Developed Markets	14.9	2.7	-7.6	2.8	5.6	6/2004
MSCI World ex US IMI ND Index (blend – Invesco) <sup>1</sup>			16.3	4.9	-8.3	2.9	6.3	
The Boston Company	314,296	Developed Markets	11.9	1.3	-6.2	2.5	3.4	3/2005
MSCI World ex US IMI ND Index (blend – Boston) <sup>2</sup>			16.3	4.9	-8.3	3.2	4.6	
Pyramis	363,206	Developed Markets	16.5	6.2	-7.7	3.3	5.3	11/2004
MSCI World ex US IMI ND Index (blend – Pyramis) <sup>3</sup>			16.3	4.9	-8.2	2.8	4.7	
The Boston Company	108,136	Emerging Markets	16.9	17.3	3.7	13.8	16.5	3/2005
T. Rowe Price	93,516	Emerging Markets	19.9	22.2	-3.9	11.6	15.7	3/2005
MSCI EMF IMI ND Index (blend) <sup>4</sup>			18.3	21.6	-0.4	13.6	16.6	

<sup>\*</sup> Performance is calculated based on the first full month of performance since funding.

#### **Latest Quarter**

During the third quarter of 2010, two of WPERP's five reporting international equity managers outperformed their respective benchmarks.

Invesco, WPERP's active core international manager, generated a quarterly return of 14.9% and underperformed the MSCI World ex US IMI ND Index (blend) return by (1.4%). Stock selection in Australia and Switzerland detracted from relative performance. From a sector perspective, stock selection in Consumer Staples and Financials hurt relative performance. Invesco was placed on watch status during the quarter due to organizational changes.

The Boston Company, the Plan's active international value manager, completed the quarter with an 11.9% return underperforming the MSCI World ex US IMI ND Index (blend) return by (4.4%). The portfolio performance was affected by an underweight position in the recovering European financials and an overweight position in the poor-performing Japanese stocks. Pyramis, the Plan's active international growth manager, outperformed the MSCI World ex US IMI ND Index (blend) by 20 basis points, with a 16.5% quarterly return. The Boston Company, one of WPERP's two emerging markets managers, finished the quarter with a 16.9% return, underperforming the MSCI Emerging Markets IMI ND Index (blend) by (1.4%). Stock selection in Information Technology and Consumer Staples plus a cash drag dampened relative performance. T. Rowe Price, the Plan's other emerging markets manager, completed the quarter with a 19.9% return, outperforming the MSCI Emerging Markets IMI ND Index (blend) by 1.6%. Stock selection, particularly in China, provided a boost to the portfolio.

<sup>\*\*</sup> Inception date reflect the month when portfolio received initial funding.

<sup>&</sup>lt;sup>1</sup> Invesco's benchmark is MSCI EAFE + Canada ND thru12/31/08, and MSCI World ex US IMI ND from 1/1/09 to the present.

<sup>&</sup>lt;sup>2</sup> Boston's benchmark is MSCI EAFE + Canada Value ND thru 6/30/07, MSCI EAFE + Canada ND from 7/1/07 to 12/31/08, and MSCI World ex US IMI ND from 1/1/09 to the present.

<sup>&</sup>lt;sup>3</sup> Pyramis' benchmark is MSCI EAFE ND thru 12/31/08, and MSCI World ex US IMI ND from 1/1/09 to the present.

<sup>&</sup>lt;sup>4</sup> Boston (EM) and T. Rowe Price's benchmark is MSCI EMF thru 12/31/08, and MSCI EMF IMI ND from 1/1/09 to the present.

### **Latest Year**

**Invesco** finished its latest 1-year period with a 2.7% return, trailing its benchmark by (2.2%). Stock selection in the United Kingdom detracted from relative performance. **The Boston Company** completed the period underperforming its benchmark by (3.6%), with a 1.3% return. Stock selection across the board, notably in Japan and Italy, proved to be challenging. **Pyramis** completed the period with a 6.2% return and bested its benchmark by 1.3%. Stock selection in European countries benefited relative performance. **The Boston Company** emerging markets portfolio produced a 17.3% return but trailed its benchmark by (4.3%). Stock selection in South Korea largely detracted from relative performance. **T. Rowe Price** generated a 22.2% return and outperformed its benchmark by 60 basis points.

### **Latest Three Years**

**Invesco** finished its latest 3-year period with a minus (7.6%) return, outperforming its benchmark by 70 basis points. **The Boston Company** completed the period returning minus (6.2%) outperforming its benchmark by 2.1%. Stock selection in Germany and Japan benefited relative performance. **Pyramis** returned minus (7.7%) and outperformed its benchmark by 50 basis points. **The Boston Company** emerging markets portfolio produced a 3.7% return and outperformed its benchmark by 4.1%. Allocation differences and stock selection in China, Taiwan, and Thailand contributed the most to relative performance. **T. Rowe Price** generated a minus (3.9%) return and trailed its benchmark by (3.5%). Stock selection in Consumer Discretionary and Information Technology accounted for the bulk of the underperformance.

### **Latest Five Years**

**Invesco** finished its latest 5-year period with a 2.8% return slightly trailing its benchmark by (10) basis points. **The Boston Company** completed the period posting a 2.5% return, underperforming its benchmark by (70) basis points. **Pyramis** returned 3.3% outperforming its benchmark by 50 basis points. **The Boston Company** emerging markets portfolio produced a 13.8% return and bested its benchmark by 20 basis points. **T. Rowe Price** returned 11.6% and underperformed its benchmark return by (2.0%). Stock selection in Consumer Discretionary detracted the most from relative performance.

### Fixed Income – Periods ending September 30, 2010

Manager	Mkt Value (\$000)	Asset Class	Quarter	1 YR	3 YR	5 YR	Since Inception*	Inception Date**
JP Morgan	1,040,099	Core	2.5					4/2010
BC Aggregate Index			2.5					
Wells	1,040,727	Core	2.8	9.6	9.4	7.5	7.0	7/2004
BC Aggregate Index			2.5	8.2	7.4	6.2	5.8	
Loomis	116,006	High Yield	7.8	20.8	8.9	8.9	9.0	3/2005
BC High Yield Index			6.7	18.4	8.7	8.4	8.3	
Wells	115,399	High Yield	5.8	15.6	8.4	8.3	7.4	11/2004
BC High Yield Index			6.7	18.4	8.7	8.4	7.8	

<sup>\*</sup> Performance is calculated based on the first full month of performance since funding.

#### **Latest Quarter**

During the third quarter of 2010, three of WPERP's four reporting fixed income managers either matched or outperformed their respective benchmarks. JP Morgan, the Plan's new core fixed income manager, posted its first quarterly return of 2.5% and matched the BC Aggregate Index. Wells, the Plan's other core fixed income manager, outperformed the BC Aggregate Index by 30 basis points with a quarterly return of 2.8%. Loomis Sayles, one of the portfolio's two high yield managers, delivered a quarterly return of 7.8% outperforming the BC High Yield Index by 1.1%. The portfolio benefited mainly from strong security selection and a long duration position as the yield curve remained flat. The other high yield manager Wells finished the quarter underperforming the BC High Yield Index by (90) basis points, with a 5.8% return.

#### **Latest Year**

**Wells** finished its latest 1-year period with a 9.6% return and outperformed its benchmark by 1.4%. Both sector and security selection drove the relative outperformance. **Loomis Sayles** generated a 20.8% return and outperformed its benchmark by 2.4%, due primarily to yield curve positioning and security selection. **Wells** High Yield finished the period returning 15.6%, but trailed its benchmark by (2.8%). The portfolio was focused on absolute portfolio risk rather that relative risk versus the benchmark. As the market rewarded risk-taking in lower-quality issues, Wells portfolio's lower exposure to these securities hurt relative performance.

#### **Latest Three Years**

**Wells** finished its latest 3-year period posting a 9.4% return and outperformed its benchmark by 2.0%, due primarily to security selection. **Loomis Sayles** generated an 8.9% return and outperformed its benchmark by 20 basis points. **Wells** High Yield posted an 8.4% return underperforming its benchmark by (30) basis points.

#### **Latest Five Years**

**Wells** finished its latest 5-year period with a 7.5% return and outperformed its benchmark by 1.3%. Security selection was the largest factor that benefited relative performance. **Loomis** completed the period with an 8.9% return outperforming its benchmark by 50 basis points. **Wells** High Yield generated an 8.3% return slightly underperforming its benchmark by (10) basis points.

<sup>\*\*</sup> Inception date reflect the month when portfolio received initial funding.

### Real Return – Periods ending September 30, 2010

Manager	Mkt Value (\$000)	Asset Class	Quarter	1 YR	3 YR	5 YR	Since Inception**	Inception Date***
Aetos Capital*	34,105	Hedge FOFs	-1.7	11.0	-0.5		1.0	2/2007
PAAMCO*	35,461	Hedge FOFs	-1.4	10.6	1.1		3.0	2/2007
Tbills + 3 %*			0.8	3.1	4.4		4.9	
HFRI FOF Diversified Index*		Hedge FOFs	-2.4	5.0	-3.8		-2.8	
WAMCO*	127,514	GILS	2.1					4/2010
Tbills + 3 %*			0.8					

<sup>\*</sup> Returns are lagged one quarter and net-of-fees.

#### **Latest Quarter**

During the third quarter of 2010, WPERP's two hedge fund managers both underperformed the Tbills+3% Index but outperformed the HFRI FOF Diversified Index. On 10/28/10, the Board terminated **PAAMCO** due to ongoing organizational issues. A replacement search for a new Hedge FOFs manager will be conducted in the fourth quarter of 2010.

**Aetos** underperformed the Tbill+3% by (2.5%) but outperformed the HFRI FOF Diversified Index by 70 basis points. **PAAMCO** underperformed the Tbill+3% by (2.2%) but outperformed the HFRI FOF Diversified Index by 1.0%. **WAMCO**, the Plan's new GILS (Global Inflation-Linked Securities) manager, posted its first quarterly return of 2.1% outperforming the Tbill+3% by 1.3%.

#### **Latest Year**

Over the latest 1-year period, **Aetos** outperformed the Tbill+3% by 7.9% and the HFRI FOF Diversified Index by 6.0%. **PAAMCO** outperformed the Tbill+3% by 7.5% and the HFRI FOF Diversified Index by 5.6%.

#### **Latest Three Years**

**Aetos** finished its latest 3-year period with a minus (0.5%) return underperforming the Tbill+3% by (4.9%), but outperforming the HFRI FOF Diversified Index by 3.3%. **PAAMCO** posted a 1.1% return trailing the Tbill+3% by (3.3%), while outperforming the HFRI FOF Diversified Index by 4.9%.

<sup>\*\*</sup> Performance is calculated based on the first full month of performance since funding.

<sup>\*\*\*</sup> Inception date reflect the month when portfolio received initial funding.

# Private Equity and Real Estate - Periods ending September 30, 2010

Asset Class	Mkt Value (\$000)	Quarter	1 YR	3 YR	5 YR	Since Inception***	Inception Date***
Private Equity*	66,144	2.9	22.9	0.1		3.9	9/2006
Cambridge USPE/USVC***		1.4	17.1	-0.9		6.4	
Real Estate*	94,002	5.7	-5.5	-11.9		-7.8	3/2007
NCREIF*		3.3	-1.5	-4.7		-1.8	

<sup>\*</sup> Returns are lagged one quarter and net of fees.

The Private Equity portfolio currently consists of seven investments including Lexington VI, Lexington VII, Landmark XIV, Capital Dynamics (previously HRJ Capital), Fisher Lynch, and Oaktree V. The portfolio outperformed the Cambridge USPE/USVC Index during the current quarter by 1.5%. Over the latest 1- and 3-year periods, the portfolio outpaced its benchmark by 5.8% and 1.0%, respectively.

The **Real Estate** portfolio currently consists of five investments including **Prisa**, **Prisa II**, **JP Morgan Strategic**, **CB Richard Ellis**, and **Mesa West**. The portfolio outperformed the NCREIF Index during the current quarter by 2.4%. Both core managers Prisa and JP Morgan (accounts for over 70% of total real estate portfolio) outperformed the NCREIF Index during the quarter. Over the latest 1- and 3-year periods, the portfolio trailed its benchmark by (4.0%) and (7.2%), respectively. The portfolio's core managers accounted for the bulk of the underperformance.

<sup>\*\*</sup> The policy benchmark for the Private Equity asset class is a blended benchmark composed of Cambridge US Private Equity Index and the Cambridge US Venture Capital Index.

<sup>\*\*\*</sup> Performance is calculated based on the first full month of performance since funding.

<sup>\*\*\*\*</sup> Inception date reflect the month when portfolio received initial funding.

### WPERP RETIREMENT PLAN MANAGERS ON WATCH

### **Return vs. Benchmark Since Watch**

As of September 30, 2010

							Performance Since Begin Watch Status*							
Portfolio	Style Group	Concern	Begin Watch Status	Last Reviewed	First Month	First 3 Months	First 6 Months	First 9 Months	First 12 Months	Since Placed on Watch				
T. Rowe Price	Emerging Markets	Performance	5/1/2009	4/28/2010	20.7	33.3	45.4	48.4	64.3	51.2				
MSCI EMF IMI Index (blended)	Emerging Markets				17.8	29.8	41.5	45.8	60.4	46.8				
T. Rowe Price vs. Target	MSCI EMF IMI Index (blended)				N/M	N/M	N/M	N/M	3.9	4.4				
Wells	Core	Organizational	2/1/2010		0.5	1.6	5.9			7.2				
BC Aggregate Index	Core				0.4	1.3	4.9			6.3				
Wells vs. Target	BC Aggregate Index				N/M	N/M	N/M	N/M		N/M				
Wells	High Yield	Performance	2/1/2010		0.3	4.8	6.1			8.9				
BC High Yield Index	High Yield				0.2	5.7	6.9			10.1				
Wells vs. Target	BC High Yield Index				N/M	N/M	N/M	N/M		N/M				
Pyramis	Developed Markets	Performance	5/1/2010		-10.8	-4.2				2.4				
MSCI Wid ex US IMI ND Index	Developed Markets				-11.2	-4.4				1.9				
Pyramis vs. Target	MSCI WId ex US IMI ND Index				N/M	N/M	N/M	N/M		N/M				
Invesco	Developed Markets	Organizational	9/1/2010		8.4					8.4				
MSCI Wid ex US IMI ND Index	Developed Markets				9.8					9.8				
Invesco vs. Target	MSCI WId ex US IMI ND Index				N/M	N/M	N/M	N/M		N/M				
MFS	Large Cap Value	Performance	9/1/2010		8.0					8.0				
Russell 1000 Value Index	Large Cap Value				7.8					7.8				
MFS vs. Target	Russell 1000 Value Index				N/M	N/M	N/M	N/M		N/M				

\*Performance data provided by Mellon.
Periods marked as '---' do not indicate that returns are not available for these periods; only that the manager in question has not been on watch status for these periods.
Periods marked as "N/M" indicate returns are not meaningful enough to fairly judge investment performance.

#### **Managers on Watch**

**T. Rowe Price (Emerging Markets)** was placed on watch status beginning 5/1/2009 due to short-term performance. Watch status has been extended 6 months due to continued performance concerns.

Wells was placed on watch status beginning 2/1/2010 due to short-term performance.

Wells HY was placed on watch status beginning 2/1/2010 due to organizational issues.

**Pyramis** was placed on watch status beginning 5/1/2010 due to short-term performance.

**Invesco** was placed on watch status beginning 9/1/2010 due to organizational issues.

MFS was placed on watch status beginning 9/1/2010 due to short-term performance.

### Managers Removed/Terminated from Watch Status

**The Boston Company (Developed Markets)** was removed from watch on 8/19/09 due to strong relative performance and lack of any material impact from organizational changes. The Boston Company was originally placed on watch status on 8/1/2007 due to organizational changes.

**The Boston Company (Emerging Markets)** was removed from watch on 8/19/09 due to strong relative performance and lack of any material impact from organizational changes. The Boston Company was originally placed on watch status on 3/1/2009 due to organizational changes.

**Intech** was terminated on 8/19/09. Intech was originally placed on watch status on 12/31/2007 due to short-term performance.

**ING** was terminated on 10/7/09 but the account is currently pending transition. ING was originally placed on watch status on 8/1/2008 due to short-term performance.

Paradigm was terminated on 1/27/10. Paradigm was originally placed on watch status on 1/1/2009 due to short-term performance.

**Aetos** was removed from watch on 3/24/10 due to strong relative performance during the evaluation period. **Aetos** was originally placed on watch status on 3/1/2009 due to short-term performance.

**PAAMCO** was removed from watch on 3/24/10 due to strong relative performance during the evaluation period. **PAAMCO** was originally placed on watch status on 3/1/2009 due to short-term performance.

**Loomis Sayles** was removed from watch on 4/28/10 due to strong relative performance during the evaluation period. **Loomis Sayles** was originally placed on watch status on 5/1/2009 due to short-term performance.

**BlackRock** was removed from watch on 6/9/10 as the merger between BlackRock and Barclays Global Investors was examined and viewed as favorable, with key professionals remaining in place. **BlackRock** was originally place on watch status on 7/1/2009 due to organizational issues.

# WPERP Retirement Plan Estimated Performance Results Net and Gross of Fees Comparison For Quarter Ending 9/30/2010

			Performa	nce, % <sup>2</sup>	Difference		
Asset Class	Manager	Market Value 2	Net Gross		Percentage	Market Value	
Domestic Equity							
Russell 1000 Index							
Passive	BlackRock	569,971,179	11.59%	11.60%	-0.01%	-57,00	
Large Value	MFS	355,792,118	9.82%	9.90%	-0.08%	-284,86	
Large Value	T. Rowe Price	364,216,908	9.71%	9.80%	-0.09%	-328,09	
Large Growth	Fred Alger	352,694,620	14.52%	14.60%	-0.08%	-282,38	
Large Growth	T. Rowe Price	340,434,486	13.11%	13.20%	-0.09%	-306,66	
Small Value	Earnest Partners	95,094,389	8.54%	8.70%	-0.16%	-152,39	
Small Growth	Frontier	96,075,046	10.35%	10.60%	-0.25%	-240.79	
Omaii Growth	Transition	506,422,445	10.5576	10.0070	0.2370	240,75	
	Transition	\$2,680,701,191				-	
hate medical Faults		\$2,000,701,191					
International Equity	Invesco	256 040 724	14.900/	14.90%	-0.11%	202.06	
Active Equities Active Equities	The Boston Co.	356,849,721 314,296,270	14.80% 11.79%	11.90%	-0.11%	-392,96 -346,10	
Active Equities Active Equities	Pyramis	363,205,975	16.42%	16.50%	-0.08%	-327,18	
Emerging Markets	The Boston Company	108,135,582	16.67%	16.90%	-0.23%	-249,28	
Emerging Markets	T. Rowe Price	93,516,477	19.66%	19.90%	-0.25%	-234,37	
zmorging mamete		\$1,236,004,025	10.0070	10.0070	0.2070	20 1,01	
Domestic Fixed Income		ψ1,230,004,023					
Core	JP Morgan	1,040,098,647	2.48%	2.50%	-0.03%	-312,12	
Core	Wells	1,040,726,935	2.77%	2.80%	-0.03%	-312,31	
High Yield	Loomis Sayles	116,005,738	7.68%	7.80%	-0.03%	-151,00	
High Yield	Wells	115,399,310	5.69%	5.80%	-0.12%	-138,64	
		\$2,312,230,630					
Real Return 3		. , , ,					
	Aetos	34,105,302	-1.70%	-1.51%	-0.19%	-64,92	
	PAAMCO	35,461,069	-1.40%	-1.15%	-0.25%	-88,87	
	WAMCO	127,513,579	2.10%	2.05%	0.05%	-63,78	
	_	\$197,079,950					
Private Equity <sup>3</sup>		. , ,					
	Lexington VI	18,210,465	0.80%	1.20%	-0.40%	-73,13	
	Lexington VII	138,767	51.00%	51.40%	-0.40%	-55	
	Landmark XIII	17,538,888	1.80%	2.20%	-0.40%	-70,43	
	Cap Dynamics	19,354,794	4.40%	4.80%	-0.40%	-77,73	
	Fisher Lynch	5,122,700	4.80%	5.20%	-0.40%	-20,57	
	Landmark XIV	2,745,315	6.20%	6.60%	-0.40%	-11,02	
	Oaktree	3,033,537	4.70%	5.10%	-0.40%	-12,18	
2		\$66,144,466					
Real Estate 3							
	Prisa	35,077,128	7.90%	8.13%	-0.23%	-80,86	
	Prisa II	13,818,201	8.30%	8.53%	-0.23%	-31,85	
	JP Morgan	35,289,537	4.00%	4.23%	-0.23%	-81,35	
	CBRE	8,828,232	0.40%	0.63%	-0.23%	-20,35	
	Mesa West	988,695 <b>\$94,001,793</b>	-4.20%	-3.97%	-0.23%	-2,27	
		\$94,001,793					
Cash		\$84,818,368		0.10%			
TOTAL PORTFOLIO 1		6,681,078,552	7.64%	7.70%	-0.06%	-\$4,816,11	
Total Fund Policy				8.00%			

<sup>&</sup>lt;sup>1</sup> Total portfolio market value includes \$16.5 million in transition assets and a negative balance of (\$6.4) million in securities lending.

<sup>&</sup>lt;sup>2</sup> Returns and market values calculated using data from Mellon and LDZ.

 $<sup>^{\</sup>rm 3}$  Hedge FoFs, Private Equity, and Real Estate asset classes report net-of-fee returns.

### **Quarterly Report**

WPERP DISABILITY PLAN REVIEW

The WPERP - Disability portfolio ended the third quarter of 2010 with an aggregate value of approximately \$42.3 million.

#### **Portfolio Performance Overview**

Periods ending September 30, 2010, Gross of Fees

Asset Class	Quarter	1 Year	3 Year	5 Year	Since Inception**	Inception Date***
Total Portfolio Policy Benchmark*	2.8 2.4	9.6 7.8	8.4 7.1	6.9 <i>6.0</i>		
Wells BC Aggregate	3.0 2.5	10.7 <i>8.2</i>	9.3 <i>7.4</i>	7.5 <i>6.2</i>	6.9 <i>5.8</i>	7/2004 

<sup>\*</sup>Policy benchmark consists of 95% BC Aggregate Bond Index and 5% Citigroup T-Bill.

**3Q 2010** – During the third quarter of 2010, the Disability Plan posted a 2.8% return and outperformed its policy benchmark by 40 basis points. The benchmark portfolio consists of passively managed asset class portfolios held at the Disability Plan's policy weightings.

Longer Term – Over the latest 1-, 3-, and 5-year periods, the Disability Plan outperformed its policy benchmark by 1.8%, 1.3%, and 0.9%, respectively.

### Portfolio Strategic Allocation (as of 9/30/10)

Segment		Actual \$(000)	Actual %	Target %	Variance
Total Portfolio		\$42,267	100	100	
Fixed Income	Wells	40,142 40.142	95 95	95 95	0
Cash		2,125	5	5	0

**Strategic allocation** – The Disability Plan target allocation consists of 95% fixed income investments and 5% cash. At the close of 3Q 2010, there was one fixed income manager, Wells. The total fund was 95% invested in this manager.

<sup>\*\*</sup> Performance is calculated based on the first full month of performance since funding.

<sup>\*\*\*</sup> Inception date reflect the month when portfolio received initial funding.

### **Quarterly Report**

WPERP DEATH PLAN REVIEW

The WPERP – Death portfolio ended the third quarter of 2010 with an aggregate value of approximately \$24.8 million.

#### **Portfolio Performance Overview**

Periods ending September 30, 2010, Gross of Fees

Asset Class	Quarter	1 Year	3 Year	5 Year	Since Inception**	Inception Date***
Total Portfolio Policy Benchmark*	2.4 2.4	8.5 7.8	8.0 7.2	6.7 6.0		
Wells BC Aggregate	3.0 2.5	10.7 <i>8.2</i>	9.3 <i>7.4</i>	7.5 <i>6.2</i>	6.9 <i>5.8</i>	7/2004 

<sup>\*</sup>Policy benchmark consists of 96% BC Aggregate Bond Index and 4% Citigroup T-bill.

**3Q 2010** – During the third quarter of 2010, the Death Plan matched its policy benchmark with a 2.4% return. The benchmark portfolio consists of passively managed asset class portfolios held at the Death Plan's policy weightings.

**Longer Terms** – Over the latest 1-, 3-, and 5-year periods, the Death Plan outperformed its policy benchmark by 70, 80, and 70 basis points, respectively.

### Portfolio Strategic Allocation (as of 9/30/10)

Segment		Actual \$(000)	Actual %	Target %	Variance
Total Portfolio		\$24,769	100	100	
Fixed Income	Wells	23,205 23,205	94 94	96 96	-2 -2
Cash		1,564	6	4	2

**Strategic allocation** – The Death Benefit Plan target allocation consists of 96% fixed income investments and 4% cash. At the close of 3Q 2010, there was one fixed income manager, Wells. The total fund was 94% invested in this manager.

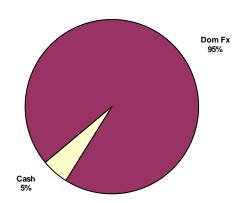
<sup>\*\*</sup> Performance is calculated based on the first full month of performance since funding.

<sup>\*\*\*</sup> Inception date reflect the month when portfolio received initial funding.

### **Actual Strategic allocation Comparison – Disability and Death Plans**

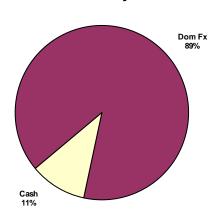
**September 30, 2010** 

Disability

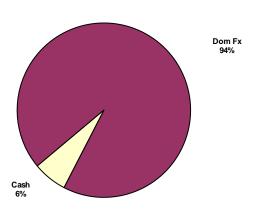


### **September 30, 2009**

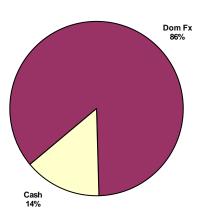
Disability



### Death



### Death



### **Quarterly Report**

**HEALTH PLAN REVIEW** 

The WPERP - Health Plan ended the third quarter of 2010 with an aggregate value of approximately \$997.9 million. Real Return managers **WAMCO**, **Aetos** and **PAAMCO** were funded during the quarter and returns are lagged one quarter. **PAAMCO** was terminated at the 10/28/10 Board meeting and a replacement search will be conducted in the fourth quarter of 2010.

#### **Portfolio Performance Overview**

Periods ending September 30, 2010, Gross of Fees

Asset Class	Quarter	1 Year	3 Year	5 Year	Since Inception	Inception Date*
Total Health Policy Benchmark <sup>1</sup>	7.7 8.2	8.9 10.1	0.1 -0.8		1.9 1.2	12/2006
Domestic Equity Russell 3000 (blend) <sup>2</sup>	11.7 11.5	10.6 11.0	-7.0 -6.7		-3.4 -3.2	1/2007
International Equity  MSCI ACWI ex U.S. IMI ND	14.4 <i>16.8</i>					9/2009
Fixed Income BC Universal (blend) <sup>3</sup>	2.9 2.9	9.4 8.9	9.4 7.7		8.7 7.2	1/2007
Real Return <sup>4</sup> Tbill + 3% <sup>4</sup>						
Private Equity <sup>4</sup> Cambridge USPE/USVC <sup>4,5</sup>	6.8 1.4	9.0 17.1			15.6 <i>-0.2</i>	9/2008
Real Estate <sup>4</sup> NCREIF <sup>4</sup>	-4.2 3.3					4/2010 
Cash Citigroup T-bills	0.1 <i>0.0</i>	0.4 <i>0.1</i>	1.4 1.0		2.2 1.8	12/2006

<sup>\*</sup>Since-inception returns are not shown for managers with less than one year of performance.

The Health Plan Total Portfolio underperformed its policy benchmark over the latest quarter by (50) basis points, with a 7.7% return. Over the latest 1-year period, the portfolio trailed its policy benchmark by (1.2%), due primarily to relative underperformance by the Plan's Domestic Equity portfolio. Over the latest 3-year period, the portfolio outperformed its policy benchmark by 90 basis points.

<sup>&</sup>lt;sup>1</sup> See Appendix for a description of the Health Plan policy benchmark.

<sup>&</sup>lt;sup>2</sup> The policy benchmark for the Domestic Equity asset class is Russell 1000 thru 9/30/09, and Russell 3000 from 10/1/09 to the present.

<sup>&</sup>lt;sup>3</sup> The policy benchmark for the Fixed Income asset class is BC Aggregate thru 9/30/09, and BC Universal from 10/1/09 to the present.

<sup>&</sup>lt;sup>4</sup> Returns are lagged one quarter.

<sup>&</sup>lt;sup>5</sup> The policy benchmark for the Private Equity asset class is a blended benchmark composed of Cambridge US Private Equity Index and the Cambridge US Venture Capital Index.

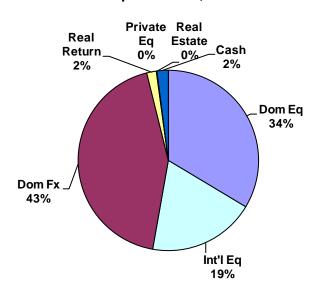
Portfolio Strategic Allocation (as of 9/30/10) – New policy target took effect on 7/1/2010.

Segment	Actual (\$MM)	Actual %	Target* %	Variance
Health Plan***	998*	100	100	0
Domestic Equity	319	34	34	0
International Equity	182	19	18	1
Domestic Fixed	412	43	42	1
Real Return	16	2	3	-1
Private Equity	1	0	1	-1
Real Estate	0	0	0	0
Cash	19	2	2	0

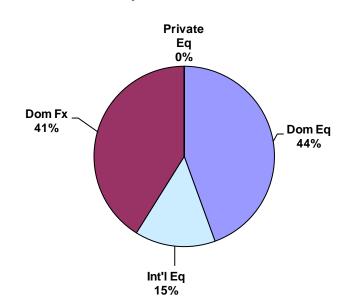
<sup>\*</sup>Includes \$48.4 million in transition assets and a negative balance of (\$223,931) in securities lending.

As of September 30, 2010, the portfolio had a 53% allocation in Equities, 43% in Fixed Income, 2% in Real Return and Cash, and less than 1% each in Private Equity and Real Estate. During the latest one year, the actual weightings of Domestic Equity decreased by (10%), while International Equity and Fixed Income increased 4% and 2%, respectively. Real Return, Real Estate, and Cash were added during the period.

### **September 30, 2010**



### **September 30, 2009**



PERFORMANCE ATTRIBUTION - HEALTH PLAN

### Performance Attribution - 3Q 2010

	Policy		Portfo	olio	Impact on Return			
	Allocation*	Return	Allocation*	Return	Weighting	Selection	Interaction	Total
Domestic Equity	34.0%	11.5	35.8%	11.7	0.1	0.1	0.0	0.1
International Equity	18.0%	16.8	15.5%	14.4	(0.2)	(0.4)	0.1	(0.6)
Fixed Income	42.0%	2.9	41.2%	2.9	0.0	0.0	0.0	0.0
Real Return	3.0%	-	0.9%	-	0.2	0.0	0.0	0.2
Private Equity	1.0%	1.4	0.1%	6.8	0.1	0.1	(0.0)	0.1
Real Estate	0.0%	3.3	0.0%	(4.2)	(0.0)	0.0	(0.0)	(0.0)
Cash	2.0%	0.0	6.5%	0.1	(0.4)	0.0	0.0	(0.4)
Total	100.0%	8.2	100.0%	7.7	(0.2)	(0.3)	0.0	(0.5)

<sup>\*</sup>Policy allocation utilizes beginning-of-the period target allocations; Portfolio allocation utilizes beginning-of-the period market values.

- During the most recent quarter, the Total Health Plan Portfolio underperformed its policy benchmark, due primarily to weighting and selection effects from International Equity. The portfolio's excess cash (at the beginning of the quarter for allocation purposes) also created a drag on relative performance.
- Performance attribution for the trailing 1-year will be shown in 4Q 2010, when the Health Plan's new asset allocation structure reaches one full year.

### **Quarterly Report**

### WPERP HEALTH PLAN MANAGER PERFORMANCE

### Domestic Equity - Periods ending September 30, 2010

Manager	Mkt Value (\$000)	Asset Class	Quarter	1 YR	3 YR	5 YR	Since Inception*	Inception Date**
BlackRock	103,950	Large Cap Core	11.6	10.9	-6.8		-3.2	1/2007
Russell 1000 Index			11.6	10.8	-6.8		-3.2	
MFS	45,952	Large Cap Value	9.9					9/2009
Russell 1000 Value Index			10.1					
T. Rowe Price	45,981	Large Cap Value	9.5					9/2009
Russell 1000 Value Index			10.1					
Fred Alger	49,467	Large Cap Growth	14.6					9/2009
Russell 1000 Growth Index			13.0					
T. Rowe Price	48,040	Large Cap Growth	13.2					4/2010
Russell 1000 Growth Index			13.0					
Earnest Partners	12,854	Small Cap Value	8.5					9/2009
Russell 2000 Value Index			9.7					
Frontier	12,841	Small Cap Value	10.6					4/2010
Russell 2000 Growth Index			12.8					

### International Equity - Periods ending September 30, 2010

Manager	Mkt Value (\$000)	Asset Class	Quarter	1 YR	3 YR	5 YR	Since Inception*	Inception Date**
Invesco	60,716	Developed Markets	14.7					9/2009
MSCI World ex US IMI ND Index			16.3					
The Boston Company	60,573	Developed Markets	11.9					9/2009
MSCI World ex US IMI ND Index			16.3					
Pyramis	60,954	Developed Markets	16.5					9/2009
MSCI World ex US IMI ND Index			16.3					

<sup>\*</sup> Performance is calculated based on the first full month of performance since funding.

<sup>\*\*</sup> Inception date reflect the month when portfolio received initial funding. Since-inception returns are not shown for managers with less than one year of performance.

## **Quarterly Report**

### Fixed Income - Periods ending September 30, 2010

Manager	Mkt Value (\$000)	Asset Class	Quarter	1 YR	3 YR	5 YR	Since Inception*	Inception Date**
JP Morgan	182,869	Core	2.5					4/2010
Wells	188,001	Core	2.8	9.7	9.6		8.8	1/2007
BC Aggregate Index			2.5	8.2	7.4		7.0	
Wells	40,848	High Yield	5.6					9/2009
BC High Yield Index			6.7					

### Private Equity and Real Estate - Periods ending September 30, 2010

Asset Class	Mkt Value (\$000)	Asset Class	Quarter	1 YR	3 YR	5 YR	Since Inception*	Inception Date**
Private Equity***	954,672	Private Equity	6.8	9.0			15.6	9/2008
Cambridge USPE/USVC*** ****			1.4	17.1			-0.2	
Real Estate***	109,855	Real Estate	-4.2					4/2010
NCREIF***			3.3					

<sup>\*</sup> Performance is calculated based on the first full month of performance since funding.

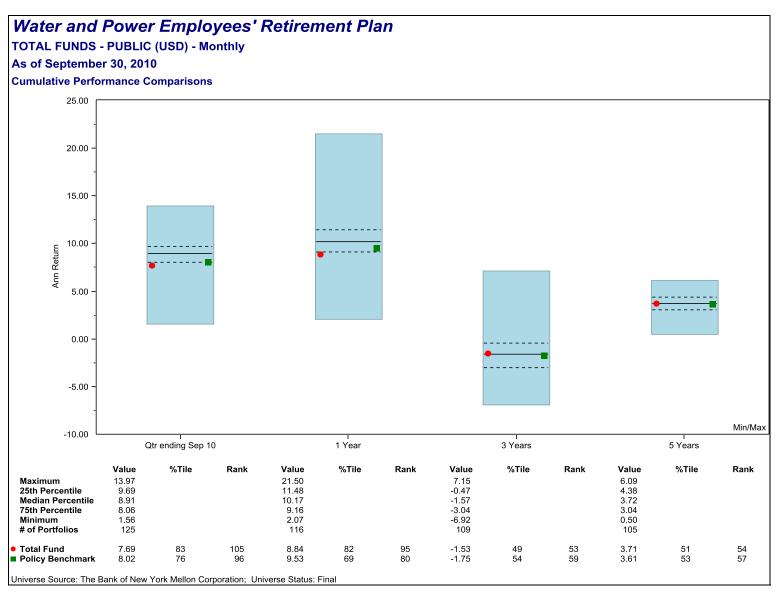
The Private Equity portfolio currently consists of three investments including Lexington VII, Landmark XIV, and Oaktree V.

The **Real Estate** portfolio currently consists of one investment **Mesa West**.

<sup>\*\*</sup> Inception date reflect the month when portfolio received initial funding. Since-inception returns are not shown for managers with less than one year of performance.

<sup>\*\*\*</sup> Returns are lagged one quarter and net of fees.

<sup>\*\*\*\*</sup> The policy benchmark for the Private Equity asset class is a blended benchmark composed of Cambridge US Private Equity Index and the Cambridge US Venture Capital Index.



#### Notes:

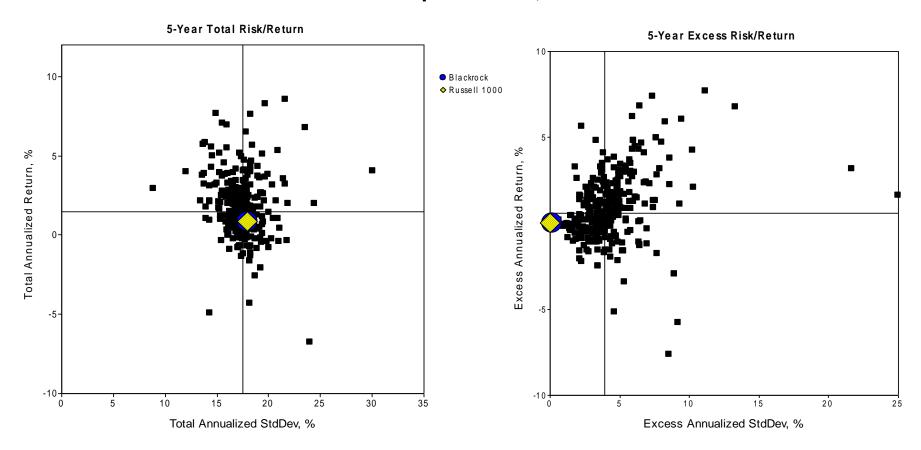
Performance and related statistics calculated using Mellon's Workbench E-Chart All performance is shown **gross of fees**.

#### Water and Power Employees' Retirement Plan **US Equity Segment - Public (USD) - Monthly** As of September 30, 2010 **Cumulative Performance Comparisons** 20.00 15.00 10.00 Ann Return 5.00 0.00 -5.00 -10.00 Min/Max -15.00 Qtr ending Sep 10 1 Year 3 Years 5 Years Value %Tile Rank Value %Tile Rank Value %Tile Rank Value %Tile Rank Maximum 15.87 17.69 -0.17 4.02 25th Percentile 12.20 -5.58 12.87 1.60 **Median Percentile** 11.74 11.51 -6.46 0.91 75th Percentile 11.30 10.48 -7.01 0.55 9.24 8.56 Minimum -10.16 -1.06 99 # of Portfolios 88 64 56 Domestic Equity 11.21 79 79 10.02 89 79 -6.66 62 40 1.06 45 26 Russell 3000 (blend) 60 60 65 58 40 50 29 11.52 10.96 -6.60 61 0.91 Universe Source: The Bank of New York Mellon Corporation; Universe Status: Final

#### Water and Power Employees' Retirement Plan Non-US Equity Segment - Public (USD) - Monthly As of September 30, 2010 **Cumulative Performance Comparisons** 25.00 20.00 15.00 10.00 Ann Return 5.00 0.00 -5.00 -10.00 Min/Max -15.00 Qtr ending Sep 10 1 Year 3 Years 5 Years Value %Tile Rank Value %Tile Rank Value %Tile Rank Value %Tile Rank Maximum 22.28 15.72 -1.80 8.67 25th Percentile 17.21 9.83 -6.27 4.89 Median Percentile 16.39 8.21 -7.39 4.03 75th Percentile 15.69 6.08 -9.20 2.97 Minimum 8.68 -1.57 -12.98 -0.75 # of Portfolios 76 58 50 81 62 International Equity 15.13 68 5.79 80 -6.19 25 15 4.15 46 24 20 27 ■ MSCI ACWI ex US IMI (blend) 38 31 8.47 46 36 16 5.04 16.80 -6.49 Universe Source: The Bank of New York Mellon Corporation; Universe Status: Final

#### Water and Power Employees' Retirement Plan **US Fixed Income Segment - Public (USD) - Monthly** As of September 30, 2010 **Cumulative Performance Comparisons** 20.00 15.00 Ann Return 00.01 5.00 Min/Max 0.00 Qtr ending Sep 10 1 Year 3 Years 5 Years %Tile Value Rank Value %Tile Rank Value %Tile Rank Value %Tile Rank 16.98 Maximum 6.24 12.72 9.56 25th Percentile 3.93 11.70 8.47 6.95 Median Percentile 3.35 10.23 7.53 6.30 75th Percentile 2.75 8.68 6.65 5.82 0.24 1.38 2.72 Minimum 3.45 # of Portfolios 82 65 56 Fixed Income 3.12 62 59 10.69 40 33 7.62 44 29 6.58 40 23 ■ BC Universal 2.88 68 65 8.91 70 58 56 37 6.26 53 30 7.32 Universe Source: The Bank of New York Mellon Corporation; Universe Status: Final

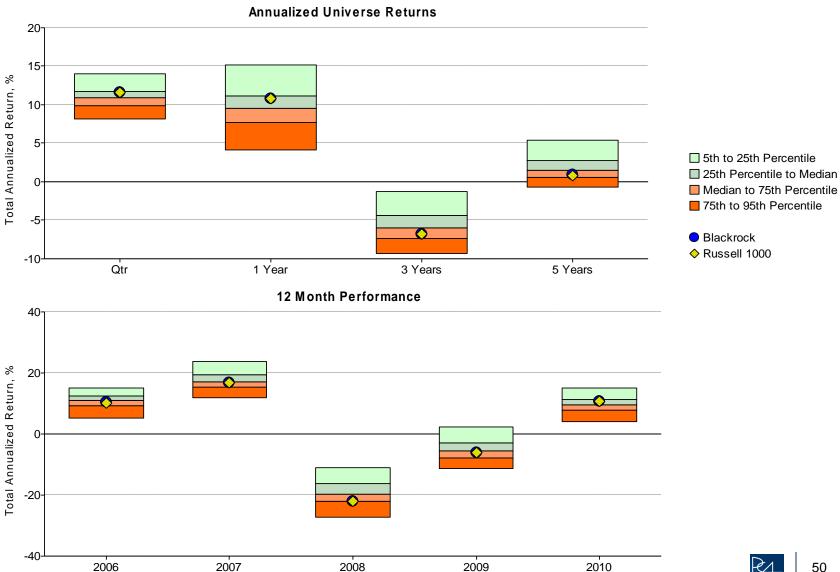
# WPERP Large Cap Core Manager Comparisons as of September 30, 2010



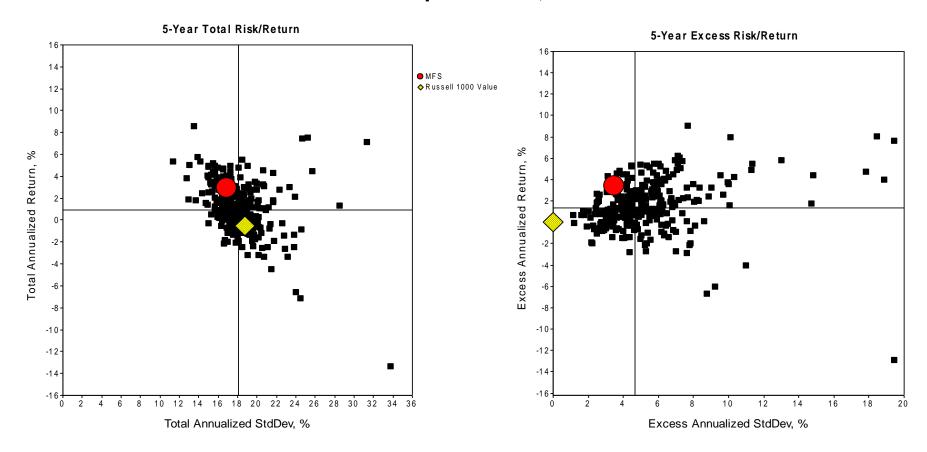
	Annualized	Annualized	Sharpe
	Return, %	StdDev, %	Ratio
Blackrock	0.88	17.96	0.05
Russell 1000	0.86	17.95	0.05
Large Cap Manager Universe Median	1.45	17.50	0.08

	Annualized Excess	Annualized Excess	Sharpe Ratio.
	Return, %	StDev, %	Excess
Blackrock	0.02	0.11	0.16
Russell 1000	0.00	0.00	NA
Large Cap Manager Universe Median	0.59	3.91	0.17

### **WPERP Large Cap Core Manager Comparisons** as of September 30, 2010



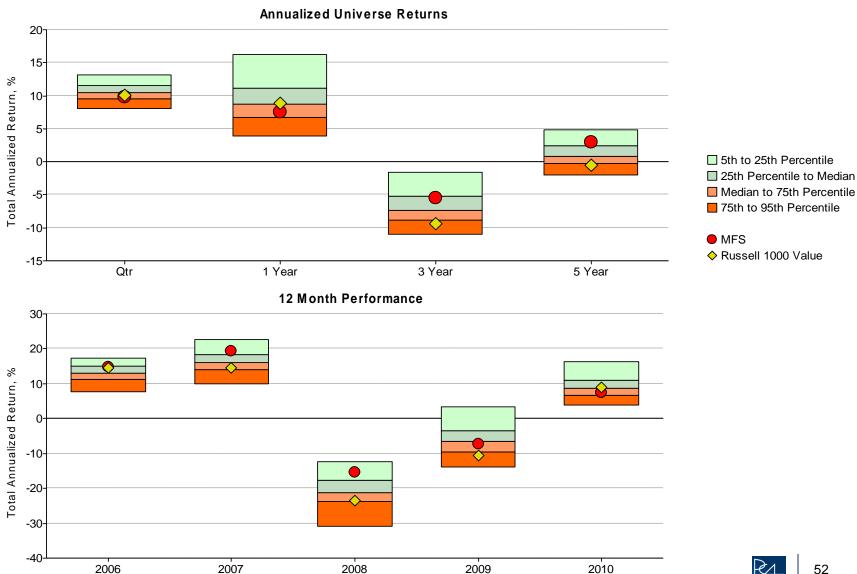
# WPERP Large Cap Value Manager Comparisons as of September 30, 2010



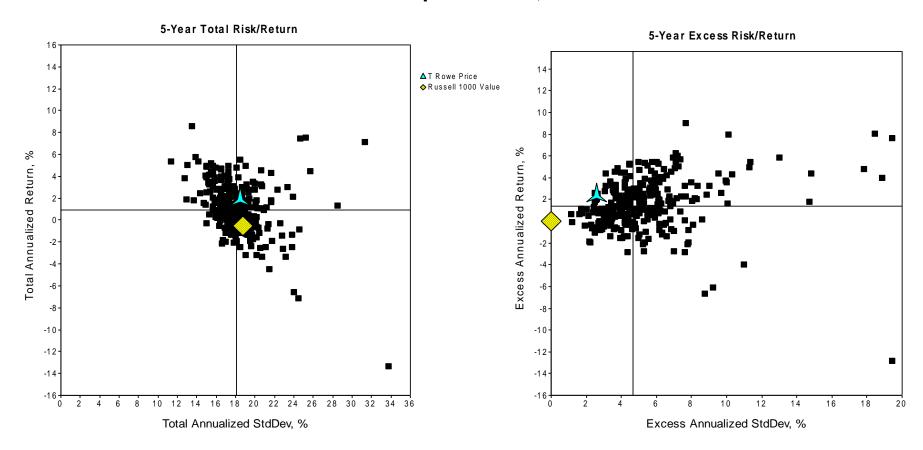
	Annualized Return, %	Annualized StdDev, %	Sharpe Ratio
MFS	2.97	16.90	0.18
Russell 1000 Value	-0.48	18.70	-0.03
Large Value Manager Universe Median	0.89	18.06	0.05

	Annualized	Annualized	Sharpe
	Excess	Excess	Ratio,
	Return, %	StDev, %	Excess
MFS	3.45	3.48	0.99
Russell 1000 Value	0.00	0.00	NA
Large Value Manager Universe Median	1.37	4.69	0.30

### **WPERP Large Cap Value Manager Comparisons** as of September 30, 2010



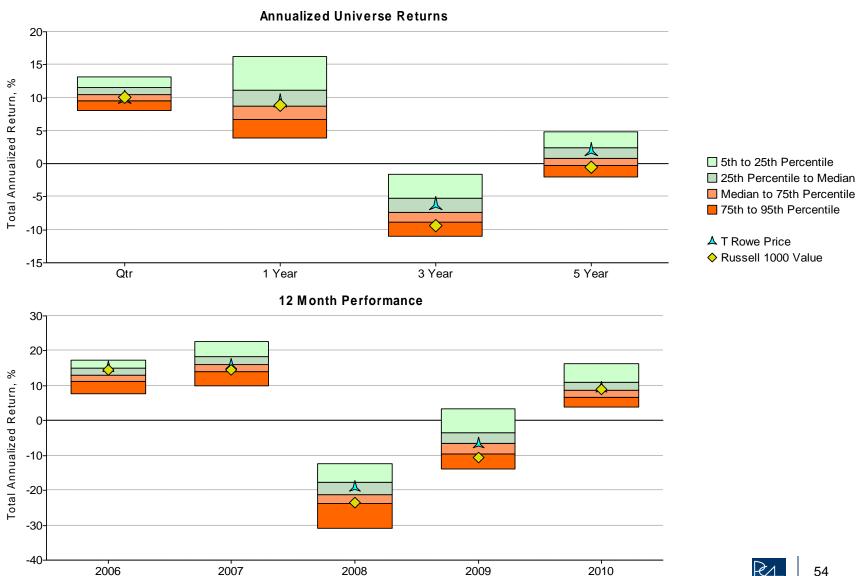
# WPERP Large Cap Value Manager Comparisons as of September 30, 2010



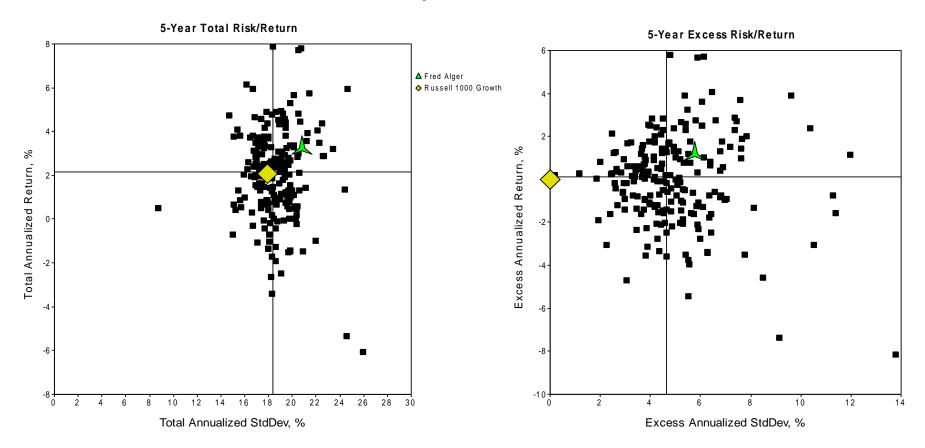
	Annualized	Annualized	Sharpe
	Return, %	StdDev, %	Ratio
T Rowe Price	1.86	18.48	0.10
Russell 1000 Value	-0.48	18.70	-0.03
Large Value Manager Universe Median	0.89	18.06	0.05

	Annualized	Annualized	Sharpe
	Excess	Excess	Ratio,
	Return, %	StDev, %	Excess
T Rowe Price	2.34	2.57	0.91
Russell 1000 Value	0.00	0.00	NA
Large Value Manager Universe Median	1.37	4.69	0.30

### **WPERP Large Cap Value Manager Comparisons** as of September 30, 2010



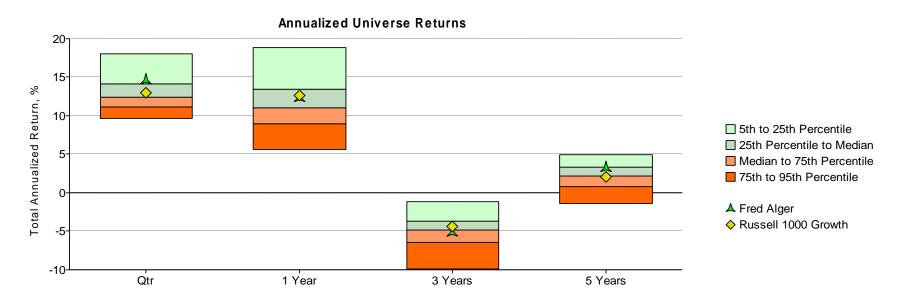
# WPERP Large Cap Growth Manager Comparisons as of September 30, 2010

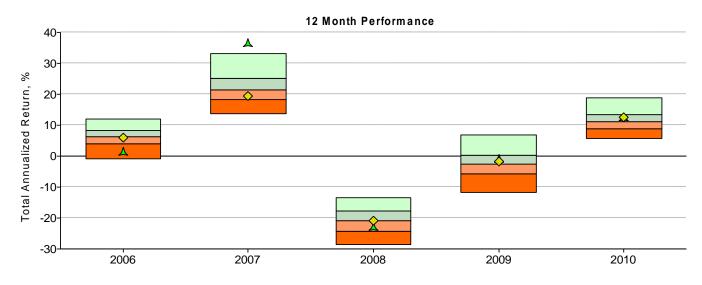


	Annualized Annualized		Sharpe	
	Return, %	StdDev, %	Ratio	
Fred Alger	3.23	20.83	0.15	
Russell 1000 Growth	2.06	17.91	0.11	
Large Growth Manager Universe Median	2.17	18.38	0.12	

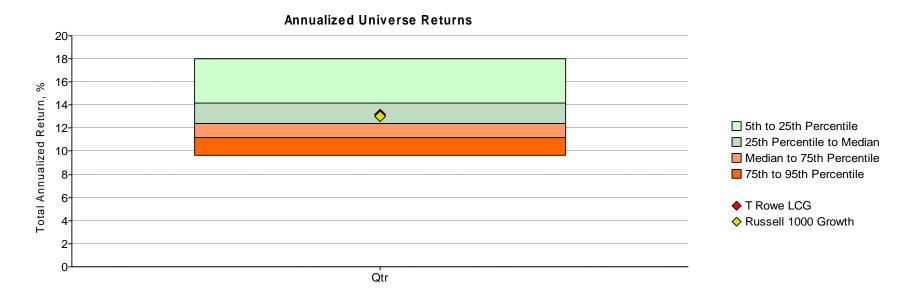
	Annualized	Annualized	Sharpe
	Excess	Excess	Ratio,
	Return, %	StDev, %	Excess
Fred Alger	1.17	5.75	0.20
Russell 1000 Growth	0.00	0.00	NA
Large Growth Manager Universe Median	0.12	4.63	0.04

## WPERP Large Cap Growth Manager Comparisons as of September 30, 2010

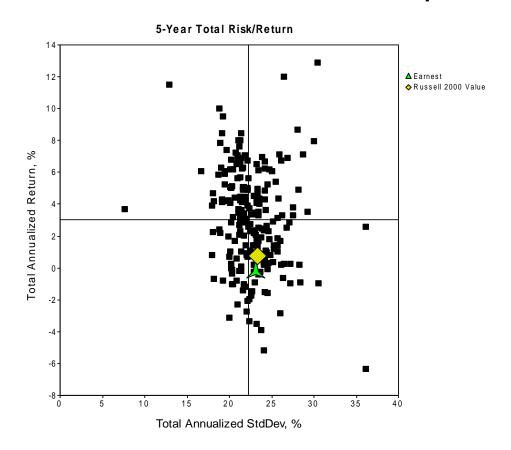


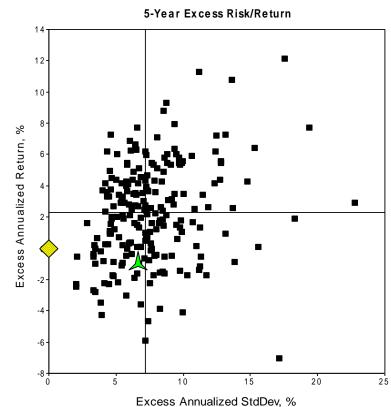


# WPERP Large Cap Growth Manager Comparisons as of September 30, 2010



# WPERP Small Cap Value Manager Comparisons as of September 30, 2010

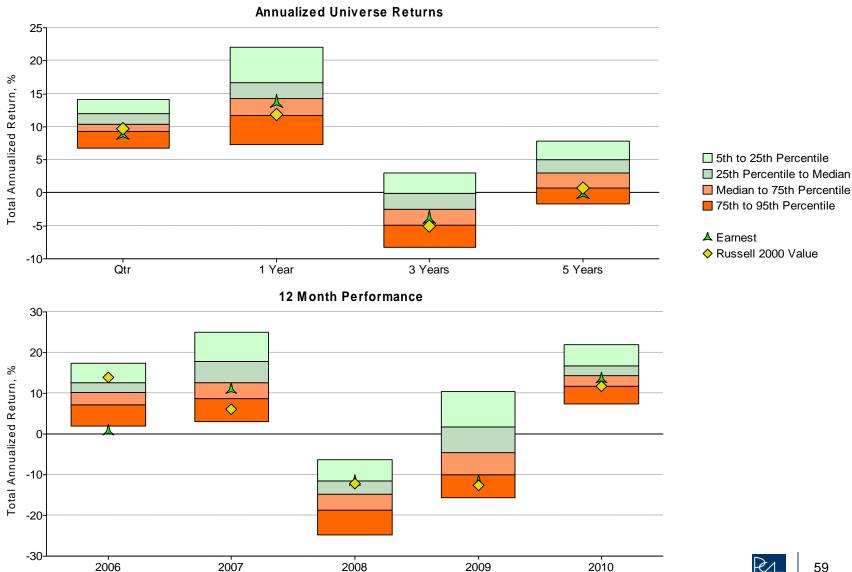




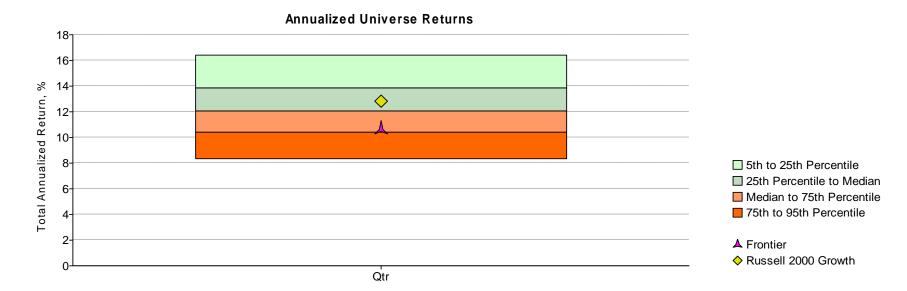
	Annualized	Annualized	Sharpe
	Return, %	StdDev, %	Ratio
Earnest	-0.24	23.08	-0.01
Russell 2000 Value	0.73	23.30	0.03
Small Cap Value Universe Median	3.04	22.27	0.13

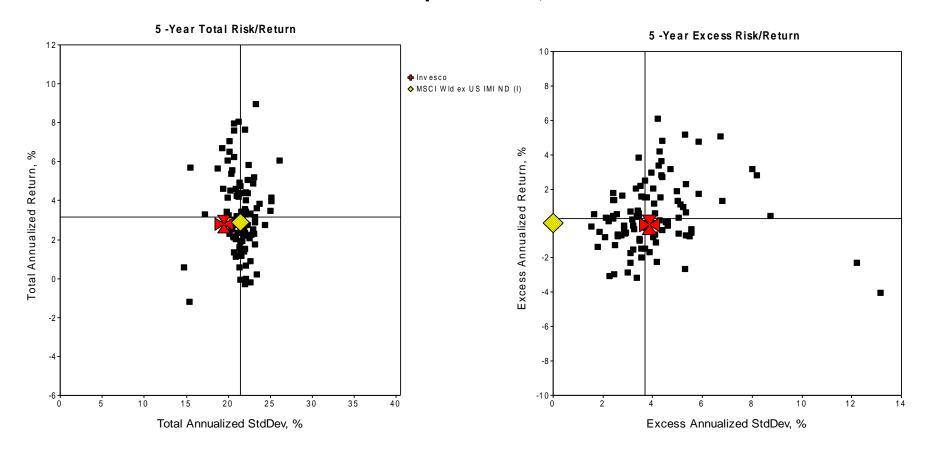
	Annualized Excess Return. %	Annualized Excess StDev. %	Sharpe Ratio, Excess
Earnest	-0.97	6.67	-0.15
Russell 2000 Value	0.00	0.00	NA
Small Cap Value Universe Median	2.30	7.17	0.31

### **WPERP Small Cap Value Manager Comparisons** as of September 30, 2010



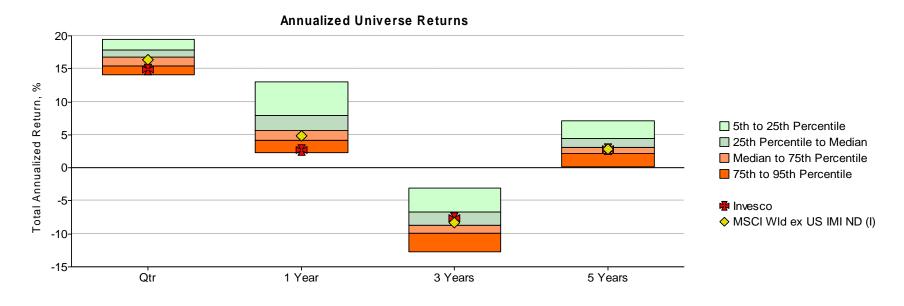
# WPERP Small Cap Growth Manager Comparisons as of September 30, 2010

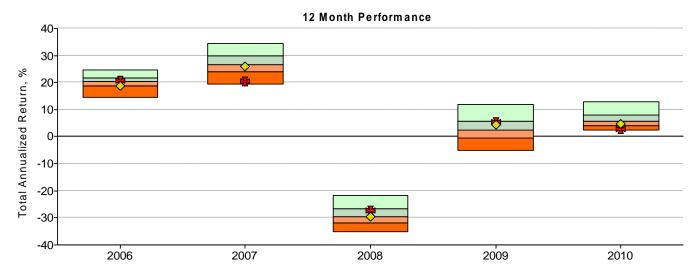


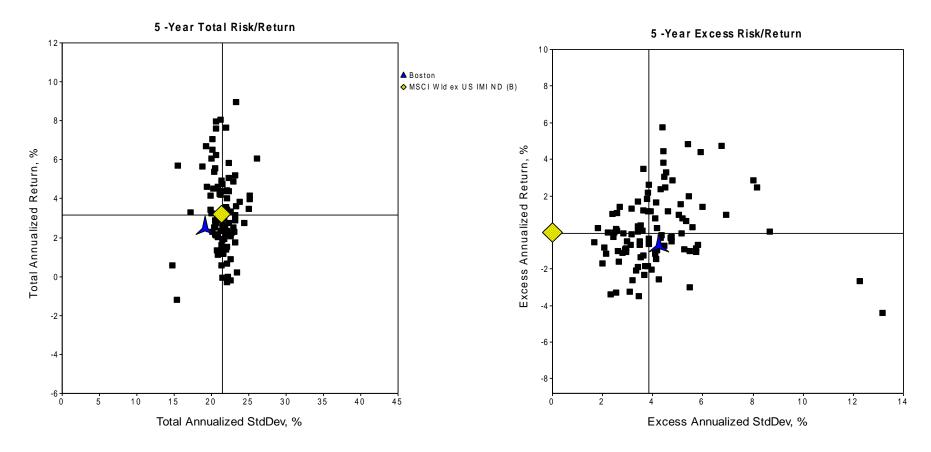


	Annualized	Annualized	Sharpe
	Return, %	StdDev, %	Ratio
Invesco	2.81	19.54	0.14
MSCI Wid ex US IMI ND (I)	2.87	21.40	0.13
International Equity Universe Median	3.15	21.48	0.14

	Annualized	Annualized	Sharpe
	Excess	Excess	Ratio,
	Return, %	StDev, %	Excess
Invesco	-0.06	3.86	-0.01
MSCI Wid ex US IMI ND (I)	0.00	0.00	NA
International Equity Universe Median	0.28	3.70	0.06

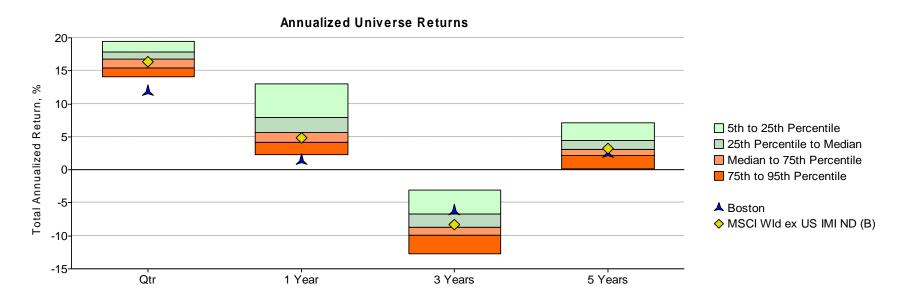


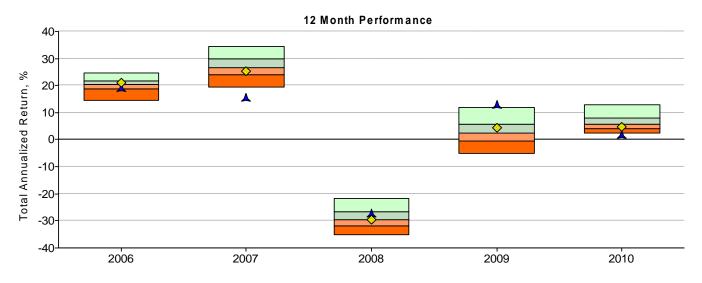


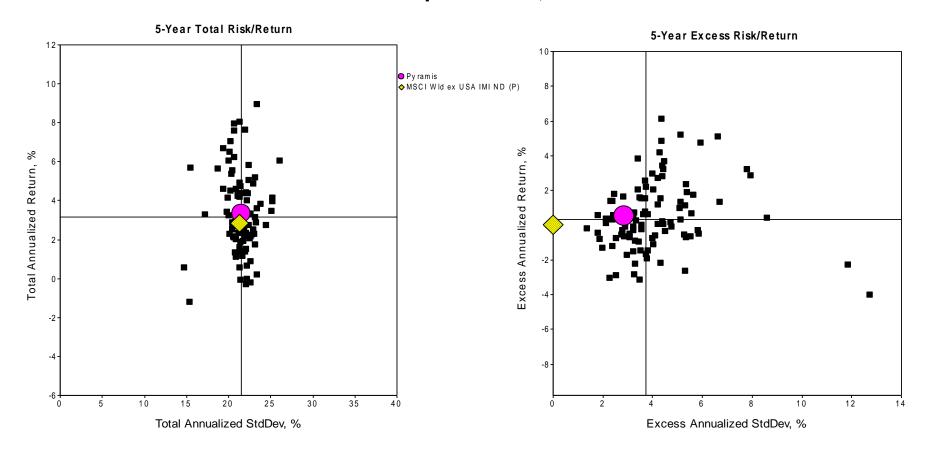


	Annualized	Annualized	Sharpe
	Return, %	StdDev, %	Ratio
Boston	2.46	19.15	0.13
MSCI Wld ex US IMI ND (B)	3.21	21.38	0.15
International Equity Universe Median	3.15	21.48	0.14

	Annualized	Annualized	Sharpe
	Excess	Excess	Ratio,
	Return, %	StDev, %	Excess
Boston	-0.75	4.24	-0.18
MSCI Wld ex US IMI ND (B)	0.00	0.00	NA
International Equity Universe Median	-0.07	3.84	-0.02

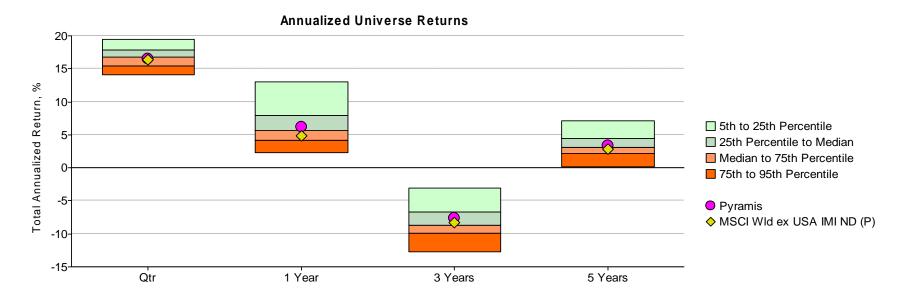






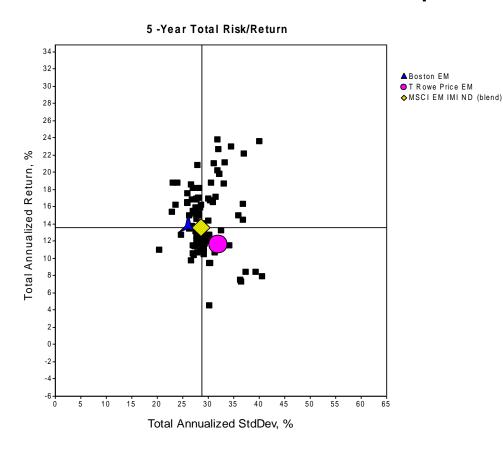
	Annualized	Annualized	Sharpe
	Return, %	StdDev, %	Ratio
Pyramis	3.34	21.52	0.16
MSCI Wld ex USA IMI ND (P)	2.83	21.27	0.13
International Equity Universe Median	3.15	21.48	0.14

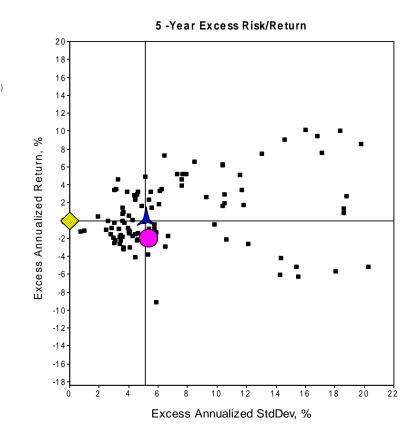
	Annualized	Annualized	Sharpe
	Excess	Excess	Ratio,
	Return, %	StDev, %	Excess
Pyramis	0.52	2.86	0.18
MSCI Wid ex USA IMI ND (P)	0.00	0.00	NA
International Equity Universe Median	0.32	3.73	0.07





## WPERP Emerging Market Equity Manager Comparisons as of September 30, 2010

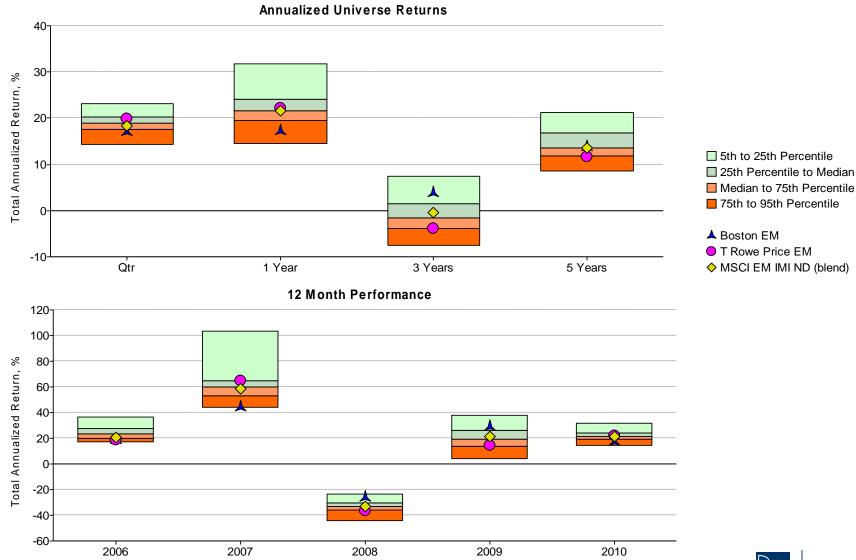




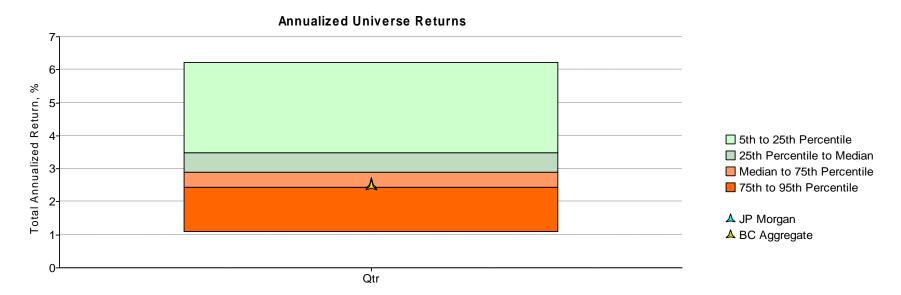
	Annualized Return, %	Annualized StdDev, %	Sharpe Ratio
Boston EM	13.75	26.03	0.53
T Rowe Price EM	11.63	32.01	0.36
MSCI EM IMI ND (blend)	13.62	28.55	0.48
Emerging Equity Universe Median	13.57	28.76	0.48

	Annualized	Annualized	Sharpe
	Excess	Excess	Ratio,
	Return, %	StDev, %	Excess
Boston EM	0.13	5.21	0.03
T Rowe Price EM	-1.99	5.40	-0.37
MSCI EM IMI ND (blend)	0.00	0.00	NA
Emerging Equity Universe Median	-0.05	5.11	-0.02

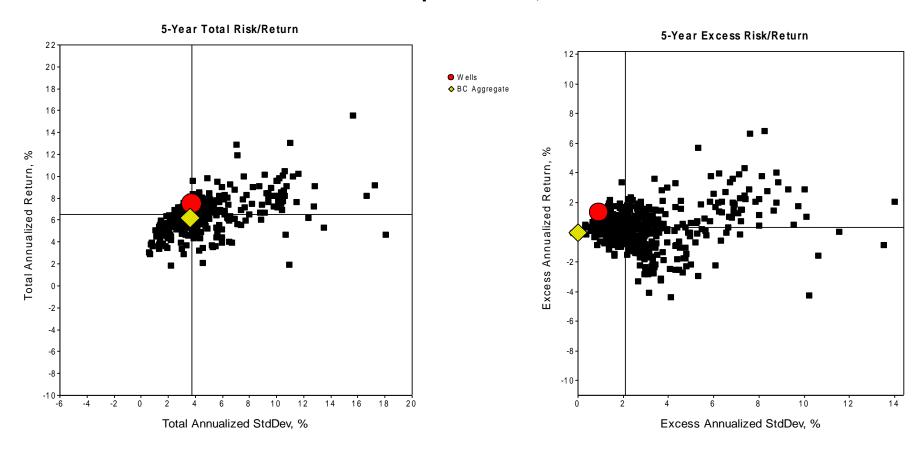
## WPERP Emerging Market Equity Manager Comparisons as of September 30, 2010



# WPERP Fixed Income Manager Comparisons as of September 30, 2010



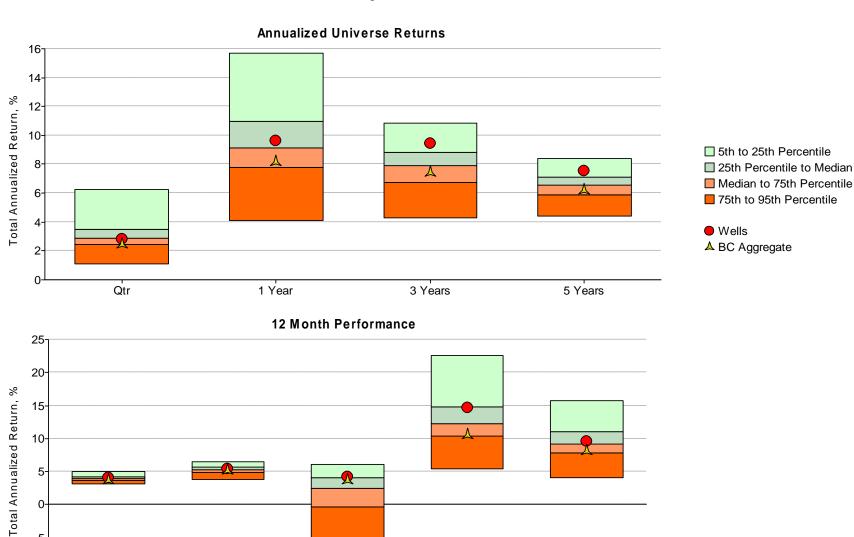
# WPERP Fixed Income Manager Comparisons as of September 30, 2010



	Annualized	Annualized	Sharpe
	Return, %	StdDev, %	Ratio
Wells	7.52	3.73	2.01
BC Aggregate	6.20	3.60	1.72
Fixed Income Manager Universe Median	6.55	3.77	1.76

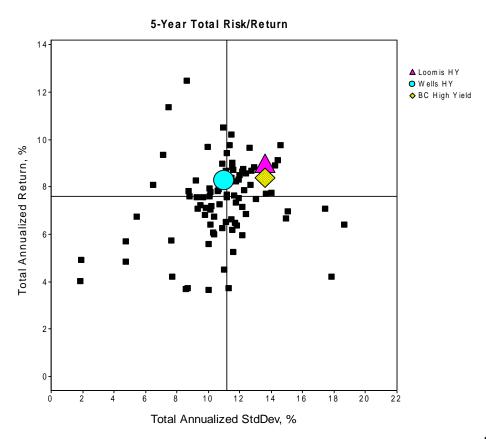
	Annualized	Annualized	Sharpe
	Excess	Excess	Ratio,
	Return, %	StDev, %	Excess
Wells	1.32	0.93	1.43
BC Aggregate	0.00	0.00	NA
Fixed Income Manager Universe Median	0.35	2.08	0.18

# WPERP Fixed Income Manager Comparisons as of September 30, 2010

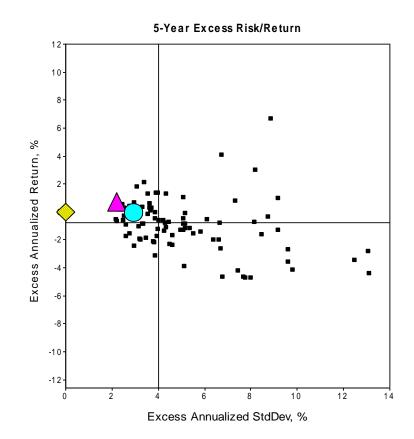


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# WPERP High Yield Manager Comparisons as of September 30, 2010

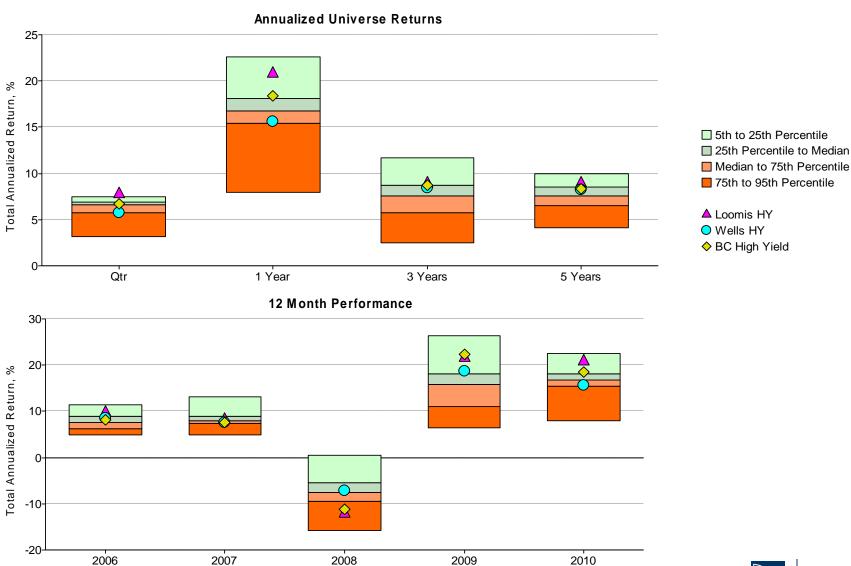


	Annualized Return, %	Annualized StdDev, %	Sharpe Ratio
Loomis HY	8.89	13.60	0.65
Wells HY	8.28	10.98	0.75
BC High Yield	8.37	13.60	0.62
U.S. High Yield Universe Median	7.61	11.17	0.70



	Annualized	Annualized	Sharpe
	Excess	Excess	Ratio,
	Return, %	StDev, %	Excess
Loomis HY	0.52	2.21	0.23
Wells HY	-0.09	2.94	-0.03
BC High Yield	0.00	0.00	NA
U.S. High Yield Universe Median	-0.76	4.03	-0.16

# WPERP High Yield Manager Comparisons as of September 30, 2010



## **APPENDIX**

## MANAGERS WATCH CRITERIA

	Short-term	Medium-term	
Asset Class	(Rolling 12 mth periods)	(Rolling 36 mth periods)	Long-term
Active Domestic Equity	Portfolio Return <	Portfolio Annlzd. Return < Benchmark	VRR <sup>1</sup> < 0.98
	Benchmark Return – 3.0% in any	Annlzd. Return – 1.5% for 2 consecutive	for 2 consecutive quarters
	quarter	quarters	
Passive Domestic	Tracking Error > 0.35% in any quarter	Tracking Error > 0.20% for 2 consecutive	Portfolio Annlzd. Return <
Equity		quarters	Benchmark Annlzd. Return –
			0.10% for 2 consecutive quarters
Active International	Portfolio Return <	Portfolio Annlzd. Return < Benchmark	VRR < 0.98
Equity	Benchmark Return – 4.5% in any	Annlzd. Return – 2.5% for 2 consecutive	for 2 consecutive quarters
	quarter	quarters	
Active Fixed Income	Portfolio Return <	Portfolio Annlzd. Return < Benchmark	VRR < 0.99 for 2 consecutive
	Benchmark Return – 1.0% in any	Annlzd. Return – 0.6% for 2 consecutive	quarters
	quarter	quarters	
Fund of Hedge Funds	Portfolio Return<	Portfolio Annlzd. Return < Benchmark	VRR < 1.00 for 2 consecutive
(Real Return)	Benchmark Return – 3.5% in any	Annlzd. Return – 2.5% for 2 consecutive	quarters
	quarter	quarters	

<sup>\*</sup>All portfolio returns are gross of manager fees.

<sup>.</sup> 

<sup>&</sup>lt;sup>1</sup> VRR – Value Relative Ratio – is calculated as: Manager Cumulative Return Relative / Benchmark Cumulative Return Relative.

## SUMMARY OF WPERP RETIREMENT PLAN PORTFOLIO TRANSITIONS

Manager	Mandate	Funded	Terminated
2003			
Merrill Lynch	Passive Core	3Q 2003	
Northern Trust	Passive Core	3Q 2003	1Q 2005
2004			
Fred Alger	Large Cap Growth	1Q 2004	
Intech	Large Cap Growth	1Q 2004	3Q 2009
MFS	Large Cap Value	1Q 2004	
T. Rowe Price	Large Cap Value	3Q 2004	
Invesco	International	2Q 2004	
ING/Aeltus	Core Fixed Income	3Q 2004	4Q 2009
Wells Capital	Core Fixed Income	3Q 2004	
Bank of New York	Small Cap Growth	4Q 2004	1Q 2006
Earnest Partners	Small Cap Value	4Q 2004	
Fidelity/Pyramis	International	4Q 2004	
Wells Capital	High Yield	4Q 2004	
2005			
Boston Company	International	1Q 2005	
Loomis Sayles	High Yield	1Q 2005	
Boston Company	Emerging Markets	1Q 2005	
T. Rowe Price	Emerging Markets	1Q 2005	
Boston Company	Large cap Active		1Q 2005
2006		1.2	
Lexington VI	Private Equity	3Q 2006	
Northpointe	Small Cap Growth	3Q 2006	2Q 2009
Paradigm	Small Cap Growth	3Q 2006	1Q 2010
Landmark XIII	Private Equity	4Q 2006	
Prisa	Real Estate	4Q 2006	
2007			
Aetos	Hedge Fund	1Q 2007	
PAAMCO	Hedge Fund	1Q 2007	
Prisa II	Real Estate	2Q 2007	
JPM Strategic	Real Estate	3Q 2007	
2008		140,0000	
HRJ	Private Equity	1Q 2008	
Fisher Lynch	Private Equity	2Q 2008	
CB Richard Ellis	Real Estate	2Q 2008	
Landmark XIV	Private Equity	3Q 2008	
2009	Driveto Facility	140,0000	
Oaktree V	Private Equity	1Q 2009	

## (Continued)

Manager	Mandate	Funded	Terminated
	2010		
Mesa West	Real Estate	1Q 2010	
Lexington VII	Private Equity	1Q 2010	
T. Rowe Price	Large Cap Growth	2Q 2010	
Frontier	Small Cap Growth	2Q 2010	
JP Morgan	Core Fixed Income	2Q 2010	
WAMCO	GILS	2Q 2010	

## WPERP RETIREMENT PLAN POLICY BENCHMARK DESCRIPTION

Time Period	Policy Benchmarks
Thru 3/31/2003	30% Citigroup BIG 60% S&P 500 10% Citigroup T-Bill
4/1/2003-12/31/2006	35% BC Universal 40% Russell 3000 15% MSCI ACWI ex U.S. 1% T-Bill The Plan had allocated 5% to Alternatives and 4% to Real Estate asset classes. Since both of these asset classes were not funded until 1Q 2007, the policy benchmark was calculated on a pro-weighted basis (on total of 91%) during this period.
1/1/2007-2/28/2007	35% BC Universal 40% Russell 3000 15% MSCI ACWI ex U.S. 4% NCREIF Lag 4.25% Cambridge U.S. Private Equity Lag, 0.75% Cambridge U.S. Venture Capital Lag 1% T-Bill
3/1/2007-6/30/2008	35% BC Universal 40% Russell 3000 15% MSCI ACWI ex U.S. 4% NCREIF Lag 3.4% Cambridge U.S. Private Equity Lag, 0.60% Cambridge U.S. Venture Capital Lag 1% T-Bill + 3% Lag 1% T-Bill
7/1/2008-6/30/2009	30% BC Universal 40% Russell 3000 24% MSCI ACWI ex U.S. IMI 2% NCREIF Lag 0.85% Cambridge U.S. Private Equity Lag, 0.15% Cambridge U.S. Venture Capital Lag 2% T-Bill + 3% Lag 1% T-Bill
7/1/2009-9/30/2010	40% BC Universal 33% Russell 3000 17% MSCI ACWI ex U.S. IMI 3% NCREIF Lag 1.70% Cambridge U.S. Private Equity Lag, 0.30% Cambridge U.S. Venture Capital Lag 3% T-Bills + 3% Lag 2% T-Bill
10/1/2010-6/30/2011	33% BC Universal 34% Russell 3000 20% MSCI ACWI ex U.S. IMI 4% NCREIF Lag 2.55% Cambridge U.S. Private Equity Lag, 0.45% Cambridge U.S. Venture Capital Lag 5% T-Bills + 3% Lag 1% T-Bill

## WPERP HEALTH PLAN POLICY BENCHMARK DESCRIPTION

Time Period	Policy Benchmarks
Thru 9/30/2009	60% Russell 1000 40% BC Aggregate Bond
10/1/2009-6/30/2010	45% BC Universal 37% Russell 3000 15% MSCI ACWI ex U.S. IMI 0% NCREIF Lag 0.85% Cambridge U.S. Private Equity Lag, 0.15% Cambridge U.S. Venture Capital Lag 0% T-Bill + 3% Lag 2% T-Bill The Plan had allocated 3% to Real Return and 3% to Real Estate asset classes. Since both of these asset classes were not funded until 3Q 2009, the policy benchmark was calculated on a pro-weighted basis (on total of 94%) during this period.
7/1/2010-6/30/2011	42% BC Universal 34% Russell 3000 18% MSCI ACWI ex U.S. IMI 0% NCREIF Lag 0.85% Cambridge U.S. Private Equity Lag, 0.15% Cambridge U.S. Venture Capital Lag 3% T-Bill + 3% Lag 2% T-Bill

#### PERFORMANCE ATTRIBUTION GLOSSARY

**Performance Attribution** - the process of comparing a portfolio's performance with its benchmark, and identify and quantify sources of differential returns (also called active returns).

**Differential Returns / Active Returns / Value Added** – The difference between the return on a portfolio and the return on the benchmark.

Impact on Return

Attribution Segment	Definition	Formula	Where:
Weighting (also called allocation, sector allocation, or pure sector allocation)	The effects of portfolio manager decisions to over/underweight each sector	Allocation $(w_i - W_i) \times (b_i - b)$	<ul> <li>w<sub>i</sub> = portfolio segment weight</li> <li>W<sub>i</sub> = benchmark segment weight</li> <li>b<sub>i</sub> = benchmark segment return</li> <li>b = total benchmark return</li> </ul>
Selection (also called within-sector selection)	The effects of portfolio manager decision to buy specific securities	Selection $(r_i - b_i) \times W_i$	r <sub>i</sub> = portfolio segment return b <sub>i</sub> = benchmark segment return W <sub>i</sub> = benchmark segment weight
Interaction (also called allocation/selection interaction)	The effects of portfolio managers decisions to security selection can inadvertently cause sector over/underweighting.	Interaction $(r_i - b_i) \times (w_i - W_i)$	$r_i$ = portfolio segment return $b_i$ = benchmark segment return $w_i$ = portfolio segment weight $W_i$ = benchmark segment weight

#### **GLOSSARY OF TERMS**

**Alpha** - The premium an investment earns above a set standard. This is usually measured in terms of a common index (i.e., how the stock performs independent of the market). An Alpha is usually generated by regressing a security's excess return on the S&P 500 excess return.

Annualized Performance - The annual rate of return that when compounded t times generates the same t-period holding return as actually occurred from period 1 to period t.

Batting Average - Percentage of periods a portfolio outperforms a given index.

**Beta** - The measure of an asset's risk in relation to the Market (for example, the S&P 500) or to an alternative benchmark or factors. Roughly speaking, a security with a Beta of 1.5 will have moved, on average, 1.5 times the market return.

Bottom-up - A management style that de-emphasizes the significance of economic and market cycles, focusing instead on the analysis of individual stocks.

**Dividend Discount Model** - A method to value the common stock of a company that is based on the present value of the expected future dividends.

Growth Stocks - Common stock of a company that has an opportunity to invest money and earn more than the opportunity cost of capital.

**Information Ratio** - The ratio of annualized expected residual return to residual risk. A central measurement for active management, value added is proportional to the square of the information ratio.

**R-Squared** - Square of the correlation coefficient. The proportion of the variability in one series that can be explained by the variability of one or more other series a regression model. A measure of the quality of fit. 100% R-square means perfect predictability.

Standard Deviation - The square root of the variance. A measure of dispersion of a set of data from its mean.

**Sharpe Ratio** - A measure of a portfolio's excess return relative to the total variability of the portfolio.

**Style Analysis** - A returns-based analysis using a multi-factor attribution model. The model calculates a product's average exposure to particular investment styles over time (i.e., the product's normal style benchmark).

**Top-down** - Investment style that begins with an assessment of the overall economic environment and makes a general asset allocation decision regarding various sectors of the financial markets and various industries.

Tracking Error - The standard deviation of the difference between the performance of a portfolio and an appropriate benchmark.

**Turnover** - For mutual funds, a measure of trading activity during the previous year, expressed as a percentage of the average total assets of the fund. A turnover rate of 25% means that the value of trades represented one-fourth of the assets of the fund.

**Value Stocks** - Stocks with low price/book ratios or price/earnings ratios. Historically, value stocks have enjoyed higher average returns than growth stocks (stocks with high price/book or P/E ratios) in a variety of countries.

#### **DEFINITION OF BENCHMARKS**

**BC Aggregate:** an index comprised of approximately 6,000 publicly traded investment-grade bonds including U.S. Government, mortgage-backed, corporate, and yankee bonds with an approximate average maturity of 10 years.

BC High Yield: covers the universe of fixed rate, non-investment grade debt. Eurobonds and debt issues from countries designated as emerging markets (e.g., Argentina, Brazil, Venezuela, etc.) are excluded, but Canadian and global bonds (SEC registered) of issuers in non-EMG countries are included. Original issue zeroes, step-up coupon structures, 144-As and pay-in-kind bonds (PIKs, as of October 1, 2009) are also included. Must be rated high-yield (Ba1/BB+ or lower) by at least two of the following ratings agencies: Moody's, S&P, Fitch. If only two of the three agencies rate the security, the lower rating is used to determine index eligibility. All issues must have at least one year to final maturity regardless of call features and have at least \$150 million par amount outstanding.

**BC Multiverse Non-US Hedged:** provides a broad-based measure of the international fixed-income bond market. The index represents the union of the BC Global Aggregate Index and the BC Global High Yield Index. In this sense, the term "Multiverse" refers to the concept of multiple universes in a single macro index.

**BC U.S. Credit:** includes publicly issued U.S. corporate and foreign debentures and secured notes that which are rated investment grade or higher by Moody's Investor Services, Standard and Poor's Corporation, or Fitch Investor's Service, with all issues having at least one year to maturity and an outstanding par value of at least \$250 million. Issues must be publicly issued, dollar-denominated and non-convertible.

**BC U.S. Government:** includes treasuries (i.e., public obligations of the U.S. Treasury that have remaining maturities of more than one year) and agencies (i.e., publicly issued debt of U.S. Government agencies, quasi-federal corporations, and corporate or foreign debt guaranteed by the U.S. Government).

**BC Universal:** includes market coverage by the Aggregate Bond Index fixed rate debt issues, which are rated investment grade or higher by Moody's Investor Services, Standard and Poor's Corporation, or Fitch Investor's Service, with all issues having at least one year to maturity and an outstanding par value of at least \$100 million) and includes exposures to high yield CMBS securities. All returns are market value weighted inclusive of accrued interest.

Citigroup 3-Month Treasury Bills (T-bills): tracks the performance of U.S. Treasury bills with 3-month maturity.

**MSCI ACWI ex US ND:** comprises both developed and emerging markets less the United States. As of August 2008, the index consisted of 23 counties classified as developed markets and 25 classified as emerging markets. This series approximates the minimum possible dividend reinvestment. The dividend is reinvested after deduction of withholding tax, applying the rate to non-resident individuals who do not benefit from double taxation treaties. MSCI Barra uses withholding tax rates applicable to Luxembourg holding companies, as Luxembourg applies the highest rates.

**MSCI EAFE Free (Europe, Australasia, Far East) ND:** is a free float-adjusted market capitalization index that is designed to measure developed market equity performance, excluding the US & Canada. This series approximates the minimum possible dividend reinvestment. The dividend is reinvested after deduction of withholding tax, applying the rate to non-resident individuals who do not benefit from double taxation treaties. MSCI Barra uses withholding tax rates applicable to Luxembourg holding companies, as Luxembourg applies the highest rates.

**MSCI EM (Emerging Markets) GD:** is a free float-adjusted market capitalization index that is designed to measure equity market performance in the global emerging markets. This series approximates the maximum possible dividend reinvestment. The amount reinvested is the entire dividend distributed to individuals resident in the country of the company, but does not include tax credits.

**MSCI Europe** is a free float-adjusted market capitalization weighted index that is designed to measure the equity market performance of the developed markets in Europe. As of June 2007, this index consisted of the following 16 developed market country indices: Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, and the United Kingdom.

**MSCI Pacific** is a free float-adjusted market capitalization weighted index that is designed to measure the equity market performance of the developed markets in the Pacific region. As of June 2007, this index consisted of the following 5 Developed Market countries: Australia, Hong Kong, Japan, New Zealand, and Singapore.

**NAREIT Index:** consists of all tax-qualified REITs listed on the New York Stock Exchange, American Stock Exchange, and the NASDAQ National Market System. The data is market weighted.

**NCREIF Property Index:** the NPI contains investment-grade, non-agricultural, income-producing properties which may be financed in excess of 5% gross market value; were acquired on behalf of tax exempt institutions; and are held in a fiduciary environment. Returns are gross of fees; including income, realized gains/losses, and appreciation/depreciation; and are market value weighted. Index is lagged one quarter.

**Russell 1000:** measures the performance of the 1,000 largest securities in the Russell 3000 Index. Russell 1000 is highly correlated with the S&P 500 Index and capitalization-weighted.

**Russell 1000 Growth:** measures the performance of those Russell 1000 securities with a greater-than-average growth orientation. Securities in this index tend to exhibit higher price-to-book and price-earnings ratios, lower dividend yields and higher forecasted growth values than the Value universe.

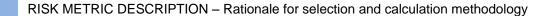
**Russell 1000 Value:** measures the performance of those Russell 1000 securities with a less-than-average growth orientation. Securities in this index tend to exhibit lower price-to-book and price-earnings ratios, higher dividend yields and lower forecasted growth values than the Growth universe.

**Russell 2000:** measures the performance of the 2,000 smallest companies in the Russell 3000 Index, which represents approximately 8% of the total market capitalization of the Russell 3000 Index.

Russell 2000 Growth: measures the performance of those Russell 2000 securities with a greater-than-average growth orientation. Securities in this index tend to exhibit higher price-to-book and price-to-earnings ratios.

**Russell 2000 Value:** measures the performance of those Russell 2000 securities with a less-than-average growth orientation. Securities in this index tend to exhibit lower price-to-book and price-to-earnings ratios.

**Russell 3000:** represents the largest 3,000 US companies based on total market capitalization, representing approximately 98% of the investable US equity market.



#### **US Equity Markets:**

Metric: P/E ratio = Price / "Normalized" earnings for the S&P 500 Index

To represent the price of US equity markets, we have chosen the S&P 500 index. This index has the longest published history of price, is well known, and also has reliable, long-term, published quarterly earnings. The price=P of the P/E ratio is the current price of the market index (the average daily price of the most recent full month for the S&P 500 index). Equity markets are very volatile. Prices fluctuate significantly during normal times and extremely during periods of market stress or euphoria. Therefore, developing a measure of earnings power (E) which is stable is vitally important, if the measure is to provide insight. While equity prices can and do double, or get cut in half, real earnings power does not change nearly as much. Therefore, we have selected a well known measure of real, stable earnings power developed by Yale Professor Robert Shiller known as the Shiller E-10. The calculation of E-10 is simply the average real annual earnings over the past 10 years. Over 10 years, the earnings shenanigans and boom and bust levels of earnings tend to even out (and often times get restated). Therefore, this earnings statistic gives a reasonably stable, slow-to-change estimate of average real earnings power for the index. Professor Shiller's data and calculation of the E-10 are available on his website at <a href="http://www.econ.yale.edu/~shiller/data.htm">http://www.econ.yale.edu/~shiller/data.htm</a>. We have used his data as the base for our calculations. Details of the theoretical justification behind the measure can be found in his book *Irrational Exuberance* [Princeton University Press 2000, Broadway Books 2001, 2nd ed., 2005].

#### Developed Equity Markets Excluding the US:

Metric: P/E ratio = Price / "Normalized" earnings for the MSCI EAFE Index

To represent the price of non-US developed equity markets, we have chosen the MSCI EAFE index. This index has the longest published history of price for non-US developed equities. The price=P of the P/E ratio is the current price of the market index (the average daily price of the most recent full month for the MSCI EAFE index). The price level of this index is available starting in December 1969. Again, for the reasons described above, we elected to use the Shiller E-10 as our measure of earnings (E). Since 12/1972, a monthly price earnings ratio is available from MSCI. Using this quoted ratio, we have backed out the implied trailing-twelve month earnings of the EAFE index for each month from 12/1972 to the present. These annualized earnings are then inflation adjusted using CPI-U to represent real earnings in US dollar terms for each time period. The Shiller E-10 for the EAFE index (10 year average real earnings) is calculated in the same manner as detailed above.

However, we do not believe that the pricing and earnings history of the EAFE markets are long enough to be a reliable representation of pricing history for developed market equities outside of the US. Therefore, in constructing the Long-Term Average Historical P/E for developed ex-US equities for comparison purposes, we have elected to use the US equity market as a developed market proxy, from 1881 to 1982. This lowers the Long-Term Average Historical P/E considerably. We believe this methodology provides a more realistic historical comparison for a market with a relatively short history.

#### **Emerging Market Equity Markets:**

Metric: Ratio of Emerging Market P/E Ratio to Developed Market P/E Ratio

To represent the Emerging Markets P/E Ratio, we have chosen the MSCI Emerging Market Free Index, which has P/E data back to January 1995 on Bloomberg. To represent the Developed Markets PE Ratio, we have chosen the MSCI World Index, which also has data back to January 1995 on Bloomberg. Although there are issues with published, single time period P/E ratios, in which the denominator effect can cause large movements, we feel that the information contained in such movements will alert investors to market activity that they will want to interpret.

#### **US Private Equity Markets:**

Metrics: S&P LCD Average EBITDA Multiples Paid in LBOs and US Quarterly Deal Volume

The Average Purchase Price to EBITDA multiples paid in LBOs is published quarterly by S&P in their LCD study. This is the total price paid (both equity and debt) over the trailing-twelve month EBITDA (earnings before interest, taxes, depreciation and amortization) as calculated by S&P LCD. This is the relevant, high-level pricing metric that private equity managers use in assessing deals. Data is published monthly.

US quarterly deal volume for private equity is the total deal volume in \$ billions (both equity and debt) reported in the quarter by Thomson Reuters Buyouts. This metric gives a measure of the level of activity in the market. Data is published quarterly.

#### U.S Private Real Estate Markets:

Metrics: US Cap rates and Transactions as a % of Market Value Trailing-Four Quarters

Real estate cap rates are a measure of the price paid in the market to acquire properties versus their annualized income generation before financing costs (NOI=net operating income). The date is published by NCREIF. We chose to use current value cap rate. These are capitalization rates from properties that were revalued during the quarter. While this data does rely on estimates of value and therefore tends to be lagging, (estimated prices are slower to rise and slow to fall than transaction prices), the data series goes back to 1979, providing a long data series for valuation comparison. Data is published quarterly.

Transactions as a % of Market Value Trailing-Four Quarters is a measure of property turnover activity in the NCREIF Universe. This metric is a measure of activity in the market. Data is published quarterly.

#### **Credit Markets US Fixed Income:**

Metric: Spreads

The absolute level of spreads over treasuries and spread trends (widening / narrowing) are good indicators of credit risk in the fixed income markets. Spreads incorporate estimates of future default, but can also be driven by technical dislocations in the fixed income markets. Abnormally narrow spreads (relative to historical levels) indicate higher levels of valuation risk, wide spreads indicate lower levels of valuation risk and / or elevated default fears. Investment grade bond spreads are represented by the Barclays Capital US Corporate Investment Grade Index Intermediate Component. The high yield corporate bond spreads are represented by the Barclays Capital US Corporate High Yield Index.

#### Measure of Equity Market Fear / Uncertainty

Metric: VIX – Measure of implied option volatility for U.S. equity markets

The VIX is a key measure of near-term volatility conveyed by implied volatility of S&P 500 index option prices. VIX increases with uncertainty and fear. Stocks and the VIX are negatively correlated. Volatility tends to spike when equity markets fall.

#### Measure of Monetary Policy

Metric: Yield Curve Slope

We calculate the yield curve slope as the 10 year treasury yield minus the 1 year treasury yield. When the yield curve slope is zero or negative, this is a signal to pay attention. A negative yield curve slope signals lower rates in the future, caused by a contraction in economic activity. Recessions are typically preceded by an inverted (negatively sloped) yield curve. A very steep yield curve (2 or greater) indicates a large difference between shorter-term interest rates (the 1 year rate) and longer-term rates (the 10 year rate). This can signal expansion in economic activity in the future, or merely higher future interest rates.

#### Measures of US Inflation Expectations

Metrics: Breakeven Inflation and Inflation Adjusted Commodity Prices

Inflation is a very important indicator impacting all assets and financial instruments. Breakeven inflation is calculated as the 10 year nominal treasury yield minus the 10 year real yield on US TIPS (treasury inflation protected securities). Abnormally low long-term inflation expectations are indicative of deflationary fears. A rapid rise in breakeven inflation indicates an acceleration in inflationary expectations as market participants sell nominal treasuries and buy TIPs. If breakeven inflation continues to rise quarter over quarter, this is a signal of inflationary worries rising, which may cause Fed action and / or dollar decline.

Commodity price movement (above the rate of inflation) is an indication of anticipated inflation caused by real global economic activity putting pressure on resource prices. We calculate this metric by adjusted in the Dow Jones UBS Commodity Index (formerly Dow Jones AIG Commodity Index) by US CPI-U. While rising commodity prices will not necessarily translate to higher US inflation, higher US inflation will likely show up in higher commodity prices, particularly if world economic activity is robust.

These two measures of anticipated inflation can, and often are, conflicting.

#### Measures of US Treasury Bond Interest Rate Risk

Metrics: 10-Year Treasury Forward-Looking Real Yield and 10-Year Treasury Duration

The expected annualized real yield of the 10 year U.S. Treasury Bond is a measure of valuation risk for U.S. Treasuries. A low real yield means investors will accept a low rate of expected return for the certainly of receiving their nominal cash flows. PCA estimates the expected annualized real yield by subtracting an estimate of expected 10 year inflation (produced by the Survey of Professional Forecasters as collected by the Federal Reserve Bank of Philadelphia), from the 10 year Treasury constant maturity interest rate.

Duration for the 10-Year Treasury Bond is calculated based on the current yield and a price of 100. This is a measure of expected percentage movements in the price of the bond based on small movements in percentage yield. We make no attempt to account for convexity.

## Definition of "extreme" metric readings

A metric reading is defined as "extreme" if the metric reading is in the top or bottom decile of its historical readings. These "extreme" reading should cause the reader to pay attention. These metrics have reverted toward their mean values in the past.